Scoping Summary Report

Proposed Southern Nevada Supplemental Airport, Clark County, Nevada

Draft EIS/RMPA

December 2025 | Version 3

PREPARED FOR

Federal Aviation Administration &
Bureau of Land Management as Joint Lead Agencies under Public Law 106-362

PREPARED BY

Landrum & Brown Incorporated

This page intentionally left blank

Contents Page

Acronyms and Abbreviations **iii**
1 Introduction **1**
1.1 Scoping Purpose 1
1.2 Proposed Project 1
2 Scoping Process **4**
2.1 Notice of Intent (NOI) 4
2.2 Public Scoping Meetings 4
2.3 Agency Scoping Meeting 5
2.4 Tribal Government-to-Government Coordination 5
3 Summary of Scoping Comments **6**
3.1 Comment Summary 7
3.1.1 Scoping 8
3.1.2 Coordination 8
3.1.3 Proposed Project 8
3.1.4 Purpose and Need 9
3.1.5 Alternatives 9
3.1.6 Resource Categories 9
3.1.7 BLM Land Use Planning Criteria 13
4 Next Steps **14**

Attachment A Notice of Intent (NOI)
Attachment B Public Scoping Materials
Attachment C Agency Scoping Meeting
Attachment D Continued Government-to-Government Tribal Coordination
Attachment E Scoping Comments
Attachment F Topical Responses

List of Tables

		Page
TABLE 1	COMMENTS RECEIVED	6
TABLE 2	FORMAT OF COMMENTS RECEIVED	7

List of Exhibits

		Page
EXHIBIT 1	PROPOSED PROJECT	3

Acronyms and Abbreviations

ADS-B	Automatic Dependent Surveillance-Broadcast
BLM	Bureau of Land Management
CCDOA	Clark County Department of Aviation
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FIS	Federal Inspection Service
JLA	Joint Lead Agencies
LAS	Harry Reid International Airport
LUP	Land Use Planning
NDOT	Nevada Department of Transportation
NEPA	National Environmental Policy Act
NM	National Monument
NOI	Notice of Intent
NRA	Lake Mead National Recreation Area
PDT	Pacific Daylight Time
RMP	Resource Management Plan
RMPA	Resource Management Plan Amendment
ROD	Record of Decision
RTC	Regional Transportation Commission of Southern Nevada
SNSA	Southern Nevada Supplemental Airport
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
VRM	Visual Resources Management

1 Introduction

The Clark County Department of Aviation (CCDOA), the owner of Harry Reid International Airport (LAS), is proposing the development and operation of the Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada. The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for preparation of the Environmental Impact Statement (EIS) in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C.] § 4321 et seq.). BLM is also evaluating the need for a Resource Management Plan Amendment (RMPA) for this project, and as a result the document is a combined EIS/RMPA. The RMPA to modify the Visual Resource Management (VRM) class is considered for the BLM to evaluate the established Ivanpah Transportation and Utilities Corridor, which requires amending the existing 1998 Las Vegas Resource Management Plan (RMP). The EIS/RMPA is prepared in accordance with the NEPA, Department of Transportation (DOT) Order 5610.1D, *DOT's Procedures for Considering Environmental Impacts*, FAA Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*, FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, Department of the Interior Implementation of the National Environmental Policy Act, Title 43, Code of Federal Regulations (CFR) Part 46, 516 DM 1-Department of the Interior Handbook: NEPA Implementation Procedures, Resource Management Planning 43 CFR § 1610.2, BLM's land use planning regulations cited in Title 43 CFR Part 1600, BLM Land Use Planning (LUP) Handbook H-1601-1, as well as other special purpose laws.

Approvals by the Federal Highway Administration (FHWA) and the Nevada Department of Transportation (NDOT) are necessary to implement the project, including improvements to the existing Interstate Highway 15 (I-15) Jean/Goodsprings Interchange. Therefore, both are Cooperating Agencies on the preparation of the EIS/RMPA. As a result, the EIS/RMPA was prepared in accordance with 23 CFR 771 and other applicable regulations.

1.1 Scoping Purpose

Scoping is an early and open process that solicits input from the public to determine the scope or range of issues to be addressed in the EIS/RMPA and to identify the significant environmental issues related to the Proposed Project. The scoping process is meant to focus the EIS/RMPA analysis on the most pertinent issues and the review of the land use planning criteria. This scoping report summarizes the agency and public scoping process and issues raised during the scoping comment period. The formal scoping comment period for the SNSA EIS/RMPA began on May 19, 2025, with issuance of the Notice of Intent (NOI) and extended through September 5, 2025.

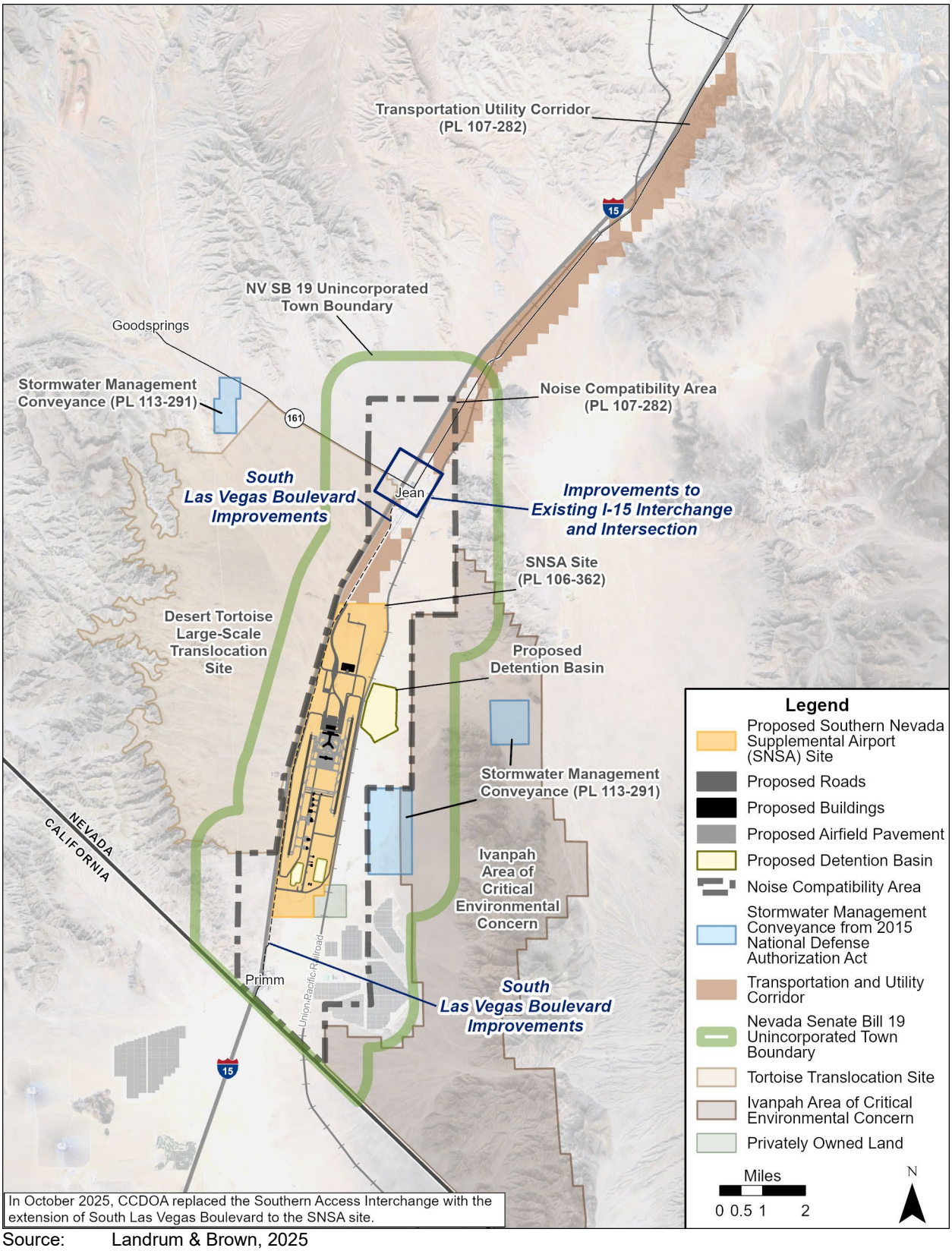
1.2 Proposed Project

The EIS/RMPA evaluates the proposed SNSA development on 5,752 acres of previously transferred federally managed land by the BLM in 2000 (Public Law 106-362). The EIS/RMPA also evaluates the proposed conveyance of 2,320 acres to Clark County for flood mitigation infrastructure upon an acceptable Record of Decision (ROD) under Public Law 113-291. Additionally, the EIS/RMPA evaluates the proposed conveyance of approximately 17,000-acres (referred to as the Noise Compatibility Area) to Clark County by the BLM and the establishment of the Ivanpah Transportation and

Utilities Corridor between the Las Vegas Valley and the proposed SNSA for the placement, on a nonexclusive basis, of transportation and utilities infrastructure upon an acceptable ROD under Public Law 107-282. The CCDOA is proposing the following development on the proposed SNSA site, as shown in **Exhibit 1**:

- Two parallel runways and supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing and takeoff
- Airspace and flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- Improvements to the existing I-15 interchange at Jean/Goodsprings, improvements to the existing intersection of Goodsprings Road and South Las Vegas Boulevard at Jean, and improvements to South Las Vegas Boulevard between Jean and Primm
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor

EXHIBIT 1 PROPOSED PROJECT



Source: Landrum & Brown, 2025

2 Scoping Process

2.1 Notice of Intent (NOI)

On May 19, 2025, the FAA, in cooperation with the BLM, issued an NOI to initiate a new EIS/RMPA process and also cancelling the EIS process started in 2006 for the proposed SNSA. The NOI described background information about the project, shared details about the scoping meetings, provided planning criteria for review and provided mailing addresses and an email address where comments regarding the scope of the EIS/RMPA were to be submitted. The NOI was published in the *Federal Register* and in the Las Vegas Review-Journal as a legal ad and made available on the project website. Elected officials and governmental agencies were notified of the publication of the NOI via email. See **Attachment A** for a copy of the NOI and the distribution notifications.

2.2 Public Scoping Meetings

Three public scoping meetings addressing the SNSA EIS/RMPA were held following the publication of the NOI. The locations and dates of these meetings were as follows:

- Virtual Meeting via Zoom Teleconference: Tuesday, July 29, 2025, 6 p.m. to 8 p.m. Pacific Daylight Time (PDT)
- In-person Meeting #1: East Las Vegas Library, 2851 East Bonanza Road, Las Vegas, Nevada 89101, Wednesday, July 30, 2025, from 5 p.m. to 7 p.m. PDT
- In-person Meeting #2: Primm Valley Casino, 31900 South Las Vegas Boulevard, Primm, Nevada 89019, Thursday, July 31, 2025, 6 p.m. to 8 p.m. PDT

The public was notified of these meetings through the NOI described in Section 2.1 as well as through the following methods:

- Display advertisement published in the *Las Vegas Review-Journal* June 27, 2025
- Display advertisement published in the digital *Las Vegas Business Press* June 30 through August 3, 2025
- Press release distributed via email June 27, 2025, to media outlets
- Meeting invitation distributed via email June 27, 2025, to individuals that requested notifications throughout the EIS/RMPA process
- Notifications on the project website (https://www.snvairporteis.com/), FAA's website (https://www.faa.gov/newsroom/press_releases), and the BLM's National NEPA Register (https://eplanning.blm.gov/eplanning-ui/project/2037961/510)

A total of 85 members of the public attended the two in-person scoping meetings, and approximately 109 members of the public attended the virtual scoping meeting. During the scoping meetings, a presentation was given to provide attendees information about CCDOA's Proposed Project. Additional JLA developed materials were distributed at the in-person meetings, including fact sheets (available in both English and Spanish) and information cards. The in-person meeting rooms had poster boards on display with information about the Proposed Project and EIS/RMPA process. Attendees at all meetings were given an opportunity to submit written comments via comment forms and provide verbal comments with a court reporter. Spanish translators were present at the in-person meetings and available for assistance as needed. All public scoping meeting materials are provided in **Attachment B**.

2.3 Agency Scoping Meeting

A virtual agency scoping meeting was held Tuesday, July 29, 2025, from 1 p.m. to 3 p.m. PDT via Zoom Teleconference. Agencies were notified of this meeting via the NOI described in Section 2.1 and a letter distributed to the agency contact database by email on June 26, 2025. The agency scoping meeting included a presentation introducing the Proposed Project and the EIS/RMPA process. Following the presentation, attendees had the opportunity to ask questions and/or submit written comments through the Zoom Teleconference chat feature. All agency scoping meeting materials are provided in **Attachment C**.

2.4 Tribal Government-to-Government Coordination

Tribal government representatives were directly notified of the Proposed Project through an email distributed July 24, 2025. This correspondence provided details regarding the formal scoping period, including information about the public and agency scoping meetings and the invitation for scoping comment submissions. The primary purpose of this continued coordination was to ensure that Federally Recognized Tribes were given the opportunity to provide meaningful and timely input about the Proposed Project and the EIS/RMPA process. See **Attachment D** for all government-to-government coordination materials.

3 Summary of Scoping Comments

A total of 66 comments were submitted during the public scoping period by agencies, Native American tribes, and members of the public. Comments were accepted via email to the project email address, US Postal service, and in-person at the scoping meetings (written or verbally recorded by the court reporter).[1] **Table 1** lists the commenter, method the comment was received, and the date the comment was received. **Table 2** presents a summary of the format of the comments received. All comments received are provided in **Attachment E**.

TABLE 1 COMMENTS RECEIVED

Commenter	Method	Date
Government Agencies		
City of Henderson	Email	July 30, 2025
Clark County Department of Environment and Sustainability	Email	August 12, 2025
Cocopah Indian Tribe	Email	August 28, 2025
Las Vegas Valley Water District	Email	September 4, 2025
National Parks Service - Lake Mead National Recreation Area	Email	September 3, 2025
National Parks Service – National Trails Office	Email	May 21, 2025
United States Environmental Protection Agency (USEPA) (1 of 3)	Email	July 7, 2025
USEPA (2 of 3)	Email	August 8, 2025
USEPA (3 of 3)	Email	September 5, 2025
Non-Governmental Organizations		
Basin and Range Watch and Western Watershed Project	Email	September 4, 2025
Desert Tortoise Council	Email	September 5, 2025
NAIOP Southern Nevada	Email	September 3, 2025
Sierra Club Toiyabe Chapter, National Parks Conservation Association, Great Basin Water Network, and Center for Biological Diversity	Email	September 5, 2025
Individuals		
Tony Alvarez	Email	June 27, 2025
Anonymous	Comment Form	July 31, 2025
Kerensa Brooks	Email	July 29, 2025
Cornelious Burke	Email	June 5, 2025
Janet Carter (1 of 2)	Comment Form	July 30, 2025
Christopher Chacko	Email	August 26, 2025
Barry Davis	Email	May 21, 2025
Marianne Donnelly	Email	July 14, 2025
Tom Douglass	Email	August 20, 2025
Carlos Espinoza	Email	August 5, 2025
Frank Ferraro	Email	August 5, 2025
Ken Freeman	Email	August 25, 2025
Peter Friseri	Comment Form	July 30, 2025
Christina Giunchigliani (1 of 4)	Comment Form	July 30, 2025
Christina Giunchigliani (2 of 4)	Email	July 30, 2025
Christina Giunchigliani (3 of 4)	Email	August 16, 2025
Jose Gonzalez	Email	August 22, 2025

1 A total of five written comments and nine verbal comments were received during the public meetings.

Commenter	Method	Date
Trent Hanson	Email	August 4, 2025
Linda Hunt	Email	July 31, 2025
Albert Kaneshiro	Email	June 24, 2025
Howard Kendall	Email	August 3, 2025
Andrew Logan	Email	July 31, 2025
John Mendoza	Email	July 24, 2025
Marian Mosser	Email	August 2, 2025
Nancy Olds	Email	August 28, 2025
Sam Palmer	Email	August 27, 2025
Jade Parke	Email	August 26, 2025
Michael Phillips	Email	August 1, 2025
Kimberly Reinhart	Email	August 19, 2025
Steve Riano	Email	June 15, 2025
Timothy Rogers	Email	May 28, 2025
Kristen Ryder	Email	August 22, 2025
Nicolas Sanchez	Email	August 1, 2025
Jamie Schwartzberg	Email	September 4, 2025
Danielle Sears	Email	September 4, 2025
Patricia Sheffield	Comment Form	July 30, 2025
Mark Silverstein (1 of 2)	Email	August 4, 2025
Keith Spencer (1 of 3)	Email	August 12, 2025
Keith Spencer (2 of 3)	Email	August 12, 2025
Keith Spencer (3 of 3)	Email	August 31, 2025
Jamie Thalgott (1 of 2)	Email	May 28, 2025
Jamie Thalgott (2 of 2)	Email	May 29, 2025
Christopher Thompson	Email	September 4, 2025
Bill VanHercke	Email	July 1, 2025
Will Bradley	Verbal	July 30, 2025
Janet Carter (2 of 2)	Verbal	July 30, 2025
Vinny Spotleson (1 of 2)	Verbal	July 30, 2025
Eva Olivia Chase	Verbal	July 30, 2025
Christina Giunchigliani (4 of 4)	Verbal	July 30, 2025
Carol Kruep	Verbal	July 31, 2025
Vinny Spotleson (2 of 2)	Verbal	July 31, 2025
Robert Scholes	Verbal	July 31, 2025
Mark Silverstein (2 of 2)	Verbal	July 31, 2025

Source: Landrum & Brown, 2025.

TABLE 2 FORMAT OF COMMENTS RECEIVED

Format	Number Received
Email	52
Comment Form	5
Verbal Comment	9
Total	**66**

Source: Landrum & Brown, 2025.

3.1 Comment Summary

This section summarizes the comments received during the scoping process. The comments were categorized into the following topics:

- Scoping
- Coordination
- Proposed Project

- Purpose and Need
- Alternatives
- Resource Categories
  - Aviation Emissions and Air Quality
  - Biological Resources
  - DOT, Section 4(f) and Section 6(f) of the Land and Water Conservation Fund Act
  - Geology and Mineral Resources
  - Hazardous Materials, Solid Waste and Pollution Prevention
  - Historic, Architectural, Archaeological, and Cultural Resources
  - Land Use and Realty
  - Natural Resources and Energy Supply
  - Noise and Noise-Compatible Land Use
  - Socioeconomics and Children's Health and Safety Risks
  - Soils, Vegetation, Noxious Weeds, and Invasive Non-Native Species
  - Surface Transportation
  - Visual Effects (Light Emissions and Visual Resources/Visual Character)
  - Water Resources
- BLM Land Use Planning Criteria

3.1.1 Scoping

Numerous commenters asked how to attend the virtual scoping meetings and obtain copies of the scoping materials. One commenter also noted that the location of the second public meeting in Primm, Nevada was not a good location to obtain public input.

3.1.2 Coordination

Several commenters asked to receive notifications throughout the EIS/RMPA process. In addition, commenters suggested that coordination efforts should occur with:

- Nellis Air Force Base
- Nevada Army National Guard
- University of Nevada Seismological Laboratory (regarding the proximity of the southern Walker Lane Belt of tectonism)
- Natural Resources Conservation Service (regarding reseeding of native plants and shortages of seeds)
- Clark Couty Water Reclamation District (regarding water infrastructure and water reclamation services)
- Southern Nevada Water Authority
- Lahontan Regional Water Quality Control Board (regarding groundwater and surface water across state lines)
- Federal Transit Administration (to facilitate eligibility for federal transit funding)
- National Association for Industrial and Office Parks
- Regional Transportation Commission of Southern Nevada (RTC).

The City of Henderson requested to be a cooperating agency and the Las Vegas Valley Water District requested to be a participating agency on the EIS/RMPA.

3.1.3 Proposed Project

Several commenters suggested integrating transit options and connectivity to LAS into the project along with accommodating a future tie-in to the Brightline West high-speed

rail project that is currently under construction along I-15. One commenter asked to consider the benefits of developing a multimodal inland port in conjunction with the Proposed Project. A commenter also questioned the size difference between the Proposed Project site and LAS.

3.1.4 Purpose and Need

Commenters questioned the need for the proposed SNSA given a recent decrease in tourism and the uncertainty of the local economy. Information regarding the passenger forecasts and airport capacity was requested to understand the need for the project, including clarifying if the Proposed Project is needed primarily to accommodate commercial passenger flights, cargo operations, or a mix of both.

3.1.5 Alternatives

Several commenters indicated that alternatives to building a supplemental airport in the Ivanpah Valley should be considered. Some commenters suggested other alternative locations for the proposed SNSA, including the Moapa Paiute Reservation and sites outside of the Ivanpah Valley. Commenters also proposed a smaller airport footprint to limit environmental disturbance and noted the land area for LAS is significantly smaller than that proposed for the SNSA. Commenters expressed strong support for the consideration of transit-focused alternatives that integrate Brightline West high-speed rail, dedicated bus rapid transit, and other mass transit options to the proposed SNSA in the opening phase and not delayed until later. Commenters also suggested the consideration of conservation-oriented alternatives that would avoid white-margined penstemon habitat altogether and restrict new flights over the Mojave National Preserve and Avi Kwa Ame National Monument (NM). A commenter asked for an explanation of how the alternatives comply with various federal laws, regulations, and policies with respect to the desert tortoise and its habitat. Some commenters strongly urged consideration of a “no-build” alternative, citing regional water scarcity, presence of endangered species, and questionable demand for the proposed SNSA.

3.1.6 Resource Categories

3.1.6.1 Aviation Emissions and Air Quality

The USEPA provided multiple comments on how the air quality analysis should be conducted for the proposed SNSA, including what emission sources should be evaluated and which agencies should be consulted in the development of the air quality analysis methodology. They also emphasized that the proposed SNSA could become Nevada’s second-largest source of ozone precursors, which would be located upwind of Las Vegas, which is currently in nonattainment of the USEPA’s 2015 8-hour ozone standard. They requested a robust air quality modeling methodology and an analysis of conformity with State and Transportation Implementation Plans. They also requested the implementation of green design, minimization, and mitigation measures into the proposed SNSA and the modeling of these measures in the air quality analysis.

Other commenters, including the USEPA, raised the topic of the lack of transit options to and from the proposed SNSA site, and the associated air quality impacts of increased automobile traffic. Other commenters further inquired about dust mitigation and technical methodologies/modeling tools for an air quality analysis that would capture this potential air quality impact.

Commenters stated that the EIS/RMPA must consider the impacts of the Proposed Project on climate. One commenter noted the loss of carbon sequestration that would occur from the development of the proposed SNSA in the desert. Another commenter requested that the JLA conduct a climate audit of the Proposed Project's impacts. Also, a commenter asked if the EIS would address urban heat islands and the disproportionate effects to low-income populations in Las Vegas.

3.1.6.2 Biological Resources

Commenters specifically requested the EIS/RMPA address direct, indirect and cumulative impacts to biological resources, including the desert tortoise, white-margined penstemon, Great Basin Desert and Mojave Desert burrowing owls, desert bighorn sheep, and migratory birds. Several commenters raised strong concerns with impacts to the desert tortoise and the white-margined penstemon.

Regarding the desert tortoise, commenters noted that the Proposed Project is located in the Eastern Mojave Recovery Unit, the substantial decline in the desert tortoise population, the ineffectiveness of mitigation such as translocation, the loss of desert tortoise habitat and population connectivity, concerns with direct, cumulative and indirect impacts (e.g. noise, dust, urban heat island, drought, etc.) to the desert tortoise and the need for avoidance. Commenters cited several desert tortoise studies and provided suggestions for mitigation.

Commenters noted that the white-margined penstemon is a sensitive plant that exists only in the Mojave Desert and requested the JLA analyze the direct, indirect and cumulative impacts to this plant and its habitat. Commenter indicated that the white-margined penstemon is protected by the BLM through the designation of Area of Critical Area of Concern and is advancing through a petition to be protected under the Endangered Species Act. One commenter stated that the EIS must contain adequate baseline information through surveys and an alternative that completely avoids the white-margined penstemon habitat. The same commenter indicated that translocation and salvage are not suitable mitigation for perennial plants with deep taproots like the white-margined penstemon.

3.1.6.3 Department of Transportation (DOT), Section 4(f) and Section 6(f) of the Land and Water Conservation Fund Act

Commenters raised concerns about potential impacts to natural quiet, recreation, and visual resources, and wilderness character of federal public lands including:

- Ivanpah Area of Critical Area of Concern
- Mojave National Preserve and Avi Kwa Ame NM (including the Clark Mountains and New York Mountain designated wilderness areas)
- Lake Mead National Recreation Area (NRA) (including the associated wilderness areas)
- Sloan Canyon National Conservation Area
- Castle Mountains NM
- Death Vally National Park
- Old Spanish National Historic Trail

3.1.6.4 Geology and Mineral Resources

A commenter indicated the proposed SNSA site is located within the Ivanpah Valley, which straddles the Eastern California Shear Zone, east of the San Andreas Fault Zone,

and south of the Garlock Fault Zone; furthermore, the proposed runways would be nearly perpendicular to the oblique extensional faulting in the area. Another comment noted that the Roach Dry Lake is composed of "puff dirt" which is not stable, and the Proposed Project would involve the most massive amount of earthmoving for a project in the history of Clark County.

3.1.6.5 Hazardous Materials, Solid Waste and Pollution Prevention

Some commenters raised questions about hazardous materials management, construction waste, and borrow pits for soil excavation. The USEPA promoted green waste management and pollution prevention strategies. They suggested composting 100 percent of all food waste from terminal restaurants, airline kitchens and any planned off-site hotels, and incorporating reuse measures, such as collecting magazines and newspapers from airplanes and sending them to local schools.

3.1.6.6 Historic, Architectural, Archaeological, and Cultural Resources

The U.S. Department of Interior, Lake Mead NRA recommended the FAA and BLM consult with affiliated Tribal Nations on this matter under Section 106 of the National Historic Preservation Act and consider their sacred air space when drafting flight paths to avoid or minimize visual, auditory, atmospheric, and cumulative impacts. They also provided the following information and recommendations:

- On August 12, 2024, Lake Mead NRA executed Voluntary Agreements with air tour operators where the operators agreed to not fly over portions of Avi Kwa Ame NM and Spirit Mountain out of respect for Tribal Nations and recognition of this sacred space
- Additional historic properties that hold significance to Tribal Nations remain within Avi Kwa Ame NM, Lake Mead NRA, and its immediate surrounding landscape
- Extant Tribal Nations regularly visit and maintain spiritual and traditional practices at Avi Kwa Ame NM and Spirit Mountain
- The Old Spanish National Historic Trail intersects the planning area, requiring analysis under the National Trails System Act

Another commenter noted the proposed SNSA site is within Nuwuvi (Southern Paiute) Tribal Territory. The commenter asked if any of the federally recognized or unrecognized tribes of the area been consulted.

3.1.6.7 Land Use and Realty

Commenters requested the EIS/RMPA discuss how each proposed alternative complies with the management structure of the current land management plan for the area, including management of adjacent/nearby lands. In addition, commenters asked to clarify NDOT and FHWA commitments for use of NDOT right-of-way.

Several commenters asked that the EIS/RMPA address land use impacts from the 2023 Nevada Senate Bill 19 and address the Airport Environs Overlay District Land Transfer section of the Southern Nevada Public Land Management Act of 1998. One commenter asked about the future operation of Jean Airport with the opening of the proposed SNSA. Concerns about urban sprawl were also raised.

3.1.6.8 Natural Resources and Energy Supply

The USEPA suggested incorporating a chapter into the Draft EIS/RMPA to address measures to maximize efficiency, energy use, and green building design for facilities, landscaping, and transportation infrastructure, including:

- Use electric, hybrid, and compressed natural gas options for all surface and support vehicles
- Consider using biodiesel from food vendors at the airport
- Implement an incentive program for airlines to adopt sustainable practices, such as minimizing use of diesel
- Install solar cells on the roof of parking garages and terminals and consider installing additional solar fields to power the airport

A commenter asked how much energy would be required by the proposed SNSA, including how much energy would be required to transport wastewater from the proposed SNSA to the wastewater treatment plant.

3.1.6.9 Noise and Noise-Compatible Land Uses

Commenters raised concerns about noise impacts on nearby communities and recreation areas. Commenters specifically asked that the EIS/RMPA address impacts to the natural quiet resources and residences within the Mohave National Preserve, Avi Kwa Ame NM, and the Castle Mountains NM. In addition, commenters requested evaluations of noise/vibration impacts on biological resources including the big horn sheep, owls, the desert tortoise, and migratory birds, and address noise compatibility measures with respect to desert tortoises and their habitat within the proposed Noise Compatibility Area.

3.1.6.10 Socioeconomics and Children's Health and Safety Risks

Some commenters argued the proposed SNSA would create jobs and economic diversification in the region, while others questioned whether benefits outweighed environmental and water costs. Other commenters inquired about the economic impacts of the Proposed Project, raised concerns about public financing, fairness, and long-term taxpayer liability, and noted that the induced sprawl would strain infrastructure and housing affordability.

3.1.6.11 Soils, Vegetation, Noxious Weeds, and Invasive Non-Native Species

Commenters noted the risk of introducing invasive species and indicated that limited supplies of native plant seeds could be an issue.

3.1.6.12 Surface Transportation

The USEPA and other commenters stressed the need to integrate public transit (high-speed rail and bus rapid transit) from Las Vegas to the proposed SNSA. Commenters requested the EIS/RMPA analyze impacts resulting from airport employee and passenger automobile trips, and justify the decision to delay incorporation of transit into the first phase of airport design and operation. In addition, concerns were expressed about the increased traffic on I-15 and the lack of planned public transportation to and from Las Vegas.

3.1.6.13 Visual Effects (Light Emissions and Visual Resources/Visual Character)

Commenters noted the proposed SNSA's proximity to public lands and national recreation areas (e.g., Sloan Canyon, Lake Mead NRA, Mojave Desert landscapes) and

raised concerns about impacts to viewsheds and night skies. They expressed concern that visual impacts would degrade outdoor recreation and local tourism opportunities.

3.1.6.14 Water Resources

Multiple commenters questioned whether there is sufficient water availability for the proposed SNSA. They cited water scarcity, the existing drought, and the low water levels of Lake Mead and the Colorado River. Commenters asked how much water would be required to construct (including dust mitigation) and operate the proposed SNSA and what will be the source of that water. One commenter stated that the Ivanpah Northern and Southern Hydrographic areas are grossly overallocated on paper. Another commenter encouraged the JLA to coordinate with Clark County and other local jurisdictions who are updating the Clean Water Act Section 208 Water Quality Management Plan which will incorporate projected water uses for the planning horizon. The Las Vegas Valley Water District requested to engage as a participating agency, noting the project will require new infrastructure for both temporary construction water and long-term operational supply. They highlighted Southern Nevada's water reuse requirements (return-flow credits to Lake Mead) and restrictions on consumptive water use. Commenters asked how wastewater would be processed (pumped back to a wastewater treatment plant or treated onsite).

The USEPA and other commenters flagged concerns about development in the Roach Dry Lake floodplain, flood control infrastructure needs, and potential groundwater contamination. Recommendations included flood modeling, collaboration with the Clark County Regional Flood Control District, and vector species control for detention basins. One commenter noted a Nevada Bureau of Mines and Geology 2010 report which states construction of a major airport facility in the Ivanpah Valley may have a significant impact on local drainage and floodplain management concerns. Another commenter stated that since the original proposal of the proposed SNSA, there have been record stormwater events in the Roach Dry Lake.

3.1.7 BLM Land Use Planning Criteria

A comment was made related to the BLM Land Use Planning Process. This comment requested, to comply with to Criterion 1, during the current RMP amendment process, the BLM should revise the Las Vegas RMP for the management of the tortoise and its habitat, so it incorporates all relevant information from scientific reports and journal articles on the tortoise/tortoise habitat, analyzes what is needed for the long-term survival of the species, and incorporates and implements effective management actions and monitoring for the tortoise.

4 Next Steps

Comments received during scoping were reviewed and are being taken into consideration during the preparation of the Draft EIS/RMPA.

Attachment A Notice of Intent (NOI)

Federal Register Notice, published May 19, 2025
Legal Advertisement, published May 19, 2025
Agency Notifications, distributed May 16, 2025
Elected Official Notifications, distributed May 20, 2025

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[26]

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2025–08843 Filed 5–16–25; 8:45 am]

BILLING CODE 8011–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Proposed Southern Nevada Supplemental Airport, Clark County, Nevada: Cancellation of Suspended Environmental Impact Statement (EIS) Process; Preparation of New EIS and Resource Management Plan Amendment; Public Scoping

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of cancellation of suspended EIS; Notice of intent to prepare new EIS, amend the BLM Las Vegas Resource Management Plan, and Request for Scoping comments.

SUMMARY: The Federal Aviation Administration (FAA), in cooperation with the Bureau of Land Management (BLM), as Joint Lead Agencies (JLA), is issuing this notice to advise the public, that the JLA has discontinued preparation of an Environmental Impact Statement (EIS) for the construction of the Proposed Southern Nevada Supplemental Airport (SNSA) initiated in 2006 under provisions of the National Environmental Policy Act (NEPA) of 1969, as amended. Due to recent legislative changes to the NEPA statute, and to establish an official start date for the environmental review of the proposed SNSA, the FAA, in cooperation with the BLM, are issuing this notice to advise the public that we are canceling the existing EIS process that was started in 2006, and are beginning a new EIS and Resource Management Plan Amendment (RMPA) to assess the potential impacts of the proposed SNSA.

DATES: Three (3) public scoping meetings are planned for the general public. A virtual public scoping meeting will be held on July 29, 2025, from 6 p.m. to 8 p.m. Pacific daylight time. Two in-person meetings will be held. The first in-person meeting will be held on July 30, 2025, at from 5 p.m. to 7 p.m. Pacific daylight time. The second in-person meeting will be held on July 31, 2025, from 6 p.m.to 8 p.m. Pacific daylight time.

ADDRESSES: Comments on the scope of the EIS and BLM Planning Criteria must be submitted to the JLA either via U.S. Mail to the contacts listed the **FOR FURTHER INFORMATION CONTACT** section of this notice or by email to *SNSAEIS@landrumbrown.com*.

The July 30, 2025 in-person meeting will be held at the East Las Vegas Library—Multipurpose Rooms 1 and 2 at 2851 East Bonanza Road, Las Vegas, Nevada 89101.

The July 31, 2025 in-person meeting will be held at the Primm Valley Casino Resorts in the Primm Valley Ballroom, 31900 South Las Vegas Boulevard, Primm, Nevada 89019. Additional information on the meetings, including how to register, can be found on the following websites: *https://www.snvairporteis.com* and the BLM National NEPA Register at *https://eplanning.blm.gov/eplanning-ui/project/2037961/510*.

FOR FURTHER INFORMATION CONTACT: David B. Kessler, AICP, Project Manager, Southern Nevada Supplemental Airport EIS, AWP–610.1, Airports Division, Federal Aviation Administration, Western-Pacific Region, 777 South Aviation Boulevard, El Segundo, California 90245. Telephone: 424–405–7315. Email: *dave.kessler@faa.gov,* and Joanie Guerrero, Realty Specialist, Bureau of Land Management, Las Vegas Field Office, 4701 N Torrey Pines Drive, Las Vegas, Nevada 89130, Telephone: 702–515–5274, Email: *jjguerrero@blm.gov*.

SUPPLEMENTARY INFORMATION: On September 5, 2006, the FAA published a Notice of Intent to prepare an EIS for the proposed SNSA (71 FR 52367). On January 25, 2008, FAA published a Notice of Availability of the Draft Purpose and Need Working Paper for the Draft EIS which was available for public comment pursuant to section 304 of the Vision 100 Century of Aviation Act of 2003 (Pub. L. 108–176) [49 U.S.C. 47171(I)] (73 FR 4666). On August 4, 2008, FAA published a Notice of Availability of the Draft Alternatives Working Paper for the Draft EIS for public comment pursuant to section 304 of the Vision 100 Century of Aviation Act of 2003 (Pub. L. 108–175) [49 U.S.C. 47171(I)] (73 FR 45268).

The FAA received a letter dated June 29, 2010, from the Clark County Department of Aviation asking FAA to suspend any further work on the EIS. The reasons for this action included the local economic conditions in Las Vegas, and Clark County, as well as other local fiscal and budgetary constraints. In 2023, following the COVID–19 (Pandemic), the economic conditions in Clark County improved and passenger usage at Harry Reid International Airport have returned to pre-Pandemic conditions.

The EIS/RMPA will include consideration of the 5,752 acres of previously transferred federally managed lands by the BLM in 2000, to Clark County for the new airport (Pub. L. 106–362). In addition to the 5,752 acres of previously transferred federally managed lands by the BLM, 2,320 acres for flood mitigation infrastructure shall be conveyed to Clark County upon an acceptable Record of Decision (ROD) under Public Law 113–291. Lastly, the 17,000-acres designated as the Noise Compatibility Area around the proposed new airport, shall be conveyed to Clark County from the BLM upon an acceptable Record of Decision (ROD) under Public Law 107–282. This law also includes the establishment of the Ivanpah transportation and utilities corridor between the Las Vegas valley and the proposed SNSA for the placement, on a nonexclusive basis, of transportation and utilities infrastructure. Also associated with the EIS and in compliance with NEPA, and the Federal Land Policy and Management Act of 1976, as amended (FLPMA), the Bureau of Land Management (BLM) Las Vegas Field Office (LVFO) intends to prepare a resource management plan amendment (RMPA).

In the 2000 Ivanpah Valley Airport Public Lands Transfer Act, (Pub. L. 106–362), Congress directed the Bureau of Land Management (BLM), acting on behalf of the Secretary of the U.S. Department of the Interior, to transfer property in Ivanpah Valley, Nevada to Clark County for the purpose of developing an airport facility and related infrastructure. That transfer has been completed. Other BLM Managed lands associated with the proposed airport would also be transferred to Clark County under the Clark County Conservation of Public Land and Natural Resources Act of 2002 (Pub. L. 107–282), Land Conveyance for Southern Nevada Supplemental Airport (Pub. L. 113–291), and the National Defense Authorization Act of 2015 (Pub. L. 113–291). However, in accordance with the Ivanpah Valley Airport Public Lands Transfer Act, should completion of the NEPA process lead to the determination that an airport should not be constructed at the site, it will be transferred back to BLM ownership.

The Ivanpah Valley Airport Public Lands Transfer Act also directed the U.S. Departments of Transportation and the Interior to prepare a joint EIS ''with respect to initial planning and

[26] 17 CFR 200.30–3(a)(12).

construction'' prior to construction of an airport facility and related infrastructure on the proposed Ivanpah site. Due to recent amendments in NEPA by the Fiscal Responsibility Act of 2023 (Pub. L. 118–5), the FAA in cooperation with the BLM, is providing notice, as Joint Lead Agencies (JLA), that the on-going EIS process, suspended since 2010, will be cancelled and a new EIS process will start for the proposed Southern Nevada Supplemental Airport.

Cancellation of the original EIS process and starting a new EIS/RMPA process is necessary to ensure proper timing consistent with NEPA, as amended. The EIS/RMPA will address a range of reasonable alternatives to meet the purpose and need, and are technically and economically feasible. The range of alternatives identified during the scoping process may include alternatives other than the Proposed Action. The alternatives may include, but are not limited to, expansion of Harry Reid International Airport (formerly known as McCarran International Airport) and use of other existing airports. The alternatives will also include a no-action scenario as required by NEPA.

The FAA and BLM intend to use the preparation of this EIS/RMPA to comply with applicable special purpose laws having public involvement requirements. Comments addressing your issues on the scope of the EIS should be directed to the listed contact persons either using U.S. Mail and must be postmarked no later than September 05, 2025, or by email to: *SNSAEIS@landrumbrown.com*.

The purpose of this notice is to inform Federal, State, and local government agencies, and the public of the intent to prepare an EIS and to conduct a public and agency scoping process. Information, data, opinions, and comments obtained throughout the scoping process will be considered during the preparation of the draft EIS/RMPA.

This document also provides notice that the BLM intends to prepare an RMPA for the Southern Nevada Supplemental Airport Project and seeks public input on issues and planning criteria. The RMPA to modify the Visual Resource Management (VRM) class is being considered in order for the BLM to evaluate the establishment of the Ivanpah Transportation and Utilities Corridor, which will require amending the existing 1998 Las Vegas RMP.

Purpose and Need: The FAA's purpose and need for the Proposed Action is to ensure that Clark County's proposed supplemental commercial service airport for the Las Vegas metropolitan area provides for safe and efficient air transportation pursuant to the Federal Aviation Act of 1958, as amended (Pub. L. 85–726), meets airport design standards, and complies with Public Law 106–362.

The BLM's purpose for the Proposed Action is to convey the identified federal lands to facilitate the development of the SNSA. The BLM's need for the Proposed Action is for the BLM to comply with Public Law 106–362; Public Law 107–282; and Public Law 113–291, provided that conditions set forth in the Public Laws are met and to meet agency responsibilities as required by section 209 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA) (Pub. L. 94–579).

As a result of proposed infrastructure within the Interstate 15 South Corridor designated per Public Law 107–282, the BLM has also determined that it will evaluate the need for a RMPA for this project, and as a result the document will be a combined EIS/RMPA following the requirements of the BLM's land use planning regulations cited in 43 CFR part 1600. Accordingly, the BLM will consider whether to amend the 1998 Las Vegas Approved Resource Management Plan/Record of Decision within the proposed Project area to modify the Visual Resources Management (VRM) class.

BLM Planning Criteria: The BLM planning criteria guide and planning effort lay the groundwork for effects analysis by identifying the preliminary issues and their analytical frameworks. The BLM has identified some preliminary planning criteria to guide development of the RMPA, to avoid unnecessary data collection and analysis, and to ensure the RMPA is tailored to the issues/resources. These criteria may be modified and/or other criteria may be identified during the public scoping process.

Criteria 1: Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies.

Criteria 2: Existing valid Las Vegas Resource Management Plan decisions will not change, and any new plan decisions will not conflict with existing valid plan decisions.

Criteria 3: Any resource management plan amendments will recognize valid existing rights.

This notice of intent initiates the scoping period and public review of the BLM planning criteria, which guide the development and analysis of the Draft EIS/RMPA. The scoping process for this EIS will also include a comment period for interested agencies and parties to submit oral and/or written comments representing the concerns and issues they believe should be addressed.

The EIS/RMPA will be prepared in accordance with NEPA, 42 U.S.C. 4321 *et seq.,* as amended, 43 CFR 46.435, 43 CFR 1610.2, and 43 CFR part 1600, FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures'' (July 16, 2015), and the procedures described in FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airports Actions (April 28, 2006) along with BLM Handbook H–1790–1, ''National Environmental Policy Act Handbook'' and the Department of the Interior Departmental Manual Part 516, ''National Environmental Policy Act of 1969''.

The Clark County Department of Aviation, the owner of Harry Reid International Airport, as well as other general aviation airports in Clark County, Nevada, proposes the following development as identified in the Southern Nevada Supplemental Airport Feasibility Study: Construction of a supplemental commercial service airport including two new runways 12,000 feet long by 150 feet wide and 15,000 feet long by 150 feet wide, parallel and connecting taxiway system; passenger terminal building with Federal Inspection Services Facility, aircraft parking apron, Airport Traffic Control Tower, navigational aids, air surveillance radar and automatic dependent broadcast ground stations, ground access infrastructure, and associated utilities. The proposal also includes development and use of associated arrival and departure flight procedures for the new runways. The FAA and the BLM are Joint Lead Agencies (JLA) for preparation of the EIS.

Public Scoping and Agency Meetings: With this notice, the JLA is announcing the scoping period to solicit public comments; to identify issues and to provide the planning criteria for public review. Related to the proposed action, the JLA are planning, two (2) in-person public scoping meetings, one (1) virtual public scoping meeting, and one (1) virtual governmental agency scoping meeting.

To ensure that the full range of issues related to Clark County's proposed project are addressed and that all significant issues are identified, comments and suggestions are invited from all interested parties. Public and agency scoping meetings will be conducted to identify any significant issues associated with the proposed project.

A virtual governmental agency scoping meeting for all Federal, State, Tribal and local regulatory agencies which have jurisdiction by law or have special expertise with respect to any potential environmental impacts associated with the proposed action will be held on July 29, 2025, from 1 p.m. to 3 p.m. Pacific daylight time. A notification letter will be sent in advance of the meeting.

To notify the general public of the scoping process, a legal notice will be placed in newspapers having general circulation in the study area, the *BLM National NEPA Register,* news release, and FAA and BLM social media pages. The newspaper notice will notify the public that scoping meetings will be held to gain their input concerning the proposed action, alternatives to be considered, review planning criteria and impacts to be evaluated.

The JLA is aware that there are Native American Tribes with affinity to the area. The JLA will conduct government-to-government consultation, in accordance with all executive orders, laws, regulations, and other memoranda. The Tribes will also be invited to participate in accordance with NEPA and section 106 of the National Historic Preservation Act.

Issued in El Segundo, California, May 5, 2025.

Mark A. McClardy,

Director, Airports Division, Federal Aviation Administration, Western-Pacific Region, AWP–600.

[FR Doc. 2025–08124 Filed 5–16–25; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2024–0302]

Commercial Driver's License: International Motors, LLC; Application for Exemption

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), Department of Transportation (DOT).

ACTION: Notice of final disposition; grant of application for exemption.

SUMMARY: FMCSA announces its decision to grant an exemption to International Motors, LLC (International), formally known as Navistar, Inc., for three Swedish commercial driver's license holders, Johan Astrom, Kristoffer Lindve, and Martin Uppman, (collectively, ''the drivers'') from the Federal requirement to hold a State-issued commercial driver's license (CDL) to operate commercial motor vehicles in the United States.

DATES: The exemption is effective May 19, 2025 and expires May 20, 2030.

FOR FURTHER INFORMATION CONTACT: Bernadette Walker, Driver, and Carrier Operations Division; Office of Carrier, Driver, and Vehicle Safety Standards; FMCSA; (202) 385–2415; *Bernadette.walker@dot.gov.* If you have questions on viewing or submitting material to the docket, contact Dockets Operations, (202) 366–9826.

SUPPLEMENTARY INFORMATION:

I. Public Participation

Viewing Comments and Documents

To view any documents mentioned as being available in the docket, go to *https://www.regulations.gov/docket/FMCSA-2024-0302/document* and choose the document to review. To view comments, click this notice, then click ''Browse Comments.''

If you do not have access to the internet, you may view the docket online by visiting Dockets Operations on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE, Washington, DC 20590–0001, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

II. Legal Basis

FMCSA has authority under 49 U.S.C. 31136(e) and 31315(b) to grant exemptions from the Federal Motor Carrier Safety Regulations (FMCSRs). FMCSA must publish a notice of each exemption request in the **Federal Register** (49 CFR 381.315(a)). The Agency must provide the public an opportunity to inspect the information relevant to the application, including the applicant's safety analysis. The Agency must provide an opportunity for public comment on the request.

The Agency reviews safety analyses and public comments and determines whether granting the exemption would likely achieve a level of safety equivalent to, or greater than, the level that would be achieved absent such exemption, pursuant to the standard set forth in 49 U.S.C. 31315(b)(1). The Agency must publish its decision in the **Federal Register** (49 CFR 381.315(b)). If granted, the notice will identify the regulatory provision from which the applicant will be exempt, the effective period, and all terms and conditions of the exemption (49 CFR 381.315(c)(1)). If the exemption is denied, the notice will explain the reason for the denial (49 CFR 381.315(c)(2)). The exemption may be renewed (49 CFR 381.300(b)).

III. Background

Current Regulatory Requirements

Under 49 CFR 383.23, no person shall operate a CMV without having taken and passed knowledge and driving skills tests for a commercial learner's permit or CDL that meet the Federal standards contained in subparts F, G, and H of part 383 for the CMV that person operates or expects to operate. Such drivers are also subject to the controlled substances and alcohol testing requirements of 49 CFR part 382.

Applicant's Request

International's application for an exemption was described in detail in a **Federal Register** notice published on January 13, 2025 (90 FR 2775), and will not be repeated, as the facts have not changed.

IV. Public Comments

The Agency received zero comments in response to the **Federal Register** notice seeking comment on International's request for an exemption.

V. FMCSA Decision

FMCSA has determined that the process for obtaining a CDL in Sweden is comparable to the process for obtaining a State-issued CDL under part 383 and adequately ensures that this driver can safely operate a CMV in the United States.

Under this exemption, Johan Astrom, Kristoffer Lindve, and Martin Uppman are not subject to the drug and alcohol testing requirements, set forth in 49 CFR part 382, which apply only to drivers who are subject to the CDL requirements in 49 CFR part 383, the Canadian National Safety Code, or the Licencia Federal de Conductor, and to their employers (49 CFR 382.103(a)). Therefore, as part of the equivalent level of safety provided by International, the terms and conditions of this exemption require International to implement a corporate drug and alcohol testing program substantially equivalent to the testing requirements in part 382. Because Johan Astrom, Kristoffer Lindve, and Martin Uppman are not subject to 49 CFR part 382, an exemption from the Clearinghouse requirements in subpart G is unnecessary.

Based on the information provided by International, including the drivers' experience and safety records, FMCSA concludes that the exemption, subject to the terms and conditions set forth below, would likely achieve a level of safety that is equivalent to, or greater

LAS VEGAS REVIEW-JOURNAL
LAS VEGAS SUN

Las Vegas Review-Journal
1111 W. Bonanza Road
Las Vegas, NV 89106

LANDRUM & BROWN
4445 LAKE FOREST DR.
BLUE ASH, OH 45242

INVOICE	
Invoice No.:	817606
Order No.:	335129
Invoice Date:	5/19/2025
Customer Acc No.:	117658
Amount Due	$ 0.00
Payment Due Terms:	15
Invoice Collector Name	Kelly Reynolds
Invoice Collector Tel No.:	702-387-5271

Legals - CLS					**$ 1,190.02**
Ad.No	**Ad Po**	**Date**	**Description**	**Position**	**Format**
50126078		5/19/2025 - 5/19/2025	MAY 19 FAA EIS	Review Journal - Legals - CLS	1 x 50.66

PLEASE DETACH AND RETURN LOWER PORTION WITH YOUR REMITTANCE.

Las Vegas Review-Journal, Inc.
PO Box 730
Las Vegas, NV 89125-0730

Summary	
Total Net Amount	**$ 1,190.02**
Total Amount	**$ 1,190.02**
Amount Prepaid	**$ 1,190.02**
Amount Due	**$ 0.00**

Invoice	817606	**Acc. No.**	117658	**Customer**	LANDRUM & BROWN

0000117658081760600000000000000

LAS VEGAS REVIEW-JOURNAL
LAS VEGAS SUN

Las Vegas Review-Journal
1111 W. Bonanza Road
Las Vegas, NV 89106

AFFIDAVIT OF PUBLICATION

STATE OF NEVADA)
COUNTY OF CLARK) SS:

LANDRUM & BROWN
4445 LAKE FOREST DR.
BLUE ASH OH 45242

Account # 117658
Order ID 335129

IMAGE ON NEXT PAGE(S)

Leslie McCormick, being 1st duty sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal/Las Vegas Sun, daily newspaper regularly issued, published and circulated in the Clark County, Las Vegas, Nevada and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal/Las Vegas Sun, in 1 edition(s) of said newspaper issued from 05/19/2025 to 05/19/2025, on the following day(s):

05/19/2025

Leslie McCormick

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this May 19, 2025

Notary Linda Espinoza

LINDA ESPINOZA
Notary Public, State of Nevada
My Appointment No. 24-9178-01
Expires: July 14, 2028

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Proposed Southern Nevada Supplemental Airport, Clark County, Nevada: Cancellation of Suspended Environmental Impact Statement (EIS) Process; Preparation of New EIS and Resource Management Plan Amendment; Public Scoping

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of cancellation of suspended EIS; Notice of intent to prepare new EIS, amend the BLM Las Vegas Resource Management Plan, and Request for Scoping comments.

SUMMARY: The Federal Aviation Administration (FAA), in cooperation with the Bureau of Land Management (BLM), as Joint Lead Agencies (JLA), is issuing this notice to advise the public, that the JLA has discontinued preparation of an Environmental Impact Statement (EIS) for the construction of the Proposed Southern Nevada Supplemental Airport (SNSA) initiated in 2006 under provisions of the National Environmental Policy Act (NEPA) of 1969, as amended. Due to recent legislative changes to the NEPA statute, and to establish an official start date for the environmental review of the proposed SNSA, the FAA, in cooperation with the BLM, are issuing this notice to advise the public that we are canceling the existing EIS process that was started in 2006, and are beginning a new EIS and Resource Management Plan Amendment (RMPA) to assess the potential impacts of the proposed SNSA.

DATES: Three (3) public scoping meetings are planned for the general public. A virtual public scoping meeting will be held on July 29, 2025, from 6 p.m. to 8 p.m. Pacific daylight time. Two in-person meetings will be held. The first in-person meeting will be held on July 30, 2025, at from 5 p.m. to 7 p.m. Pacific daylight time. The second in-person meeting will be held on July 31, 2025, from 6 p.m.to 8 p.m. Pacific daylight time.

ADDRESSES: Comments on the scope of the EIS and BLM Planning Criteria must be submitted to the JLA either via U.S. Mail to the contacts listed in the FOR FURTHER INFORMATION CONTACT section of this notice or by email to SNSAEIS@landrumbrown.com.

The July 30, 2025 in-person meeting will be held at the East Las Vegas Library – Multipurpose Rooms 1 and 2 at 2851 East Bonanza Road, Las Vegas, Nevada 89101.
The July 31, 2025 in-person meeting will be held at the Primm Valley Casino Resorts in the Primm Valley Ballroom, 31900 South Las Vegas Boulevard, Primm, Nevada 89019. Additional information on the meetings, including how to register, can be found on the following websites: https://www.snvairporteis.com and the BLM National NEPA Register at https://eplanning.blm.gov/eplanning-ui/project/2037961/510

FOR FURTHER INFORMATION CONTACT: David B. Kessler, AICP, Project Manager, Southern Nevada Supplemental Airport EIS, AWP-610.1, Airports Division, Federal Aviation Administration, Western-Pacific Region, 777 South Aviation Boulevard, El Segundo, California 90245. Telephone: 424-405-7315. Email: dave.kessler@faa.gov, and Joanie Guerrero, Realty Specialist, Bureau of Land Management, Las Vegas Field

Office, 4701 N. Torrey Pines Drive, Las Vegas, Nevada 89130, Telephone: 702-515-5274, Email: jjguerrero@blm.gov.

SUPPLEMENTARY INFORMATION: On September 5, 2006, the FAA published a Notice of Intent to prepare an EIS for the proposed SNSA (71 FR 52367). On January 25, 2008, FAA published a Notice of Availability of the Draft Purpose and Need Working Paper for the Draft EIS which was available for public comment pursuant to section 304 of the Vision 100 Century of Aviation Act of 2003 (Pub. L. 108-176) [49 U.S.C. 47171(l)] (73 FR 4666). On August 4, 2008, FAA published a Notice of Availability of the Draft
Alternatives Working Paper for the Draft EIS for public comment pursuant to section 304 of the Vision 100 Century of Aviation Act of 2003 (Pub. L. 108-175) [49 U.S.C. 47171(l)] (73 FR 45268).
The FAA received a letter dated June 29, 2010, from the Clark County Department of Aviation asking FAA to suspend any further work on the EIS. The reasons for this action included the local economic conditions in Las Vegas, and Clark County, as well as other local fiscal and budgetary constraints. In 2023, following the COVID-19 (Pandemic), the economic conditions in Clark County improved and passenger usage at Harry Reid International Airport have returned to pre-Pandemic conditions.
The EIS/RMPA will include consideration of the 5,752 acres of previously transferred federally managed lands by the BLM in 2000, to Clark County for the new airport (Pub. L. 106-362). In addition to the 5,752 acres of previously transferred federally managed lands by the BLM, 2,320 acres for flood mitigation infrastructure shall be conveyed to Clark County upon an acceptable Record of Decision (ROD) under Public Law 113-291. Lastly, the 17,000-acres designated as the Noise Compatibility Area around the proposed new airport, shall be conveyed to Clark County from the BLM upon an acceptable Record of Decision (ROD) under Public Law 107-282. This law also includes the establishment of the Ivanpah transportation and utilities corridor between the Las Vegas valley and the proposed SNSA for the placement, on a nonexclusive basis, of transportation and utilities infrastructure. Also associated with the EIS and in compliance with NEPA, and the Federal Land Policy and Management Act of 1976, as amended (FLPMA), the Bureau of Land Management (BLM) Las Vegas Field Office (LVFO) intends to prepare a resource management plan amendment (RMPA).
In the 2000 Ivanpah Valley Airport Public Lands Transfer Act, (Pub. L. 106-362), Congress directed the Bureau of Land Management (BLM), acting on behalf of the Secretary of the U.S. Department of the Interior, to transfer property in Ivanpah Valley, Nevada to Clark County for the purpose of developing an airport facility and related infrastructure. That transfer has been completed. Other BLM Managed lands associated with the proposed airport would also be transferred to Clark County under the Clark County Conservation of Public Land and Natural Resources Act of 2002 (Pub. L. 107-282), Land Conveyance for Southern Nevada Supplemental Airport (Pub. L. 113-291), and the National Defense Authorization Act of 2015 (Pub. L. 113-291). However, in accordance with the Ivanpah Valley Airport Public Lands Transfer Act, should completion of the NEPA process lead to the determination that an airport should not be constructed at the site, it will be transferred back to BLM ownership.

The Ivanpah Valley Airport Public Lands Transfer Act also directed the U.S. Departments of Transportation and the Interior to prepare a joint EIS "with respect to initial planning and construction" prior to construction of an airport facility and related infrastructure on the proposed Ivanpah site. Due to recent amendments in NEPA by the Fiscal Responsibility Act of 2023 (Pub. L. 118-5), the FAA in cooperation with the BLM, is providing notice, as Joint Lead Agencies (JLA), that the on-going EIS process, suspended since 2010, will be cancelled and a new EIS process will start for the proposed Southern Nevada Supplemental Airport. Cancellation of the original EIS process and starting a new EIS/RMPA process is necessary to ensure proper timing consistent with NEPA, as amended. The EIS/RMPA will address a range of reasonable alternatives to meet the purpose and need, and are technically and economically feasible. The range of alternatives identified during the scoping process may include alternatives other than the Proposed Action. The alternatives may include, but are not limited to, expansion of Harry Reid International Airport (formerly known as McCarran International Airport) and use of other existing airports. The alternatives will also include a no-action scenario as required by NEPA.

The FAA and BLM intend to use the preparation of this EIS/RMPA to comply with applicable special purpose laws having public involvement requirements. Comments addressing your issues on the scope of the EIS should be directed to the listed contact persons either using U.S. Mail and must be postmarked no later than September 05, 2025, or by email to: SNSAEIS@landrumbrown.com.

The purpose of this notice is to inform Federal, State, and local government agencies, and the public of the intent to prepare an EIS and to conduct a public and agency scoping process. Information, data, opinions, and comments obtained throughout the scoping process will be considered during the preparation of the draft EIS/RMPA.

This document also provides notice that the BLM intends to prepare an RMPA for the Southern Nevada Supplemental Airport Project and seeks public input on issues and planning criteria. The RMPA to modify the Visual Resource Management (VRM) class is being considered in order for the BLM to evaluate the establishment of the Ivanpah Transportation and Utilities Corridor, which will require amending the existing 1998 Las Vegas RMP.

Purpose and Need: The FAA's purpose and need for the Proposed Action is to ensure that Clark County's proposed supplemental commercial service airport for the Las Vegas metropolitan area provides for safe and efficient air transportation pursuant to the Federal Aviation Act of 1958, as amended (Pub. L. 85-726), meets airport design standards, and complies with Public Law 106-362.

The BLM's purpose for the Proposed Action is to convey the identified federal lands to facilitate the development of the SNSA. The BLM's need for the Proposed Action is for the BLM to comply with Public Law 106-362; Public Law 107–282; and Public Law 113-291, provided that conditions set forth in the Public Laws are met and to meet agency responsibilities as required by section 209 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA) (Pub. L. 94-579).

As a result of proposed infrastructure within the Interstate 15 South Corridor

designated per Public Law 107–282, the BLM has also determined that it will evaluate the need for a RMPA for this project, and as a result the document will be a combined EIS/RMPA following the requirements of the BLM's land use planning regulations cited in 43 CFR part 1600. Accordingly, the BLM will consider whether to amend the 1998 Las Vegas Approved Resource Management Plan/Record of Decision within the proposed Project area to modify the Visual Resources Management (VRM) class.

BLM Planning Criteria: The BLM planning criteria guide and planning effort lay the groundwork for effects analysis by identifying the preliminary issues and their analytical frameworks. The BLM has identified some preliminary planning criteria to guide development of the RMPA, to avoid unnecessary data collection and analysis, and to ensure the RMPA is tailored to the issues/resources. These criteria may be modified and/or other criteria may be identified during the public scoping process.

Criteria 1: Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies.

Criteria 2: Existing valid Las Vegas Resource Management Plan decisions will not change, and any new plan decisions will not conflict with existing valid plan decisions.

Criteria 3: Any resource management plan amendments will recognize valid existing rights.

This notice of intent initiates the scoping period and public review of the BLM planning criteria, which guide the development and analysis of the Draft EIS/RMPA. The scoping process for this EIS will also include a comment period for interested agencies and parties to submit oral and/or written comments representing the concerns and issues they believe should be addressed.

The EIS/RMPA will be prepared in accordance with NEPA, 42 U.S.C. 4321 et seq., as amended, 43 CFR 46.435, 43 CFR 1610.2, and 43 CFR part 1600, FAA Order 1050.1F, "Environmental Impacts: Policies and Procedures" (July 16, 2015), and the procedures described in FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airports Actions (April 28, 2006) along with BLM Handbook H-1790-1, "National Environmental Policy Act Handbook" and the Department of the Interior Departmental Manual Part 516, "National Environmental Policy Act of 1969".

The Clark County Department of Aviation, the owner of Harry Reid International Airport, as well as other general aviation airports in Clark County, Nevada, proposes the following development as identified in the Southern Nevada Supplemental Airport Feasibility Study: Construction of a supplemental commercial service airport including two new runways 12,000 feet long by 150 feet wide and 15,000 feet long by 150 feet wide, parallel and connecting taxiway system; passenger terminal building with Federal Inspection Services Facility, aircraft parking apron, Airport Traffic Control Tower, navigational aids, air surveillance radar and automatic dependent broadcast ground stations, ground access infrastructure, and associated utilities. The proposal also includes development and use of associated arrival and departure flight procedures for the new runways. The FAA and the BLM are Joint Lead Agencies (JLA) for preparation of the EIS.

Public Scoping and Agency Meetings: With this notice, the JLA is announcing the scoping period to solicit public comments; to identify issues and to provide the planning criteria for public review. Related to the proposed action, the JLA are planning, two (2) in-person public scoping meetings, one (1) virtual public scoping meeting, and one (1) virtual governmental agency scoping meeting.

To ensure that the full range of issues related to Clark County's proposed project are addressed and that all significant issues are identified, comments and suggestions are invited from all interested parties. Public and agency scoping meetings will be conducted to identify any significant issues associated with the proposed project.

A virtual governmental agency scoping meeting for all Federal, State, Tribal and local regulatory agencies which have jurisdiction by law or have special expertise with respect to any potential environmental impacts associated with the proposed action will be held on July 29, 2025, from 1 p.m. to 3 p.m. Pacific daylight time. A notification letter will be sent in advance of the meeting.

To notify the general public of the scoping process, a legal notice will be placed in newspapers having general circulation in the study area, the BLM National NEPA Register, news release, and FAA and BLM social media pages. The newspaper notice will notify the public that scoping meetings will be held to gain their input concerning the proposed action, alternatives to be considered, review planning criteria and impacts to be evaluated.

The JLA is aware that there are Native American Tribes with affinity to the area. The JLA will conduct government-to-government consultation, in accordance with all executive orders, laws, regulations, and other memoranda. The Tribes will also be invited to participate in accordance with NEPA and section 106 of the National Historic Preservation Act.

PUB: May 19, 2025
LV Review-Journal

TABLE A-1 AGENCY NOI DISTRIBUTION LIST

Agency Name	Contact Name	Title	Email
Clark County Department of Aviation (CCDOA)	John Wagner	Airport Program Administrator - SNSA	johnw@lasairport.com
Clark County Department of Aviation (CCDOA)	Bryant Holt	Managing Director of Aviation, Planning	bryanth@lasairport.com
Clark County Department of Aviation (CCDOA)	Rosemary Vassiliadis		rosemaryy@lasairport.com
Clark County Department of Aviation (CCDOA)	James Chrisley	Senior Director of Aviation	jamesc@lasairport.com
Clark County Department of Environment and Sustainability (CCDES)	Marci Henson	Director, Department of Environment and Sustainability	mhenson@clarkcountynv.gov
Federal Highway Administration (FHWA)	Jacob Waclaw	Team Leader, Senior Transportation Engineer Dist 3	jacob.waclaw@dot.gov
Federal Highway Administration (FHWA)	Ed Woolford	Realty & Environmental Program Manager	edward.woolford@dot.gov
Federal Highway Administration (FHWA)	Ammon Heier	Senior Transportation Engineer, Dist 1 (ADL) - AZ	ammon.heier@dot.gov
National Park Service – Mojave National Preserve	Jodi Bailey		Jodi_Bailey@nps.gov
National Park Service (NPS)	David Szymanski	Regional Director	David_Szymanski@nps.gov
National Park Service (NPS)	Debra Hughson		Debra_Hughson@nps.gov
National Park Service (NPS)	Jeremy Petruncio		jeremy_petruncio@nps.gov
National Park Service (NPS)	Randy Lavasseur		Randy_lavasseur@nps.gov
Nevada Department of Environmental Protection (NDEP)	Mandy Hood	Main Office	mhood@ndep.nv.gov
Nevada Department of Transportation (NDOT)	My-Linh Nguyen	Chief, Environmental Division	mnguyen@dot.nv.gov
Nevada Department of Transportation (NDOT)	Chris Young	Chief, Environmental Services Program	cyoung@dot.nv.gov
Nevada Department of Transportation (NDOT)	Mary Taitano	Environmental Services Manager	mtaitano@dot.nv.gov
Nevada Department of Wildlife (NDOW)	Alan Jenne	Director	ajenne@ndow.org
Nevada Division of Forestry (NDF)	Kacey KC	State Forester	kaceykc@forestry.nv.gov
Nevada State Historic Preservation Office (SHPO)	Robin K. Reed	Deputy State Historic Preservation Officer	rreed@shpo.nv.gov
Regional Transportation Commission of Southern Nevada (RTC)	M.J. Maynard-Carey	CEO	maynardm@rtcsnv.com
U.S. Environmental Protection Agency (USEPA)	Josh F.W. Cook	Regional Administrator, EPA Region 9	cook.josh@epa.gov

Agency Name	Contact Name	Title	Email
U.S. Fish and Wildlife Service (USFWS)	Paul Souza	Regional Director, Pacific Southwest Region	Paul_Souza@fws.gov
U.S. Fish and Wildlife Service (USFWS)	Brian Croft	Palm Springs and Southern Nevada Offices, Field Supervisor	brian_croft@fws.gov
U.S. Forest Service (USFS)	Cheva Gabor	Nevada State Liaison	cheva.gabor@usda.gov
Nevada Division of Natural Heritage (NDNH)	Jamey McClinton	Administrator, Department of Conservation and Natural Resources	jmcclinton@heritage.nv.gov
Clark County Regional Flood Control District (CCRFCD)	Andrew R. Trelease, P.E., CFM	General Manager/ Chief Engineer	atrelease@regionalflood.org
U.S. Environmental Protection Agency, Region 9	Connell Dunning		dunning.connell@epa.gov

Source: Landrum & Brown, 2025.

From:	Kessler, Dave (FAA)
To:	John Wagner; Bryant Holt; rosemaryv@lasairport.com; James Chrisley; Mhenson@clarkcountynv.gov; Waclaw, Jacob (FHWA); Woolford, Edward (FHWA); Heier, Ammon (FHWA); Debra_Hughson@nps.gov; david_szymanski@nps.gov; mhood@ndep.nv.gov; mnguyen@dot.nv.gov; cyoung@dot.nv.gov; mtaitano@dot.nv.gov; ajenne@ndow.org; kaceykc@forestry.nv.gov; rreed@shpo.nv.gov; maynardm@rtcsnv.com; cook.josh@epa.gov; "Dunning.Connell@epa.gov"; Paul_Souza@fws.gov; brian_croft@fws.gov; cheva.gabor@usda.gov; jmclinton@heritage.nv.gov; atrelease@regionalflood.org
Cc:	Wolfers-Lawrence, Jean (FAA); Duffy, Kent (FAA); michael.hines; michael.lawrance; joseph.carlini; Garcia, Faviola (FAA); Fowler, Kimberly (FAA); McClardy, Mark (FAA); kyler.erhard; Aunger, Jonathan P (FAA); Carlson, James J (FAA); Hudson, Pam E (FAA); Guerrero, Joanie J; Cepero Rios, Colleen; Leslie, Stephen O; Sarah Potter; Rob Adams; Gaby Elizondo
Subject:	Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)
Date:	Friday, May 16, 2025 3:21:04 PM
Attachments:	SNSA EIS Cooperating Participating Agency Invite letter 5 16 2025 0909 pdt.pdf

Good afternoon – the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA). As noted in the attached letter, the JLA issued a Notice of Intent (NOI) to prepare an EIS back in 2006. Due to the effects of the Great Recession, Clark County asked the JLA to suspend further work on the EIS in 2010. In 2018, Clark County resumed detailed planning efforts for the proposed SNSA.

On Monday, May 19, 2025, a Notice of Cancellation and Notice of Intent will appear in the *Federal Register* and the *Las Vegas Review-Journal* that cancels the suspended EIS and we will begin a new EIS process along with amending the BLM's Las Vegas Resource Management Plan for the proposed development and operation of the SNSA.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for preparation of an Environmental Impact Statement (EIS) for Clark County, Nevada's proposed Southern Nevada Supplemental Airport (SNSA). In 2006 the JLA issued a Notice of Intent to prepare the EIS, however, in 2010, at the request of Clark County, the JLA suspended preparation of the EIS. The FAA is the administrative lead agency for the JLA.

In 2018, Clark County resumed detailed planning efforts for the proposed new airport. On May 19, 2025, the JLA intends to issue a Notice of Cancellation for the preparation of the EIS that began in 2006 and issue a Notice of Intent to begin a new EIS and amend the BLM's Las Vegas Resource Management Plan for the proposed development and operation of the SNSA.

The FAA Reauthorization Act of 2024 (Public Law 118-63) states that "[a] Federal agency required to make an approval or take an action for a project" must be treated as a cooperating agency.[1] The proposed SNSA includes proposed modifications to an existing interchange and construction of a new interchange on Interstate Highway 15 (I-15) which will require approval by the Federal Highway Administration (FHWA) and Nevada Department of Transportation (NDOT). Therefore, the JLA is inviting the FHWA and NDOT to be cooperating agencies on the EIS.

Considering the update to the legal standards controlling cooperating and participating agencies,[2] the following agencies are invited to be **participating agencies** in the preparation of the EIS as they provide special expertise with respect to potential environmental impacts from the proposed SNSA.

- National Park Service (NPS)
- U.S. Environmental Protection Agency (US EPA)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Forest Service (USFS)
- Nevada Department of Wildlife (NDOW)
- Nevada Department of Environmental Protection (NDEP)
- Nevada Division of Natural Heritage (NDNH)
- Nevada Division of Forestry (NDF)
- Nevada State Historic Preservation Officer (SHPO)
- Regional Transportation Commission of Southern Nevada (RTC)
- Clark County Department of Environment and Sustainability (CCDES)
- Clark County Regional Flood Control District (CCRFCD)
- Clark County Department of Aviation (CCDOA)

The JLA will be scheduling a meeting to provide an update on this project in the near future. At this meeting the JLA will present an overview of the project, description of roles and responsibilities, a summary of the EIS process, and the anticipated schedule for completion of the EIS. The JLA appreciates your assistance in forwarding copies of this information to the appropriate staff within your organization. Please contact me if you have any questions at 424-405-7315 or at dave.kessler@faa.gov

DAVID KESSLER Digitally signed by DAVID KESSLER
Date: 2025.05.16 09:14:05 -07'00'

David B. Kessler, M.A., AICP
Regional Environmental Protection Specialist
Federal Aviation Administration

[1] *See* 49 U.S.C. § 47171(n)(2)(C).
[2] *See* 49 U.S.C. § 47171, as amended by the FAA Reauthorization Act of 2024 (Public Law 118-63); The National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq., as amended by the Fiscal Responsibility Act of 2023 (Public Law 118-5).

From:	Kessler, Dave (FAA)
To:	Jeremy_petruncio@nps.gov
Cc:	Wolfers-Lawrence, Jean (FAA); Sarah Potter; Rob Adams; Gaby Elizondo
Subject:	FW: Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)
Date:	Friday, May 16, 2025 5:30:00 PM
Attachments:	SNSA EIS Cooperating Participating Agency Invite letter 5 16 2025 0909 pdt.pdf

Good Afternoon Jeremy – I understand you replaced Debra Hughson. I wanted to make sure you were aware of the proposed Southern Nevada Supplemental Airport.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From: Kessler, Dave (FAA)
Sent: Friday, May 16, 2025 12:21 PM
To: John Wagner ; Bryant Holt ; rosemaryv@lasairport.com; James Chrisley ; Mhenson@clarkcountynv.gov; Jacob.Waclaw@dot.gov; Woolford, Edward (FHWA) ; Heier, Ammon (FHWA) ; Debra_Hughson@nps.gov; david_szymanski@nps.gov; mhood@ndep.nv.gov; mnguyen@dot.nv.gov; cyoung@dot.nv.gov; mtaitano@dot.nv.gov; ajenne@ndow.org; kaceykc@forestry.nv.gov; rreed@shpo.nv.gov; maynardm@rtcsnv.com; cook.josh@epa.gov; 'Dunning.Connell@epa.gov' ; Paul_Souza@fws.gov; brian_croft@fws.gov; cheva.gabor@usda.gov; jmclinton@heritage.nv.gov; atrelease@regionalflood.org
Cc: Wolfers-Lawrence, Jean (FAA) ; Duffy, Kent (FAA) ; Hines, Michael (FAA) ; Lawrance, Michael (FAA) ; Carlini, Joseph (FAA) ; Garcia, Faviola (FAA) ; Fowler, Kimberly (FAA) ; McClardy, Mark (FAA) ; Erhard, Kyler (FAA) ; Aunger, Jonathan P (FAA) ; Carlson, James J (FAA) ; Hudson, Pam E (FAA) ; Guerrero, Joanie J ; Cepero Rios, Colleen ; Leslie, Stephen O ; Sarah Potter ; Rob Adams ; Gaby Elizondo
Subject: Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)

Good afternoon – the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA). As noted in the attached letter, the JLA issued a Notice of Intent

(NOI) to prepare an EIS back in 2006. Due to the effects of the Great Recession, Clark County asked the JLA to suspend further work on the EIS in 2010. In 2018, Clark County resumed detailed planning efforts for the proposed SNSA.

On Monday, May 19, 2025, a Notice of Cancellation and Notice of Intent will appear in the *Federal Register* and the *Las Vegas Review-Journal* that cancels the suspended EIS and we will begin a new EIS process along with amending the BLM's Las Vegas Resource Management Plan for the proposed development and operation of the SNSA.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From:	Kessler, Dave (FAA)
To:	randy_lavasseur@nps.go
Cc:	Wolfers-Lawrence, Jean (FAA); Sarah Potter; Rob Adams; Gaby Elizondo
Subject:	FW: Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)
Date:	Friday, May 16, 2025 3:54:42 PM
Attachments:	SNSA EIS Cooperating Participating Agency Invite letter 5 16 2025 0909 pdt.pdf

Good Afternoon Randy – I understand that Mr. Szymanski is out of the office until June 2nd. I wanted to make sure this was sent to you in a timely manner.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From: Kessler, Dave (FAA)
Sent: Friday, May 16, 2025 12:21 PM
To: John Wagner ; Bryant Holt ; rosemaryv@lasairport.com; James Chrisley ; Mhenson@clarkcountynv.gov; Jacob.Waclaw@dot.gov; Woolford, Edward (FHWA) ; Heier, Ammon (FHWA) ; Debra_Hughson@nps.gov; david_szymanski@nps.gov; mhood@ndep.nv.gov; mnguyen@dot.nv.gov; cyoung@dot.nv.gov; mtaitano@dot.nv.gov; ajenne@ndow.org; kaceykc@forestry.nv.gov; rreed@shpo.nv.gov; maynardm@rtcsnv.com; cook.josh@epa.gov; 'Dunning.Connell@epa.gov' ; Paul_Souza@fws.gov; brian_croft@fws.gov; cheva.gabor@usda.gov; jmclinton@heritage.nv.gov; atrelease@regionalflood.org
Cc: Wolfers-Lawrence, Jean (FAA) ; Duffy, Kent (FAA) ; Hines, Michael (FAA) ; Lawrance, Michael (FAA) ; Carlini, Joseph (FAA) ; Garcia, Faviola (FAA) ; Fowler, Kimberly (FAA) ; McClardy, Mark (FAA) ; Erhard, Kyler (FAA) ; Aunger, Jonathan P (FAA) ; Carlson, James J (FAA) ; Hudson, Pam E (FAA) ; Guerrero, Joanie J ; Cepero Rios, Colleen ; Leslie, Stephen O ; Sarah Potter ; Rob Adams ; Gaby Elizondo
Subject: Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)

Good afternoon – the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA). As noted in the attached letter, the JLA issued a Notice of Intent

(NOI) to prepare an EIS back in 2006. Due to the effects of the Great Recession, Clark County asked the JLA to suspend further work on the EIS in 2010. In 2018, Clark County resumed detailed planning efforts for the proposed SNSA.

On Monday, May 19, 2025, a Notice of Cancellation and Notice of Intent will appear in the *Federal Register* and the *Las Vegas Review-Journal* that cancels the suspended EIS and we will begin a new EIS process along with amending the BLM's Las Vegas Resource Management Plan for the proposed development and operation of the SNSA.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From:	Kessler, Dave (FAA)
To:	jmcclinton@heritage.nv.gov
Cc:	Sarah Potter; Rob Adams; Gaby Elizondo
Subject:	FW: Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)
Date:	Friday, May 16, 2025 3:34:38 PM
Attachments:	SNSA EIS Cooperating Participating Agency Invite letter 5 16 2025 0909 pdt.pdf

Ms. McClinton – please see the email below. I had misspelled your email address.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From: Kessler, Dave (FAA)
Sent: Friday, May 16, 2025 12:21 PM
To: John Wagner ; Bryant Holt ; rosemaryv@lasairport.com; James Chrisley ; Mhenson@clarkcountynv.gov; Jacob.Waclaw@dot.gov; Woolford, Edward (FHWA) ; Heier, Ammon (FHWA) ; Debra_Hughson@nps.gov; david_szymanski@nps.gov; mhood@ndep.nv.gov; mnguyen@dot.nv.gov; cyoung@dot.nv.gov; mtaitano@dot.nv.gov; ajenne@ndow.org; kaceykc@forestry.nv.gov; rreed@shpo.nv.gov; maynardm@rtcsnv.com; cook.josh@epa.gov; 'Dunning.Connell@epa.gov' ; Paul_Souza@fws.gov; brian_croft@fws.gov; cheva.gabor@usda.gov; jmclinton@heritage.nv.gov; atrelease@regionalflood.org
Cc: Wolfers-Lawrence, Jean (FAA) ; Duffy, Kent (FAA) ; Hines, Michael (FAA) ; Lawrance, Michael (FAA) ; Carlini, Joseph (FAA) ; Garcia, Faviola (FAA) ; Fowler, Kimberly (FAA) ; McClardy, Mark (FAA) ; Erhard, Kyler (FAA) ; Aunger, Jonathan P (FAA) ; Carlson, James J (FAA) ; Hudson, Pam E (FAA) ; Guerrero, Joanie J ; Cepero Rios, Colleen ; Leslie, Stephen O ; Sarah Potter ; Rob Adams ; Gaby Elizondo
Subject: Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)

Good afternoon – the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA). As noted in the attached letter, the JLA issued a Notice of Intent (NOI) to prepare an EIS back in 2006. Due to the effects of the Great Recession, Clark County

asked the JLA to suspend further work on the EIS in 2010. In 2018, Clark County resumed detailed planning efforts for the proposed SNSA.

On Monday, May 19, 2025, a Notice of Cancellation and Notice of Intent will appear in the *Federal Register* and the *Las Vegas Review-Journal* that cancels the suspended EIS and we will begin a new EIS process along with amending the BLM's Las Vegas Resource Management Plan for the proposed development and operation of the SNSA.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

TABLE A-2 ELECTED OFFICIAL NOI DISTRIBUTION LIST

Agency Name	Contact Name	Title	Email
United States Senate	Honorable Catherine Cortez Masto	U.S. Senator	info@catherinecortezmasto.com
United States Senate	Honorable Jacky Rosen	U.S. Senator	SNV.CS@rosen.senate.gov
United States House of Representatives	Honorable Susie Lee	U.S. Representative	aneil.gill@mail.house.gov
United States House of Representatives	Honorable Steven Horsford	U.S. Representative	Sheyla.marimon@mail.house.gov
United States House of Representatives	Honorable Mark Amodei	U.S. Representative	monika.konrad@mail.house.gov
United States House of Representatives	Honorable Dina Titus	U.S. Representative	clair.shanklein@mail.house.gov
State of Nevada	Joe Lombardo	Governor	Mailed to 101 N. Carson Street, Carson City, NV 89701
State of Nevada	Chase McNamara	Governor's Office	cmcnamara@gov.nv.gov
State of Nevada	Tim Robb	Governor's Office	trobb@gov.nv.gov
State Senate	Carrie A. Buck	Senator	Carrie.Buck@sen.state.nv.us
State Senate	Nicole J. Cannizzaro	Senator	Nicole.Cannizzaro@sen.state.nv.us
State Senate	Michelee Cruz-Crawford	Senator	Shelly.Cruzcrawford@sen.state.nv.us
State Senate	Skip Daly	Senator	Skip.Daly@sen.state.nv.us
State Senate	Fabian Doñate	Senator	Fabian.Donate@sen.state.nv.us
State Senate	Marilyn Dondero Loop	Senator	Marilyn.DonderoLoop@sen.state.nv.us
State Senate	John Ellison	Senator	John.Ellison@sen.state.nv.us
State Senate	Edgar Flores	Senator	Edgar.Flores@sen.state.nv.us
State Senate	Ira Hansen	Senator	Ira.Hansen@sen.state.nv.us
State Senate	Lisa Krasner	Senator	Lisa.Krasner@sen.state.nv.us
State Senate	Roberta Lange	Senator	Roberta.Lange@sen.state.nv.us
State Senate	Dina Neal	Senator	Dina.Neal@sen.state.nv.us
State Senate	Rochelle T. Nguyen	Senator	rochelle.nguyen@sen.state.nv.us
State Senate	James Ohrenschall	Senator	James.Ohrenschall@sen.state.nv.us
State Senate	Julie Pazina	Senator	Julie.Pazina@sen.state.nv.us
State Senate	Lori Rogich	Senator	Lori.Rogich@sen.state.nv.us
State Senate	Melanie Scheible	Senator	Melanie.Scheible@sen.state.nv.us
State Senate	John C. Steinbeck	Senator	John.Steinbeck@sen.state.nv.us
State Senate	Jeff Stone	Senator	Jeff.Stone@sen.state.nv.us

Agency Name	Contact Name	Title	Email
State Senate	Angela D. Taylor	Senator	Angela.Taylor@sen.state.nv.us
State Senate	Robin L. Titus	Senator	Robin.Titus@sen.state.nv.us
State Representatives	Natha C. Anderson	Assemblywoman	Natha.Anderson@asm.state.nv.us
State Representatives	Shea Backus	Assemblywoman	Shea.Backus@asm.state.nv.us
State Representatives	Tracy Brown-May	Assemblywoman	Tracy.BrownMay@asm.state.nv.us
State Representatives	Max Carter	Assemblyman	Max.Carter@asm.state.nv.us
State Representatives	Lisa Cole	Assemblywoman	lisa.cole@asm.state.nv.us
State Representatives	Venicia Considine	Assemblywoman	Venicia.Considine@asm.state.nv.us
State Representatives	Joe Dalia	Assemblyman	joe.dalia@asm.state.nv.us
State Representatives	Rich DeLong	Assemblyman	Rich.Delong@asm.state.nv.us
State Representatives	Jill Dickman	Assemblywoman	Jill.Dickman@asm.state.nv.us
State Representatives	Reuben D'Silva	Assemblyman	Reuben.DSilva@asm.state.nv.us
State Representatives	Rebecca Edgeworth	Assemblywoman	rebecca.edgeworth@asm.state.nv.us
State Representatives	Tanya Flanagan	Assemblywoman	tanya.flanagan@asm.state.nv.us
State Representatives	Danielle Gallant	Assemblywoman	Danielle.Gallant@asm.state.nv.us
State Representatives	Cecelia González	Assemblywoman	Cecelia.Gonzalez@asm.state.nv.us
State Representatives	Heather Goulding	Assemblywoman	heather.goulding@asm.state.nv.us
State Representatives	Ken Gray	Assemblyman	Ken.Gray@asm.state.nv.us
State Representatives	Bert Gurr	Assemblyman	Bert.Gurr@asm.state.nv.us
State Representatives	Gregory T. Hafen II	Assemblyman	Gregory.Hafen@asm.state.nv.us
State Representatives	Alexis Hansen	Assemblywoman	Alexis.Hansen@asm.state.nv.us
State Representatives	Melissa Hardy	Assemblywoman	Melissa.Hardy@asm.state.nv.us
State Representatives	Brian Hibbetts	Assemblyman	Brian.Hibbetts@asm.state.nv.us
State Representatives	Linda Hunt	Assemblyman	linda.hunt@asm.state.nv.us
State Representatives	Jovan Jackson	Assemblyman	jovan.jackson@asm.state.nv.us
State Representatives	Sandra Jauregui	Assemblywoman	Sandra.Jauregui@asm.state.nv.us
State Representatives	Venise Karris	Assemblywoman	venise.karris@asm.state.nv.us
State Representatives	Heidi Kasama	Assemblywoman	Heidi.Kasama@asm.state.nv.us
State Representatives	Gregory Koenig	Assemblyman	Gregory.Koenig@asm.state.nv.us
State Representatives	Selena La Rue Hatch	Assemblywoman	Selena.La.Rue.Hatch@asm.state.nv.us
State Representatives	Elaine Marzola	Assemblywoman	Elaine.Marzola@asm.state.nv.us
State Representatives	Brittney Miller	Assemblywoman	Brittney.Miller@asm.state.nv.us
State Representatives	Daniele Monroe-Moreno	Assemblywoman	Daniele.MonroeMoreno@asm.state.nv.us
State Representatives	Cinthia Zermeño Moore	Assemblywoman	cinthia.moore@asm.state.nv.us
State Representatives	Erica Mosca	Assemblywoman	Erica.Mosca@asm.state.nv.us

Agency Name	Contact Name	Title	Email
State Representatives	Hanadi Nadeem	Assemblywoman	hanadi.nadeem@asm.state.nv.us
State Representatives	Duy Nguyen	Assemblyman	Duy.Nguyen@asm.state.nv.us
State Representatives	Philip PK O'Neill	Assemblyman	PK.Oneill@asm.state.nv.us
State Representatives	David Orentlicher	Assemblyman	David.Orentlicher@asm.state.nv.us
State Representatives	Erica Roth	Assemblywoman	erica.roth@asm.state.nv.us
State Representatives	Selena Torres-Fossett	Assemblywoman	Selena.Torres@asm.state.nv.us
State Representatives	Howard Watts	Assemblyman	Howard.Watts@asm.state.nv.us
State Representatives	Steve Yeager	Assemblyman	Steve.Yeager@asm.state.nv.us
State Representatives	Toby Yurek	Assemblyman	Toby.Yurek@asm.state.nv.us
Clark County Board of Commissioners	Tick Segerblom	Chairman	DistrictE@ClarkCountyNV.gov
Clark County Board of Commissioners	William McCurdy II	Vice-Chairman	DistrictD@ClarkCountyNV.gov
Clark County Board of Commissioners	Michael Naft	County Commissioner	DistrictA@ClarkCountyNV.gov
Clark County Board of Commissioners	Marilyn Kirkpatrick	County Commissioner	DistrictB@ClarkCountyNV.gov
Clark County Board of Commissioners	April Becker	County Commissioner	DistrictC@ClarkCountyNV.gov
Clark County Board of Commissioners	Justin Jones	County Commissioner	DistrictF@ClarkCountyNV.gov
Clark County Board of Commissioners	James Gibson	County Commissioner	DistrictG@ClarkCountyNV.gov
Las Vegas, NV	Shelley Berkley	Mayor	sberkley@lasvegasnevada.gov
Las Vegas, NV	Brian Knudsen	Mayor Pro Tem	ward1@lasvegasnevada.gov
Las Vegas, NV	Victoria Seaman	Councilwoman	ward2@lasvegasnevada.gov
Las Vegas, NV	Olivia Diaz	Councilwoman	ward3@lasvegasnevada.gov
Las Vegas, NV	Francis Allen-Palenske	Councilwoman	fpalenske@lasvegasnevada.gov
Las Vegas, NV	Shondra Summers-Armstrong	Councilwoman	ssummersarmstrong@lasvegasnevada.gov
Las Vegas, NV	Nancy E. Brune	Councilwoman	nbrune@lasvegasnevada.gov
North Las Vegas, NV	Pamela Goynes-Brown	Mayor	perkinsparschab@cityofnorthlasvegas.com
North Las Vegas, NV	Isaac Barron	Councilman	Lomelic@cityofnorthlasvegas.com
North Las Vegas, NV	Ruth Garcia-Anderson	Councilwoman	guzmanm@cityofnorthlasvegas.com
North Las Vegas, NV	Scott Black	Councilman	Lomelic@cityofnorthlasvegas.com
North Las Vegas, NV	Richard Cherchio	Councilman	guzmanm@cityofnorthlasvegas.com

Agency Name	Contact Name	Title	Email
Boulder City, NV	Joe Hardy	Mayor	JoeHardy@bcnv.org
Boulder City, NV	Sherri Jorgensen	Mayor Pro Tempore	SJorgensen@bcnv.org
Boulder City, NV	Cookie Booth	Councilwoman	CBooth@bcnv.org
Boulder City, NV	Steve Walton	Councilman	SWalton@bcnv.org
Boulder City, NV	Denise Ashurst	Councilwoman	DAshurst@bcnv.org
Henderson, NV	Michelle Romero	Mayor	Michelle.Romero@cityofhenderson.com
Henderson, NV	Jim Seebock	Councilman	Jim.Seebock@cityofhenderson.com
Henderson, NV	Monica Larson	Councilwoman	Monica.Larson@cityofhenderson.com
Henderson, NV	Carrie Cox	Councilwoman	Carrie.Cox@cityofhenderson.com
Henderson, NV	Dan Stewart	Councilman	Dan.Stewart@cityofhenderson.com
Nye County Board of Commissioners	Bruce Jabbour	Commissioner	bjjabbour@nyecountynv.gov
Nye County Board of Commissioners	John Koenig	Commissioner	jkoenig@nyecountynv.gov
Nye County Board of Commissioners	Ian Bayne	Commissioner	ilbayne@nyecountynv.gov
Nye County Board of Commissioners	Ron Boskovich	Chair	reboskovich@nyecountynv.gov
Nye County Board of Commissioners	Debra Strickland	Vice Chair	dlstrickland@nyecountynv.gov

Source: Landrum & Brown, 2025.

From: Kessler, Dave (FAA)
Sent: Tuesday, May 20, 2025 3:19 PM
To: 'info@catherinecortezmasto.com' <info@catherinecortezmasto.com>; 'SNV.CS@rosen.senate.gov' <SNV.CS@rosen.senate.gov>; 'aneil.gill@mail.house.gov' <aneil.gill@mail.house.gov>; 'Sheyla.marimon@mail.house.gov' <Sheyla.marimon@mail.house.gov>; 'monika.konrad@mail.house.gov' <monika.konrad@mail.house.gov>; 'clair.shanklein@mail.house.gov' <clair.shanklein@mail.house.gov>; 'trobb@gov.nv.gov' <trobb@gov.nv.gov>; 'cmcnamara@gov.nv.gov' <cmcnamara@gov.nv.gov>; 'Carrie.Buck@sen.state.nv.us' <Carrie.Buck@sen.state.nv.us>; 'Nicole.Cannizzaro@sen.state.nv.us' <Nicole.Cannizzaro@sen.state.nv.us>; 'Shelly.Cruzcrawford@sen.state.nv.us' <Shelly.Cruzcrawford@sen.state.nv.us>; 'Skip.Daly@sen.state.nv.us' <Skip.Daly@sen.state.nv.us>; 'Fabian.Donate@sen.state.nv.us' <Fabian.Donate@sen.state.nv.us>; 'Marilyn.DonderoLoop@sen.state.nv.us' <Marilyn.DonderoLoop@sen.state.nv.us>; 'John.Ellison@sen.state.nv.us' <John.Ellison@sen.state.nv.us>; 'Edgar.Flores@sen.state.nv.us' <Edgar.Flores@sen.state.nv.us>; 'Ira.Hansen@sen.state.nv.us' <Ira.Hansen@sen.state.nv.us>; 'Lisa.Krasner@sen.state.nv.us' <Lisa.Krasner@sen.state.nv.us>; 'Roberta.Lange@sen.state.nv.us' <Roberta.Lange@sen.state.nv.us>; 'Dina.Neal@sen.state.nv.us' <Dina.Neal@sen.state.nv.us>; 'rochelle.nguyen@sen.state.nv.us' <rochelle.nguyen@sen.state.nv.us>; 'James.Ohrenschall@sen.state.nv.us' <James.Ohrenschall@sen.state.nv.us>; 'Julie.Pazina@sen.state.nv.us' <Julie.Pazina@sen.state.nv.us>; 'Lori.Rogich@sen.state.nv.us' <Lori.Rogich@sen.state.nv.us>; 'Melanie.Scheible@sen.state.nv.us' <Melanie.Scheible@sen.state.nv.us>; 'John.Steinbeck@sen.state.nv.us' <John.Steinbeck@sen.state.nv.us>; 'Jeff.Stone@sen.state.nv.us' <Jeff.Stone@sen.state.nv.us>; 'Angela.Taylor@sen.state.nv.us' <Angela.Taylor@sen.state.nv.us>; 'Robin.Titus@sen.state.nv.us' <Robin.Titus@sen.state.nv.us>; 'Natha.Anderson@asm.state.nv.us' <Natha.Anderson@asm.state.nv.us>; 'Shea.Backus@asm.state.nv.us' <Shea.Backus@asm.state.nv.us>; 'Tracy.BrownMay@asm.state.nv.us' <Tracy.BrownMay@asm.state.nv.us>; 'Max.Carter@asm.state.nv.us' <Max.Carter@asm.state.nv.us>; 'lisa.cole@asm.state.nv.us' <lisa.cole@asm.state.nv.us>; 'Venicia.Considine@asm.state.nv.us' <Venicia.Considine@asm.state.nv.us>; 'joe.dalia@asm.state.nv.us' <joe.dalia@asm.state.nv.us>; 'Rich.Delong@asm.state.nv.us' <Rich.Delong@asm.state.nv.us>; 'Jill.Dickman@asm.state.nv.us' <Jill.Dickman@asm.state.nv.us>; 'Reuben.DSilva@asm.state.nv.us' <Reuben.DSilva@asm.state.nv.us>; 'rebecca.edgeworth@asm.state.nv.us' <rebecca.edgeworth@asm.state.nv.us>; 'tanya.flanagan@asm.state.nv.us' <tanya.flanagan@asm.state.nv.us>; 'Danielle.Gallant@asm.state.nv.us' <Danielle.Gallant@asm.state.nv.us>; 'Cecelia.Gonzalez@asm.state.nv.us' <Cecelia.Gonzalez@asm.state.nv.us>; 'heather.goulding@asm.state.nv.us' <heather.goulding@asm.state.nv.us>; 'Ken.Gray@asm.state.nv.us' <Ken.Gray@asm.state.nv.us>; 'Bert.Gurr@asm.state.nv.us' <Bert.Gurr@asm.state.nv.us>; 'Gregory.Hafen@asm.state.nv.us' <Gregory.Hafen@asm.state.nv.us>; 'Alexis.Hansen@asm.state.nv.us' <Alexis.Hansen@asm.state.nv.us>; 'Melissa.Hardy@asm.state.nv.us' <Melissa.Hardy@asm.state.nv.us>;

'Brian.Hibbetts@asm.state.nv.us' <Brian.Hibbetts@asm.state.nv.us>; 'linda.hunt@asm.state.nv.us' <linda.hunt@asm.state.nv.us>; 'jovan.jackson@asm.state.nv.us' <jovan.jackson@asm.state.nv.us>; 'Sandra.Jauregui@asm.state.nv.us' <Sandra.Jauregui@asm.state.nv.us>; 'venise.karris@asm.state.nv.us' <venise.karris@asm.state.nv.us>; 'Heidi.Kasama@asm.state.nv.us' <Heidi.Kasama@asm.state.nv.us>; 'Gregory.Koenig@asm.state.nv.us' <Gregory.Koenig@asm.state.nv.us>; 'Selena.La.Rue.Hatch@asm.state.nv.us' <Selena.La.Rue.Hatch@asm.state.nv.us>; 'Elaine.Marzola@asm.state.nv.us' <Elaine.Marzola@asm.state.nv.us>; 'Brittney.Miller@asm.state.nv.us' <Brittney.Miller@asm.state.nv.us>; 'Daniele.MonroeMoreno@asm.state.nv.us' <Daniele.MonroeMoreno@asm.state.nv.us>; 'cinthia.moore@asm.state.nv.us' <cinthia.moore@asm.state.nv.us>; 'Erica.Mosca@asm.state.nv.us' <Erica.Mosca@asm.state.nv.us>; 'hanadi.nadeem@asm.state.nv.us' <hanadi.nadeem@asm.state.nv.us>; 'Duy.Nguyen@asm.state.nv.us' <Duy.Nguyen@asm.state.nv.us>; 'PK.Oneill@asm.state.nv.us' <PK.Oneill@asm.state.nv.us>; 'David.Orentlicher@asm.state.nv.us' <David.Orentlicher@asm.state.nv.us>; 'erica.roth@asm.state.nv.us' <erica.roth@asm.state.nv.us>; 'Selena.Torres@asm.state.nv.us' <Selena.Torres@asm.state.nv.us>; 'Howard.Watts@asm.state.nv.us' <Howard.Watts@asm.state.nv.us>; 'Steve.Yeager@asm.state.nv.us' <Steve.Yeager@asm.state.nv.us>; 'Toby.Yurek@asm.state.nv.us' <Toby.Yurek@asm.state.nv.us>; 'DistrictE@ClarkCountyNV.gov' <DistrictE@ClarkCountyNV.gov>; 'DistrictD@ClarkCountyNV.gov' <DistrictD@ClarkCountyNV.gov>; 'DistrictA@ClarkCountyNV.gov' <DistrictA@ClarkCountyNV.gov>; 'DistrictB@ClarkCountyNV.gov' <DistrictB@ClarkCountyNV.gov>; 'DistrictC@ClarkCountyNV.gov' <DistrictC@ClarkCountyNV.gov>; 'DistrictF@ClarkCountyNV.gov' <DistrictF@ClarkCountyNV.gov>; 'DistrictG@ClarkCountyNV.gov' <DistrictG@ClarkCountyNV.gov>; 'sberkley@lasvegasnevada.gov' <sberkley@lasvegasnevada.gov>; 'ward1@lasvegasnevada.gov' <ward1@lasvegasnevada.gov>; 'ward2@lasvegasnevada.gov' <ward2@lasvegasnevada.gov>; 'ward3@lasvegasnevada.gov' <ward3@lasvegasnevada.gov>; 'fpalenske@lasvegasnevada.gov' <fpalenske@lasvegasnevada.gov>; 'ssummersarmstrong@lasvegasnevada.gov' <ssummersarmstrong@lasvegasnevada.gov>; 'nbrune@lasvegasnevada.gov' <nbrune@lasvegasnevada.gov>; 'perkinsparschab@cityofnorthlasvegas.com' <perkinsparschab@cityofnorthlasvegas.com>; 'Lomelic@cityofnorthlasvegas.com' <Lomelic@cityofnorthlasvegas.com>; 'guzmanm@cityofnorthlasvegas.com' <guzmanm@cityofnorthlasvegas.com>; 'Lomelic@cityofnorthlasvegas.com' <Lomelic@cityofnorthlasvegas.com>; 'guzmanm@cityofnorthlasvegas.com' <guzmanm@cityofnorthlasvegas.com>; 'JoeHardy@bcnv.org' <JoeHardy@bcnv.org>; 'SJorgensen@bcnv.org' <SJorgensen@bcnv.org>; 'CBooth@bcnv.org' <CBooth@bcnv.org>; 'SWalton@bcnv.org' <SWalton@bcnv.org>; 'DAshurst@bcnv.org' <DAshurst@bcnv.org>; 'Michelle.Romero@cityofhenderson.com' <Michelle.Romero@cityofhenderson.com>; 'Jim.Seebock@cityofhenderson.com' <Jim.Seebock@cityofhenderson.com>; 'Monica.Larson@cityofhenderson.com' <Monica.Larson@cityofhenderson.com>; 'Carrie.Cox@cityofhenderson.com' <Carrie.Cox@cityofhenderson.com>; 'Dan.Stewart@cityofhenderson.com' <Dan.Stewart@cityofhenderson.com>; 'bjjabbour@nyecountynv.gov' <bjjabbour@nyecountynv.gov>; 'jkoenig@nyecountynv.gov' <jkoenig@nyecountynv.gov>; 'ilbayne@nyecountynv.gov' <ilbayne@nyecountynv.gov>; 'reboskovich@nyecountynv.gov' <reboskovich@nyecountynv.gov>; 'dlstrickland@nyecountynv.gov' <dlstrickland@nyecountynv.gov>

Cc: Wolfers-Lawrence, Jean (FAA) <jean.wolfers-lawrence@faa.gov>; Aunger, Jonathan P (FAA) <Jonathan.P.Aunger@faa.gov>; Duffy, Kent (FAA) <Kent.Duffy@faa.gov>; Lawrance, Michael (FAA) <Michael.Lawrance@faa.gov>; Hines, Michael (FAA) <Michael.Hines@faa.gov>; Carlini, Joseph (FAA) <Joseph.Carlini@faa.gov>; Aunger, Jonathan P (FAA) <Jonathan.P.Aunger@faa.gov>; Erhard, Kyler (FAA) <Kyler.Erhard@faa.gov>; Carlson, James J (FAA) <James.J.Carlson@faa.gov>; Hudson, Pam E (FAA) <Pam.E.Hudson@faa.gov>; Guerrero, Joanie J <jjguerrero@blm.gov>; Cepero Rios, Colleen <cceperorios@blm.gov>; Leslie, Stephen O <sleslie@blm.gov>; Fowler, Kimberly (FAA) <kimberly.fowler@faa.gov>
Subject: Southern Nevada Supplemental Airport Environmental Impact Statement/Resource Management Plan Amendment

Good afternoon – the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA). As noted in the attached letter, on Monday, May 19, 2025, a Notice of Cancellation and Notice of Intent appeared in the *Federal Register* and the *Las Vegas Review-Journal* that cancels the original EIS process the JLA began in 2006 and suspended in 2010. The JLA are beginning a new EIS process along with amending the BLM's Las Vegas Resource Management Plan for the proposed development and operation of the proposed SNSA.

The JLA will be holding public and governmental agency scoping meetings in late July 2025. Specific information about these meetings is in the attached letter. Please let me know if you have any questions about the federal environmental disclosure process for the proposed SNSA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov

Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

The Federal Aviation Administration (FAA) and the Bureau of Land Management (BLM), as Joint Federal Agencies (JLA), are resuming preparation of the Environmental Impact Statement (EIS) for Clark County Department of Aviation's (CCDOA) proposal for the development and operation of the Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada (Proposed Project). BLM has also determined that it will evaluate the need for a Resource Management Plan Amendment (RMPA) for this project, and as a result the document will be a combined EIS/RMPA. The RMPA to modify the Visual Resource Management (VRM) class is being considered in order for the BLM to evaluate the establishment of the Ivanpah Transportation and Utilities Corridor, which will require amending the existing 1998 Las Vegas RMP. The CCDOA, the owner of Harry Reid International Airport (LAS), is proposing the following development for the new airport:

- Construction of a supplemental commercial service airport including two new runways 12,000 feet long by 150 feet wide and 15,000 feet long by 150 feet wide;
- Parallel and connecting taxiway system;
- Passenger terminal building with a Federal Inspection Services facility;
- Aircraft parking aprons;
- Airport Traffic Control Tower;
- Navigational aids, airport surveillance radar and automatic dependent-broadcast ground stations;
- Ground access infrastructure and associated utilities; and
- Development and use of associated arrival and departure flight procedures for the new runways.

The EIS/RMPA will be prepared in accordance with the National Environmental Policy Act (NEPA), FAA Order 1050.1 F, *Environmental Impacts: Policies and Procedures*, FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions,* Department of the Interior Implementation of the National Environmental Policy Act 43 CFR Part 46, Resource Management Planning 43 CFR § 1610.2, and BLM's land use planning regulations cited in 43 CFR Part 1600, as well as other special purpose laws.

The JLA published a Notice of Intent (NOI) to prepare the EIS/RMPA in the *Federal Register* on May 19, 2025. Release of the NOI initiated the formal scoping period, which is an early and open process for determining the scope of the alternatives to be considered and the issues to be addressed in the EIS/RMPA related to the proposed action. Additionally, the NOI includes the BLM planning criteria for public review. The BLM planning criteria guides the planning effort and lays the groundwork for effects analysis by identifying the

preliminary issues and their analytical frameworks. The scoping period is a collaborative effort that invites participation from federal, state and local agencies, and the general public. One virtual agency scoping meeting will be conducted along with two in-person public and one virtual public scoping meetings. The detail for each meeting is provided below.

Date	Tuesday, July 29	Tuesday, July 29	Wednesday, July 30	Thursday, July 31
Time	1-3 pm	6-8 pm	5-7 pm	6-8 pm
Location	Virtual	Virtual	East Las Vegas Library	Primm Valley Ballroom
Audience	Agencies	Public	Public	Public

In addition to submitting written comments at the agency scoping meeting, written comments can also be submitted by email to SNSAEIS@landrumbrown.com, or sent via U.S. Mail to either of the following addresses

David B. Kessler, AICP
Project Manager, SNSA EIS
Federal Aviation Administration
Western-Pacific Region
777 South Aviation Boulevard
El Segundo, California 90245

Joanie Guerrero
Realty Specialist
Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130

Comments must be postmarked no later than September 5, 2025.

Additional information on the project and EIS process can be found on the project website: https://www.snvairporteis.com/ and the BLM National NEPA Register

DAVID KESSLER Digitally signed by DAVID KESSLER
Date: 2025.05.20 14:41:12 -07'00'

David B. Kessler, M.A., AICP
Regional Environmental Protection Specialist
Federal Aviation Administration

Attachment B Public Scoping Materials

FAA Press Release, published May 14, 2025
BLM National NEPA Register, published June 23, 2025
Project Website Announcement, published June 23, 2025
Media Press Release, distributed June 27, 2025
Email Notification to Public, distributed June 27, 2025
Display Advertisement, published June 27, 2025
Digital Advertisement, published June 30 to August 3, 2025
Virtual Scoping Meeting Materials, meeting held July 29, 2025
In-person Scoping Meeting Materials, meetings held July 30 and July 31, 2025

An official website of the United States government Here's how you know

Newsroom
Press Releases
Statements
Fact Sheets
Speeches
Testimony
Conferences & Events
Daily Air Traffic Report
Flight Delay Information
FAA Safety Briefing Magazine
Subscribe to FAA News

FAA and BLM Announce Public Meetings on Proposed Supplemental Airport for Las Vegas

Wednesday, May 14, 2025

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) will hold one virtual and two in-person public meetings to solicit input on the draft Environmental Impact Statement for the proposed Southern Nevada Supplemental Airport.

The proposed new airport would add airfield capacity to the Las Vegas Metropolitan Area for commercial and general aviation aircraft operators.

The meetings are part of the agencies' environmental review process and are intended to give people an opportunity to learn more about the project and provide comments.

The meeting details are as follows:

Tuesday, July 29, 2025
6 – 8 p.m.
Virtual
Register here: https://www.snvairporteis.com

Wednesday, July 30, 2025
5 – 7 p.m.
East Las Vegas Library – Multipurpose Rooms 1 & 2
2851 East Bonanza Road, Las Vegas, NV 89101

Thursday, July 31, 2025
6 – 8 p.m.
Primm Valley Casino Resorts – Primm Valley Ballroom
31900 South Las Vegas Boulevard, Primm, NV 89019

Additional information on the meetings, including how to register, is on the FAA project webpage and the BLM project webpage.

Contact Us

Federal Aviation Administration Press Office
800 Independence Avenue, SW
Washington, DC 20591
United States

Email:
pressoffice@faa.gov

Provide Your Feedback

If you are deaf, hard of hearing, or have a speech disability, please dial 7-1-1 to access telecommunications relay services.

Subscribe to FAA News

In addition to providing input at the meetings, people also can email comments to: SNSAEIS@landrumbrown.com and mail comments to:

David Kessler, AICP
c/o Federal Aviation Administration,
Western-Pacific Region
777 South Aviation Boulevard
El Segundo, CA 90245

Joanie Guerrero
Realty Specialist
Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130

The deadline to submit comments is Friday, Sept. 5, 2025.

POLICIES, RIGHTS & LEGAL

About DOT

Budget and Performance

Civil Rights

FOIA

Information Quality

No FEAR Act

Office of Inspector General

Privacy Policy

USA.gov

Web Policies and Notices

Web Standards

Southern Nevada Supplemental Airport

Project Information

NEPA Number:	DOI-BLM-NV-S010-2025-0035-RMP-EIS
Project Name:	Southern Nevada Supplemental Airport
Project Type:	RMP Amendment - Environmental Impact Statement
NEPA Status:	In Progress - Public Scoping Period
Lead Office:	Las Vegas FO
Last Updated:	06/23/2025 13:14:12 MDT

Project Description

The Clark County Department of Aviation (CCDOA), the owner of Harry Reid International Airport (LAS), is proposing the development and operation of the Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada.

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for preparation of an Environmental Impact Statement (EIS) and will do so in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C. §4321 et seq.). BLM has also determined that it will evaluate the need for a Resource Management Plan Amendment (RMPA) for this project, and as a result the document will be a combined EIS/RMPA. The RMPA to modify the Visual Resource Management (VRM) class is being considered in order for the BLM to evaluate the established Ivanpah Transportation and Utilities Corridor, which will require amending the existing 1998 Las Vegas Resource Management Plan.

The EIS/RMPA will be prepared in accordance with the NEPA, FAA Order 1050.1 F, Environmental Impacts: Policies and Procedures, FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, Department of the Interior Implementation of the National Environmental Policy Act 43 CFR Part 46, BLM's NEPA Handbook H 1790-1,Resource Management Planning 43 CFR § 1610.2, BLM's land use planning regulations cited in 43 CFR Part 1600, BLM Land Use Planning (LUP) Handbook H-1601-1 as well as other special purpose laws.

What's New

Spring 2025

The Federal Aviation Administration (FAA), in cooperation with the Bureau of Land Management (BLM), as Joint Lead Agencies (JLA), has issued a new Notice of Intent (NOI) to begin a new Environmental Impact Statement (EIS), amend the BLM Las Vegas Resource Management Plan (RMP), to solicit public review of the planning criteria and to solicit public comments for the proposed Southern Nevada Supplemental Airport, Clark County, Nevada. The public scoping period as well as review of the proposed land use planning criteria begins today through September 5, 2025. All comments must be received or postmarked by that date.

Providing Comments

Comments can be provided at the public meetings (see below), the JLA welcomes written comments from the public on the project proposal and on the proposed land use planning criteria. Written comments may be submitted by email to SNSAEIS@landrumbrown.com, or sent via U.S. Mail to either of the following addresses:

David B. Kessler, AICP	Joanie Guerrero
Project Manager, SNSA EIS	Realty Specialist
Federal Aviation Administration	Bureau of Land Management
Western-Pacific Region	Las Vegas Field Office
777 South Aviation Boulevard El Segundo, California 90245 Telephone 424-405-7315	4701 N. Torrey Pines Drive Las Vegas, Nevada 89130 Telephone: 702-515-5274

Public scoping meetings will be conducted to identify any significant issues associated with the proposed project. Three (3) public scoping meetings are planned for the general public. A virtual meeting on July 29, 2025, from 6:00 p.m. to 8:00 p.m. Pacific Daylight Time. Two in-person meetings will be held. The first in-person meeting will be held on July 30, 2025, from 5:00 p.m. to 7:00 p.m. Pacific Daylight Time at the East Las Vegas Library – Multipurpose Rooms 1 and 2, 2851 East Bonanza Road, Las Vegas, Nevada 89101. The second in-person meeting will be held on July 31, 2025, from 6:00 p.m.to 8:00 p.m. Pacific Daylight Time, at the Primm Valley Casino Resorts in the Primm Valley Ballroom, 31900 South Las Vegas Boulevard, Primm, Nevada 89019. Additional information on the meetings, including how to register for the virtual public meeting, the SNSA EIS Project Website at https://www.snvairporteis.com/.

Notice of Intent (NOI)

Scoping for the development of the EIS/RMPA began with the publication of the Notice of Intent to prepare the EIS in the Federal Register on May 19, 2025.

https://www.govinfo.gov/content/pkg/FR-2025-05-19/pdf/2025-08124.pdf

Public Notice

The JLA provided notice of the preparation of the EIS/RMPA and the scoping meetings in the Las Vegas Review-Journal.

https://classifieds.reviewjournal.com/nv/government-notices/department-of-transportation-/AC1E03E90ca7120A066U7hCC8F9B

Project Dates

Start Date: 05/19/2025

Decision Date:

Project Milestones

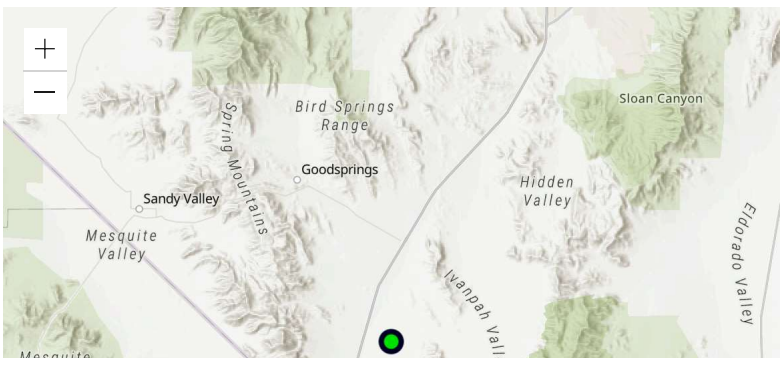
	Initial Scheduled Date Revised Target Date Actual Date
Notice of Intent Publication:	05/19/2025
Draft EIS Publication:	08/30/2027
Final EIS Publication:	02/24/2028
Record of Decision Publication:	05/19/2028

Project Office Information

Lead Office: Las Vegas FO

Office(s): Las Vegas FO

Cooperating Agencies:



Southern Nevada Supplemental Airport Environmental Impact Statement & Resource Management Plan Amendment

FEDERAL AVIATION ADMINISTRATION | BUREAU OF LAND MANAGEMENT

Upcoming Meetings

The JLA will conduct three (3) public scoping meetings; two in-person meetings and one virtual meeting on July 29, 30, and 31, 2025. The in-person public scoping meetings will be conducted in an open house format designed to inform the public about the Proposed Project, the NEPA process, and the BLM Land Use Planning Process, and will allow the public to speak with FAA, BLM, and Airport Sponsor representatives on issues and concerns they would like to see addressed in the EIS/RMPA. During the virtual and in-person scoping meetings, the JLA staff will provide the same presentation. The virtual meeting will be recorded and posted **here**.

Click Here to Register for the Virtual Scoping Meeting

The Clark County Department of Aviation (CCDOA), the owner of Harry Reid International Airport (LAS), is proposing the development and operation of the Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada. The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for preparation of an Environmental Impact Statement (EIS) and will do so in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C.] § 4321 et seq.). BLM has also determined that it will evaluate the need for a Resource Management Plan Amendment (RMPA) for this project, and as a result the

TABLE B-1 MEDIA PRESS RELEASE DISTRIBUTION LIST

Outlet	Media Type	Contact	Title	Email
KSNV Channel 3 Las Vegas	Local Television	Assignment Desk		news@news3lv.com
KSNV Channel 3 Las Vegas	Local Television	Warren Tennyson	Assignment Editor	wrtennyson@sbgtv.com
KSNV Channel 3 Las Vegas	Local Television	Sara Sullivan	Assignment Editor	sarsullivan@sbgtv.com
KSNV Channel 3 Las Vegas	Local Television	Martha Cruz	Assignment Editor	macruz@sbgtv.com
FOX 5 Las Vegas	Local Television	Assignment Desk		desk@fox5vegas.com
KLAS 8 News Now	Local Television	Assignment Desk		newsdesk@8NewsNow.com
KLAS 8 News Now	Local Television	Dennis Neuhausel	Assignment Manager	dneuhausel@8NewsNow.com
KTNV Channel 13	Local Television	Assignment Desk		desk@ktnv.com
KTNV Channel 13	Local Television	Megan Arias	Assignment Editor	Megan.Arias@ktnv.com
Telemundo (KLBR Channel 39)	Local Television	Assignment Desk		TelemundoLVnews@telemundo.com
Telemundo (KLBR Channel 39)	Local Television	Johali Carmona	Assignment Editor	Johali.Carmona@nbcuni.com
Telemundo (KLBR Channel 39)	Local Television	Tony Alvarez	Assignment Editor	Tony.AlvarezSalgado@nbcuni.com
Univison	Local Television	Assignment Desk		noticiasnevada@entravision.com
Univison	Local Television	Alex Zapata	Assignment Editor	alexzapata@entravision.com
Univison	Local Television	Victor Sanchez	Assignment Editor	victor.sanchez@entravision.com
Channel 4 (Clark County)	Local Television	Victor Woodall	CCTV 4 Station Manager	VictorW@ClarkCountyNV.gov
Channel 4 (Clark County)	Local Television	Sue Leavitt	CCTV 4 Writer/Producer	Sue.Leavitt@ClarkCountyNV.gov
Channel 2 (City of Las Vegas)	Local Television			kclv.lasvegas@gmail.com
Channel 2 (City of Las Vegas)	Local Television	Krystal Allan	KCLV Content & Producer	kallan@LasVegasNevada.GOV
KPVM-TV	Local Television			admin@kpvm.tv
UNLV TV	Local Television			unlvtv@unlv.edu
KLVX Channel 10/ PBS	Local Television	Mary Mazur	General Manager	contactus@vegaspbs.org
Las Vegas Review Journal	Local Print Media	Marian Green	Deputy Metro Editor	mgreen@reviewjournal.com
Las Vegas Review Journal	Local Print Media	Mick Akers	Sports Business and Transportation	makers@reviewjournal.com
Las Vegas Review Journal	Local Print Media	Richard N. Velotta	Business Editor	rvelotta@reviewjournal.com
Las Vegas Sun	Local Print Media	Ray Brewer	Managing Editor	ray.brewer@lasvegassun.com
Las Vegas Sun	Local Print Media	Dave Mondt	Editor	dave.mondt@lasvegassun.com
The Nevada Independent	Local Print Media	Jon Ralston	CEO	ralston@thenvindy.com
The Nevada Independent	Local Print Media	Amy Alonso	environment and energy reporter	amy@thenvindy.com

Outlet	Media Type	Contact	Title	Email
Nevada Current	Local Print Media	April Corbin Girnus	Deputy Editor	april@nevadacurrent.com
Vegas Inc.	Local Print Media			news@vegasinc.com
Las Vegas Weekly	Local Print Media	Shannon Miller	Editor	shannon.miller@gmgvegas.com
Associated Press	Local Print Media			aplasvegas@ap.org
Las Vegas Asian Journal	Local Print Media	Robert Macabagdal	Editor	robert@asianjournalinc.com
Boulder City Review	Local Print Media	Ron Eland	Editor	reland@bouldercityreview.com
Pahrump Valley Times	Local Print Media	Selwyn Harris	Reporter	sharris@pvtimes.com
Pahrump Valley Times	Local Print Media	Robin Hebrock	Reporter	Rhebrock@pvtimes.com
El Mundo	Local Print Media	Roberto Palaez	Editor	editorial@elmundo.net
Las Vegas Business Press	Local Print Media	Lyn Collier	Editor	lcollier@reviewjournal.com
Laughlin Nevada Times	Local Print Media			laughlintimes@gmail.com
Desert Lightning News	Local Print Media			editor@aerotechnews.com
Nevada Business Magazine	Local Print Media	Tarah Richardson	Managing Editor	tarah@nevadabusiness.com
Las Vegas Tribune	Local Print Media			newsdesk@lasvegastribune.com
Veterans Reporter	Local Print Media	Su Phelps	Managing Editor	veteransreporternews@gmail.com
Reno Gazette Journal	Local Print Media	Jeff Meehan	Managing Editor	jmeehan@reno.gannett.com
KCEP 88.1	Local Radio Stations	Melvin Stringer	Underwriting Team Coordinator	MelvinS@kcepfm.com
KCEP 88.1	Local Radio Stations			cknight@eobcapsnv.org
KDWN 720	Local Radio Stations			infovegas@kdwn.com
KNPR 89.5	Local Radio Stations	Christopher Alvarez	Producer - State of Nevada	christopher@knpr.org
KXNT 840	Local Radio Stations			kxntnews@audacy.com
Hot 702.5 "The Flo" Community Show	Local Radio Stations	Shon Henry	Host	sholanda.thomas@icloud.com
Hot 702.5 "The Flo" Community Show	Local Radio Stations			shonhenry01@gmail.com
Beasley Broadcasting Public Affairs Show 102.7,96.3	Local Radio Stations	Slone Terranella	Host	slone.terranella@bbgi.com
LOTUS Broadcasting Public Affairs Show 1340,1230, 97.1,92.3,101.9	Local Radio Stations	Lorrin Bond	Host	lorrin@lvradio.com

Outlet	Media Type	Contact	Title	Email
LOTUS Broadcasting Public Affairs Show 1340,1230, 97.1,92.3,101.9	Local Radio Stations	Stephanie Mackenzie	Host	steph@lvradio.com
Audacy Radio Public Affairs Show 840, 101.5,94.1, 100.5,98.5,1140	Local Radio Stations	Heather Vale	Host	heather.vale@audacy.com
Las Vegas HEALS	Local Radio Stations	Adriana Romero	Editor	Adriana@lasvegasheals.org
Iheartradio- 93.1, 95.5, 105.5, 106.5,	Local Radio Stations	FORM: https://lasvegas.iheartadvertising.com/psa	Phone : 702-238-7300	
Iheartradio 98.1 (spanish)	Local Radio Stations	FORM: https://lasvegas.iheartadvertising.com/psa	Phone: 702-326-2910	
KDOL 1280	Local Radio Stations			scott@smiradio.com
Clark County Public Information Office	Local Public Information Office	Jennifer Cooper	Chief Communications and Strategy Officer	Jennifer.Cooper@ClarkCountyNV.gov
Clark County Public Information Office	Local Public Information Office	Stephanie Wheatley	Deputy Director	Stephanie.Wheatley@ClarkCountyNV.gov
City of Las Vegas Public Information Office	Local Public Information Office	David Riggleman	Communications Director	driggleman@LasVegasNevada.Gov
City of Las Vegas Public Information Office	Local Public Information Office	Jace Radke	PIO	jradke@LasVegasNevada.GOV
City of North Las Vegas Public Information Office	Local Public Information Office	Gregory Bortolin	Director of Communications	Bortoling@Cityofnorthlasvegas.com
City of North Las Vegas Public Information Office	Local Public Information Office	Liz Abebefe	PIO	Abebefee@cityofnorthlasvegas.com
City of Henderson Public Information Office	Local Public Information Office	Karina Milani	Director	Karina.Milani@cityofhenderson.com
Air Cargo News	National Print Media	Damian Brett	Managing Editor	d.brett@aircargonews.net
Air Cargo News	National Print Media	Rebecca Jeffrey	Editor	r.jeffrey@aircargonews.net
Air Transport World	National Print Media	Karen Walker	Editor	karen.walker@informa.com

Outlet	Media Type	Contact	Title	Email
Airport Business Magazine	National Print Media	Joe Petrie	Editor	joe.petrie@aviationpros.com
Aviation Daily	National Print Media	Mark Nensel	Editor	mark.nensel@aviationweek.com
Asian Aviation	National Print Media	Matt Driskill	Editor	matt.driskill@asianaviation.com
Aviation Week & Space Technology	National Print Media	Joseph C. Anselmo	Editor	joe.anselmo@aviationweek.com
The Wall Street Journal	National Print Media	Andrew Tangel	Aviation Reporter	andrew.tangel@wsj.com
The Wall Street Journal	National Print Media	Jim Carlton	West Coast correspondent	Jim.Carlton@wsj.com
The Wall Street Journal	National Print Media	Dawn Gilbertson	Columnist - Travel & Airlines	dawn.gilbertson@wsj.com
The Washington Post	National Print Media	Lori Aratani	Transportation Reporter	lori.aratani@washpost.com
The Washington Post	National Print Media	Reis Thebault	West Coast correspondent	reis.thebault@washpost.com
The Desert Sun	National Print Media	Janet Wilson	Environmental Reporter	janet.wilson@desertsun.com
The Desert Sun	National Print Media	Eric Hartley	News Editor	eric.hartley@desertsun.com
In Flight USA	National Print Media			vickie@inflightusa.com
In Flight USA	National Print Media	Annamarie Buonocore		Annamarie@inflightusa.com
Inland Valley Daily Bulletin	National Print Media	Mark Acosta	Editor	macosta@scng.com
Inland Valley Daily Bulletin	National Print Media	Jessica Keating	Editor	jkeating@scng.com
Bloomberg News	National Print Media	Ted Mann	Transportation	tmann@bloomberg.net
Investor's Business Daily	National Print Media	Susan Warfel	Managing Editor	susan.warfel@investors.com

Outlet	Media Type	Contact	Title	Email
The Los Angeles Times	National Print Media	Colleen Shalby	Transportation	colleen.shalby@latimes.com
The Los Angeles Times	National Print Media	Ian James	Nevada/Water	ian.james@latimes.com
The New York Times	National Print Media	Niraj Chokshi	Transportation	niraj.chokshi@nytimes.com
The New York Times	National Print Media	Livia Albeck-Ripka	West Coast correspondent	livia.ar@nytimes.com
Los Angeles Daily News	National Print Media	Steve Scauzillo	Local Government/Transportation	steve.scauzillo@dailynews.com
Orange County Register	National Print Media	Fielding Buck	Business	fbuck@scng.com
Orange County Register	National Print Media	Samantha Gowen	Business Editor	sgowen@ocregister.com
Arizona Republic	National Print Media	Lauren De Young	City Watchdog and Transportation Reporter	ldeyoung@gannett.com
The Sacramento Bee	National Print Media	Ariane Lange	Regional Transportation Reporter	alange@sacbee.com
The San Diego Union-Tribune	National Print Media	Diana McCabe	Business Editor	diana.mccabe@sduniontribune.com
Travel Weekly	National Print Media	Andrew McQuarrie	Deputy News Editor	drew.mcquarrie@travelweekly.co.uk
USA Today	National Print Media	Zach Wichter	Consumer Travel Reporter	zwichter@usatoday.com

Source: Landrum & Brown, 2025.

FAA and BLM Announce Public Meetings on Proposed Supplemental Airport for Las Vegas

Friday, June 27, 2025

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) will hold one virtual and two in-person public scoping meetings to solicit input on the draft Environmental Impact Statement and Resource Management Plan Amendment process for the proposed Southern Nevada Supplemental Airport.

The proposed new airport would add airfield capacity to the Las Vegas Metropolitan Area for commercial and general aviation aircraft operators.

The meetings are part of the agencies' environmental review process and are intended to give people an opportunity to learn more about the project and provide comments.

The meeting details are as follows:

- **Tuesday, July 29, 2025**
  6 – 8 p.m.
  Virtual
  (see the project website to register: https://www.snvairporteis.com/)
- **Wednesday, July 30, 2025**
  5 – 7 p.m.
  East Las Vegas Library – Multipurpose Rooms 1 & 2
  2851 East Bonanza Road, Las Vegas, NV 89101
- **Thursday, July 31, 2025**
  6 – 8 p.m.
  Primm Valley Casino Resorts – Primm Valley Ballroom
  31900 South Las Vegas Boulevard, Primm, NV 89019

Additional information on the meetings, including how to register, is on the FAA project webpage and the BLM project webpage.

In addition to providing input at the meetings, people also can email comments to: SNSAEIS@landrumbrown.com and mail comments to:

David Kessler, AICP
c/o Federal Aviation Administration,

Western-Pacific Region
777 South Aviation Boulevard
El Segundo, CA 90245

Joanie Guerrero
Realty Specialist
Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130

The deadline to submit comments is Friday, Sept. 5, 2025.

TABLE B-2 EMAIL NOTIFICATION TO PUBLIC DISTRIBUTION LIST

Email
aaron.kraft@stantec.com
aaron@moreau.us
adfsadf@ddd.com
agriffit@bechtel.com
airportarch@sbcglobal.net
albert.kaneshiro@hok.com
amber.brenzikofer@parsons.com
amy.hopkins@jacobs.com
andrea@sbwlv.com
andresgarcia@hillintl.com
Anita.Marquez@snwa.com
arielbecker@outlook.com
arielle.edwards@rrpartners.com
arnoldstalk@gmail.com
b2@bglobaladvisors.com
baltabbaa@lawa.org
barryjamesdavis@gmail.com
bdobbin@fosterandpartners.com
begnal@gmail.com
bghsfireman@hotmail.com
bgordon@appliedanalysis.com
brianmo@lasairport.com
bskipper@henselphelps.com
byron.thurber@arup.com
ccaluya@tcco.com
charing-cross@live.com
charles.joseph@c-agroup.com
christas@lasairport.com
chrjohnson@hntb.com
clint.laaser@aecom.com
cmail@keywordhealth.com
coairandrew@icloud.com
Collin.Haworth@rwdi.com
craiganthony0703@gmail.com
cstrom@bechtel.com
csw13108@gmail.com
cwojcik@inprocorp.com
dave@elementalag.com
DavidMcMahn@gmail.com
davisbennett329@gmail.com
ddfanning@ltgov.nv.gov
debbie@debbiegerman.com
Dedison@tpcusa.com
diego.rincon@parsons.com
dlanders@tollbrothers.com
dnintorf@sundt.com
dnschuerman@leoadaly.com

Email
DON.KOPPY@MEADHUNT.COM
dporter1@brwncald.com
drussell@pgal.com
dstehle@markiv.com
EdwinJCorral@yahoo.com
ekbobo@armstrongceilings.com
emma.harding@sita.aero
et7133embar@gmail.com
felipe.cifuentes@rsandh.com
flights@gojetwise.com
flyons@cumming-group.com
ggrytoyr@hotmail.com
ghostlightmater@yahoo.com
gltober@gmail.com
grottorabbit@gmail.com
guada_lupe_castillo@hotmail.com
gwadejr@gmail.com
hbrewer@geotekusa.com
hdexheimer@gcwengineering.com
hermino@comcast.net
hray@lundopsahl.com
iansgoodwin@yahoo.com
idsucks@yahoo.com
intissar.durham@atkinsrealis.com
jake513@prodigy.net
janelle.boelter@lvvwd.com
jay.oleson@arup.com
jbranstetter@capaggs.com
jbrinson@getbiological.com
jean.majortom@gmail.com
jeffrey.breeden@faa.gov
jenniferwe@lasairport.com
jfranklin@glumac.com
Jhovani.carrillo@ktnv.com
jim.carey@introba.com
jjamm@att.net
jjguerrero@blm.gov
jmesm@comcast.net
John.Kim@construction.com
john.vanwoensel@wsp.com
johnw@lasairport.com
jon.jackson@dambraequipment.com
jonathan.meier@hok.com
josh.bedre@tylin.com
jpainter@apple.com
jthalgott@bhfs.com
juniorrocketman@gmail.com
justinmanumkal@gmail.com
jvengstr@bechtel.com

Email
kalyn@apple-designs.com
kaushal.shah@wsp.com
kaven.swan@hok.com
kball@vantageairportgroup.com
keli.callahan@stantec.com
kevin@takebreadstrategies.com
kim.passoth@fox5vegas.com
kimberaknv@aol.con
kimthrelfall1613@gmail.com
krhodes@dot.nv.gov
kroberts@burnsmcd.com
kseniya@paulmurdocharchitects.com
kwatanabe@hntb.com
Lamarspear@gmail.com
lberstene@mitre.org
Leaper@clarkcountynv.gov
Lee.Lehnert@aecom.com
Lee.Lehnert@gmail.com
leonora.macaluso@jacobs.com
lifelongpenguins@gmail.com
lkrcats@icloud.com
mancinifamily23@gmail.com
mandy.cei@marinaco.com
mariaa@lasairport.com
mariah.jackson@geosyntec.com
mark.mosko@mottmac.com
mark.weishaar@tutorperini.com
markgrock@gmail.com
matt.needham@hok.com
matthew.d.robertson@faa.gov
matthew.kelsall@fticonsulting.com
matthewa@lasairport.com
mattrudich@gmail.com
megathemeresorts@usa.com
mewilliams@burnsmcd.com
michael.brown1@unlv.edu
michael.mosley@kimley-horn.com
michaeljnelson@cox.net
Mitch.Tanamachi@vanderlande.com
mkelly@ocmi.com
mlfaraimo@balfourbeattyus.com
moanhalt@gmail.com
motes226@comcast.net
mtyne@gfnet.com
natie.mitchell@caddell.com
ncadams@rosendin.com
Nguyen.martin@epa.gov
p.ragavan@earthmech.com
parrym@ballardspahr.com

Email
pathixon48@yahoo.com
pbury@wa-cap.com
petercooper99@gmail.com
phillipd@lasairport.com
ramelee1@bechtel.com
rbrunetti@hntb.com
ribarra@appliedanalysis.com
ric.paterson@parsons.com
ron.siecke@jacobs.com
rosaleyasmine@gmail.com
rparavia@kleinfelder.com
rreyes2124@yahoo.com
rscholes@newmarketadvisors.com
ryan.nam@cwjgroup.com
ryanscho702@gmail.com
samuel.ingalls@barich.net
sarah.tipoff@honeywell.com
satansgift2women@yahoo.com
sects.tinned_0f@icloud.com
smcdevitt@mckinc.net
sprice@weoneil.com
srgarrett@burnsmcd.com
sundevil911@gmail.com
swriano@bechtel.com
t.rogers@avairpros.com
terry@encorecre.com
terryz1@my.erau.edu
tmurphy951@gmail.com
tpohle@bdlaw.com
Trevor.condren@penwoodre.com
vegaswoods@aol.com
westsdpratt@gmail.com
William.Debelak@gmail.com
wolfsonsteve@yahoo.com
worzellanicole@gmail.com
wrsturgill@yahoo.com
wziegler@inprocorp.com
yassine.kone@sita.aero

Source: Landrum & Brown, 2025.

From: SNSA EIS
To: SNSA EIS
Subject: You"re Invited: Attend the Public Scoping Meeting for the EIS/RMPA for the Proposed Southern Nevada Supplemental Airport
Date: Friday, June 27, 2025 8:04:44 AM

YOU'RE INVITED

To attend the public scoping meeting for the Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada. Clark County Department of Aviation (CCDOA), owner of Harry Reid International Airport (LAS), is proposing the development and operation of the SNSA in Clark County, Nevada. The Federal Aviation Administration (FAA) and the Bureau of Land Management (BLM), as Joint Lead Agencies (JLA), will host Public Scoping Meetings to discuss the type and scope of information and analysis to be included in the EIS/RMPA.

The JLA will conduct one virtual and two in-person Public Scoping Meetings in an open house format designed to inform the public about the Proposed Project, the NEPA process, and the BLM Land Use Planning Process, and allow the public to speak with FAA, BLM, and Airport Sponsor representatives on issues and concerns they would like to see addressed in the EIS/RMPA. The same information will be presented at each meeting. Comment sheets and a chance to give oral comments will be available at the meetings.

Comments may also be emailed to:
SNSAEIS@landrumbrown.com

Comments will be accepted through Friday, September 5, 2025.

****Before including your name, address,*** telephone number, email or any other personal identifying information in your comment, be advised that your entire comment- including your personal identifying information may be made publicly available at any time.*

VIRTUAL

Tuesday, July 29
6:00 p.m. to 8:00 p.m.
To register for the virtual public meeting, visit the project website:
www.snvairporteis.com

IN-PERSON

Wednesday, July 30
5:00 p.m. to 7:00 p.m.
East Las Vegas Library
2851 E. Bonanza Rd
Las Vegas, NV 89101

Thursday, July 31
6:00 p.m. to 8:00 p.m.
Primm Valley Casino Resorts
31900 S Las Vegas Blvd
Primm, NV 89019

If you require any special accommodations to attend and participate in the scoping meetings, please email:
SNSAEIS@landrumbrown.com

If you have questions, please visit or contact:
www.snvairporteis.com

LAS VEGAS REVIEW-JOURNAL
LAS VEGAS SUN

Las Vegas Review-Journal
1111 W. Bonanza Road
Las Vegas, NV 89106

AFFIDAVIT OF PUBLICATION

STATE OF NEVADA)
COUNTY OF CLARK) SS:

G.C. GARCIA, INC
SUITE 210
1055 WHITNEY RANCH DR.
HENDERSON NV 89014

Account # 118079
Order ID 337446

IMAGE ON NEXT PAGE(S)

Leslie McCormick, being 1st duty sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal/Las Vegas Sun, daily newspaper regularly issued, published and circulated in the Clark County, Las Vegas, Nevada and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal/Las Vegas Sun, in 1 edition(s) of said newspaper issued from 06/27/2025 to 06/27/2025, on the following day(s):

06/27/2025

Leslie McCormick

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this June 27, 2025

Notary Linda Espinoza

LINDA ESPINOZA
Notary Public, State of Nevada
My Appointment No. 24-9178-01
Expires: July 14, 2028

YOU'RE INVITED

To attend the public scoping meeting for the Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada. Clark County Department of Aviation (CCDOA), owner of Harry Reid International Airport (LAS), is proposing the development and operation of the SNSA in Clark County, Nevada. The Federal Aviation Administration (FAA) and the Bureau of Land Management (BLM),as Joint Lead Agencies (JLA), will host Public Scoping Meetings to discuss the type and scope of information and analysis to be included in the EIS/RMPA.

The JLA will conduct one virtual and two in-person Public Scoping Meetings in an open house format designed to inform the public about the Proposed Project, the NEPA process, and the BLM Land Use Planning Process, and allow the public to speak with FAA, BLM, and Airport Sponsor representatives on issues and concerns they would like to see addressed in the EIS/RMPA. The same information will be presented at each meeting. Comment sheets and a chance to give oral comments will be available at the meetings.

VIRTUAL

Tuesday, July 29
6:00 p.m. to 8:00 p.m.
To register for the virtual public meeting, visit the project website:
www.snvairporteis.com

IN-PERSON

Wednesday, July 30
5:00 p.m. to 7:00 p.m.
East Las Vegas Library
2851 E. Bonanza Rd
Las Vegas, NV 89101

Thursday, July 31
6:00 p.m. to 8:00 p.m.
Primm Valley Casino Resorts
31900 S Las Vegas Blvd
Primm, NV 89019

If you require any special accommodations to attend and participate in the scoping meetings, please email:

SNSAEIS@landrumbrown.com

If you have questions, please visit or contact:

www.snvairporteis.com

Comments may also be emailed to:

SNSAEIS@landrumbrown.com

Comments will be accepted through Friday, September 5, 2025.

****Before including your name, address,*** *telephone number, email or any other personal identifying information in your comment, be advised that your entire comment- including your personal identifying information may be made publicly available at any time.*

LAS VEGAS REVIEW-JOURNAL
LAS VEGAS SUN

Las Vegas Review-Journal
1111 W. Bonanza Road
Las Vegas, NV 89106

G.C. GARCIA, INC
SUITE 210
1055 WHITNEY RANCH DR.
HENDERSON, NV 89014

INVOICE	
Invoice No.:	818964
Order No.:	337446
Invoice Date:	6/27/2025
Customer Acc No.:	118079
Amount Due	$ 0.00
Payment Due Terms:	15
Invoice Collector Name	Kelly Reynolds
Invoice Collector Tel No.:	702-387-5271

Any Local					**$ 2,279.00**
Ad.No	**Ad Po**	**Date**	**Description**	**Position**	**Format**
50148261		6/27/2025 - 6/27/2025	SNSA EIS	Review Journal - Any Local	2 x 7.75

PLEASE DETACH AND RETURN LOWER PORTION WITH YOUR REMITTANCE.

Las Vegas Review-Journal, Inc.
PO Box 730
Las Vegas, NV 89125-0730

Summary	
Total Net Amount	**$ 2,279.00**
Total Amount	**$ 2,279.00**
Amount Prepaid	**$ 2,279.00**
Amount Due	**$ 0.00**

Invoice	818964	**Acc. No.**	118079	**Customer**	G.C. GARCIA, INC

0000118079081896400000000000000

Card payment 18944

Detail

Transaction ID	118755286
Authorization code	01630Q
Office	Las Vegas Review-Journal, Inc.
Collector	Denzila Watts
Customer	G.C. GARCIA, INC
Date created	6/25/2025 3:10 PM
Payment date	6/25/2025 3:10 PM
Amount	1,500.00 $
Amount confirmed	1,500.00 $
Pay. provider	Edgil PayWay
Card ending	8735
Card type	MasterCard
Expiration date	October 2029
Type	Direct payment
Status	Completed
Contact info	MELISSA EURE **Mail:** meure@gcgarciainc.com **Phone:** 702-435-9909 **Address:** SUITE 210 1055 WHITNEY RANCH DR. HENDERSON 89014 USA NV

Actions

Allocations

Invoices

Order pre-payments

#	Order #	Order name	Date created	Amount due	Amount allocated
1	337435	SNSA EIS Digital	6/24/2025	1,500.00	0.00

Ads

No data found

Refunds

No data found

Back

SMALL BUSINESS »
Best of Las Vegas contest grows into one of the largest in U.S.

REAL ESTATE »
Local experts address future of affordable housing

EXPERT'S CORNER »
Cloud convenience comes with a catch: Are you the weak link?

REAL ESTATE »
LVR reports more homes on market, home prices back to record high

Attend the Public Scoping Meetings for the
Environmental Impact Statement & Resource Management Plan Amendment
for the proposed Southern Nevada Supplemental Airport in Clark County, Nevada.
Click here for more information
www.snvairporteis.com

VIDEO

REAL ESTATE »
Young entrepreneur sees opportunity to revitalize
PARTNER CONTENT FOR AGRIPPA AND AUGUSTUS

REAL ESTATE »
How housing shaped Las Vegas
BY TROY REIERSON SPECIAL TO LAS VEGAS BUSINESS PRESS

SMALL BUSINESS »
Best of Las Vegas contest grows into one of the largest in U.S.
PROVIDED CONTENT

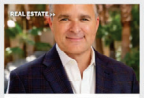
ALL VIDEOS »

NEWS

REAL ESTATE »
Young entrepreneur sees opportunity to revitalize commercial ...
PARTNER CONTENT FOR AGRIPPA AND AUGUSTUS

EXPERT'S CORNER »
Training tomorrow's construction leaders today
BY STACEY FINE SPECIAL TO LAS VEGAS BUSINESS PRESS

Wholesale Trade Show
The Perfect Market For Home Designers, Home Stagers & Retailers



REAL ESTATE »
How housing shaped Las Vegas
BY TROY REIERSON SPECIAL TO LAS VEGAS BUSINESS PRESS

News Headlines

REAL ESTATE
High-rise condo sales slow this year
BY BUCK WARGO REAL ESTATE MILLIONS

SPONSORED CONTENT
Sandringham Manor to open in northwest valley
Provided Content

SPONSORED CONTENT
LGI Homes, Cox Communities partnership provides fiber-fast connections
Provided Content

ENTERTAINMENT »
BUSINESS SNAPS: Tennesseasonings
By BUFORD DAVIS LAS VEGAS BUSINESS PRESS

Attend the Public Scoping Meetings for the
Environmental Impact Statement & Resource Management Plan Amendment
for the proposed Southern Nevada Supplemental Airport in Clark County, Nevada.
Click here for more information
www.snvairporteis.com

REAL ESTATE
Local real estate industry's No. 1 priority: Making more federal land available
BY BUCK WARGO LAS VEGAS BUSINESS PRESS

GOVERNMENT
Celebrating 60 Years with the Library District
BY KELVIN WATSON SPECIAL TO LAS VEGAS

REAL ESTATE
$2.25M luxury log cabin features breathtaking views of Las Vegas Valley
BY VALERIE PUTNAM REAL ESTATE MILLIONS

SPONSORED CONTENT
Summerlin Council Patriotic Parade marks 31st year
PROVIDED CONTENT

GIVING BACK
Touchstone Living supports Catholic Charities of Southern Nevada
PROVIDED CONTENT

EXPERT'S CORNER
Understanding the relationship between housing inventory and price trends
BY ERIN ACHESMAN SPECIAL TO LAS VEGAS

Attend the Public Scoping Meetings for the
Environmental Impact Statement & Resource Management Plan Amendment
for the proposed Southern Nevada Supplemental Airport in Clark County, Nevada.
Click here for more information
www.snvairporteis.com

ON THE MOVE »
ON THE MOVE: Roseman names founding dean of its proposed Colloge ...
SPECIAL TO LAS VEGAS BUSINESS PRESS

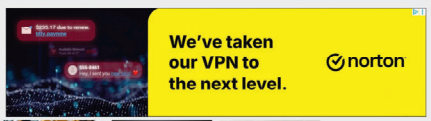
Words like stuck, special and scarce can cost you
By JIM RAWLAK SPECIAL TO LAS VEGAS BUSINESS PRESS

REAL ESTATE
RealTrends recognizes Huntington Ellis top real estate agents, teams
Provided Content

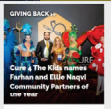
REAL ESTATE
What luxury homebuyers want
BY VALERIE PUTNAM REAL ESTATE MILLIONS

REAL ESTATE
Local NAIOP panel addresses commercial real estate
BY BUCK WARGO LAS VEGAS BUSINESS PRESS

Economic uncertainty is the time to prepare for the best
BY IVAN FERRAZ SPECIAL TO LAS VEGAS BUSINESS PRESS



ECONOMY »
Experts 'cautiously optimistic' on Vegas' economy
BY BUCK WARGO LAS VEGAS BUSINESS PRESS



GIVING BACK »
Cure 4 The Kids names Farhan and Ellie Naqvi Community Partners of the Year
PROVIDED CONTENT

REAL ESTATE »
Mag's ultra luxury home soars in sale
BY BUCK WARGO REAL ESTATE MILLIONS

Copyright © 2025 Las Vegas Review-Journal, Inc. | Privacy policy | Terms of Service
Powered by WordPress.com VIP

July 29, 2025

Virtual Public Scoping Meeting

Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)

Federal Aviation Administration

Bureau of Land Management

Thank you for joining us this evening. The meeting will begin at 6:03 p.m. PST

- ✓ Please mute yourself during the presentation to avoid echo and feedback. If you joined the meeting via phone, you can dial *6 to mute/unmute your line.

- ✓ If you have a comment, please type your name and your comment into the chat box throughout the presentation. Please provide your name to sign up to provide a verbal comment.

- ✓ This presentation will be automatically recorded.

If you're experiencing any IT issues, contact us at: SNSAEIS@landrumbrown.com

About the Presenter

David B. Kessler, AICP

Project Manager, SNSA EIS/RMPA

Federal Aviation Administration

About the Presenter

Stephen Leslie

Field Manager

Bureau of Land Management

Agenda

- Introductions
- Roles and Responsibilities
- Proposed Project Background & Overview
- Environmental Resource Categories
- Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA) Process & Schedule

Roles and Responsibilities

Roles and Responsibilities

Federal Aviation Administration (FAA) & Bureau of Land Management (BLM)

- Joint Lead Agencies (JLA) for preparation of the EIS/RMPA
- FAA is lead agency for the preparation of the required evaluation per the National Environmental Policy Act (NEPA)
- Coordinate with and seek comments/concurrence from federal, state, and local agencies and Tribal nations
- Ensure compliance with the NEPA, the Federal Land Policy and Management Act (FLPMA), and other special purpose laws
- Evaluate the Proposed Project and Reasonable Alternatives including No Action

Roles and Responsibilities

Federal Aviation Administration (FAA) & Bureau of Land Management (BLM) ***(Continued)***

- BLM to evaluate the need for a Resource Management Plan Amendment (RMPA) to modify the Visual Resource Management (VRM) class in order for the BLM to evaluate the established Ivanpah Transportation and Utilities Corridor (Public Law 107-282), as this will require amending the existing 1998 Las Vegas Resource Management Plan
- Prepare and issue a Record of Decision (ROD)

Roles and Responsibilities

Cooperating Agencies

- FAA Reauthorization Act of 2024 (Public Law 118-63) states that *"[a] Federal agency required to make an approval or take an action for a project"* must be treated as a **cooperating agency**.

  The proposed SNSA project includes modifications to an existing interchange and construction of a new interchange on Interstate Highway 15 (I-15)

- Therefore, the cooperating agencies for this EIS/RMPA are:
  - Federal Highway Administration (FHWA)
  - Nevada Department of Transportation (NDOT)

Roles and Responsibilities

Consultant Team

- Reports to JLA
- Under the supervision of the JLA, conducts the environmental impact analysis and supports JLA's coordination with federal, state, and local agencies
- Assists the JLA with preparing the EIS/RMPA documentation
- Assist the JLA to plan and conduct public outreach
- Provides subject matter experts that conduct associated field work

Roles and Responsibilities

Clark County Department of Aviation (CCDOA)

- CCDOA is the Sponsor for the proposed SNSA
- Owner and operator of Harry Reid International Airport (LAS), North Las Vegas Airport (VGT), Henderson Airport (HND), Jean Airport (0L7), and Overton Perkins Field (U08)
- Provide supporting planning, design, and other information to inform the EIS/RMPA
- Is a Participating Agency with the JLA in preparing the EIS/RMPA

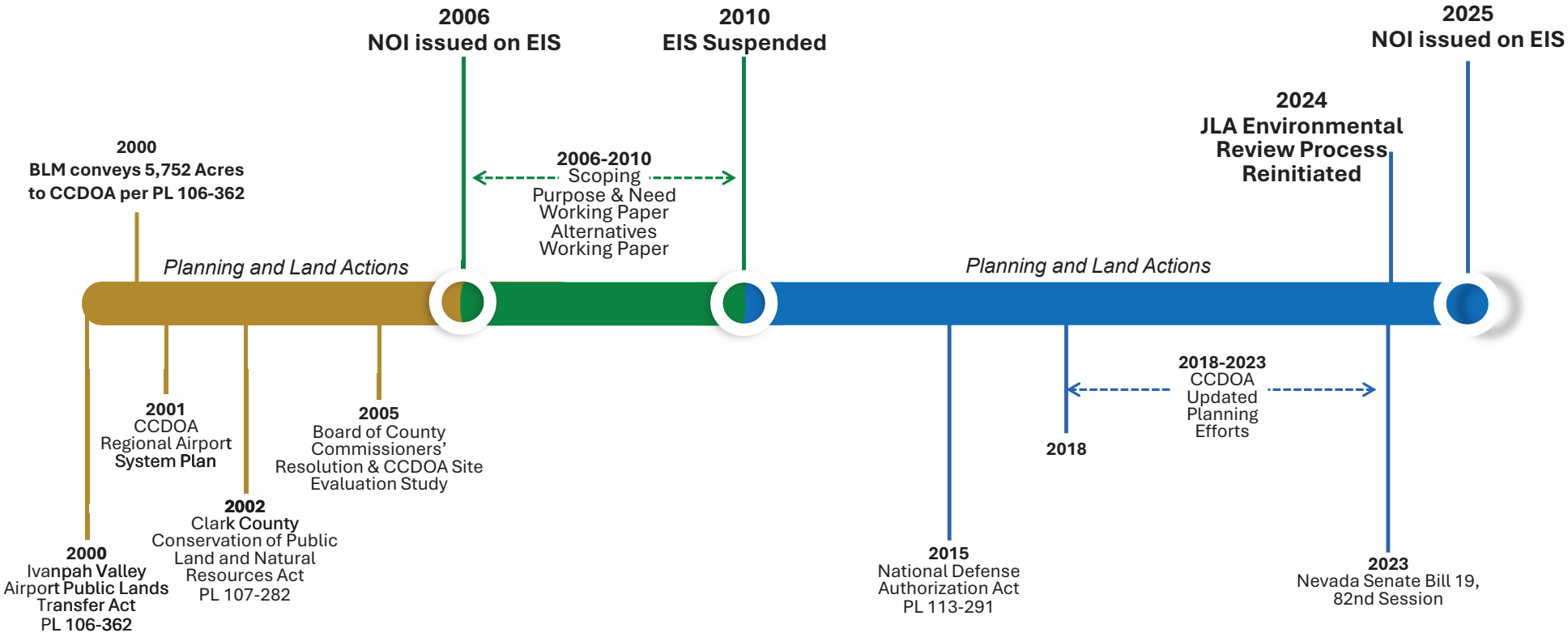
Roles and Responsibilities

Participating Agencies

- National Park Service (NPS)
- U.S. Environmental Protection Agency (US EPA)
- U.S. Fish and Wildlife Service (USFWS)
- Nevada Department of Wildlife (NDOW)
- Nevada Department of Environmental Protection (NDEP)
- Nevada Division of Forestry (NDF)
- Nevada State Historic Preservation Officer (SHPO)
- Nevada Division of Natural Heritage (NDNH)
- Regional Transportation Commission of Southern Nevada (RTC)
- Clark County Department of Environment and Sustainability (CCDES)
- Clark County Regional Flood Control District (CCRFCD)
- Clark County Department of Aviation (CCDOA)

Project Background & Overview

Proposed Project Background & Overview



Clark County Department of Aviation Preliminary Purpose and Need

- **Purpose:** To accommodate future aviation demand in the Las Vegas metropolitan area, while meeting FAA airport design standards, protect airspace from obstacle encroachment, and provide for safe and efficient flight procedures.
- **Need:** Insufficient facilities to accommodate future aviation demand in the Las Vegas metropolitan area and comply with Public Law 106-362.

FAA Purpose and Need

- **Purpose:** To fulfill FAA's statutory mission to ensure the safe and efficient use of navigable airspace in the United States as set forth under 49 U.S.C. § 47101 (a)(1).
- **Need:** Ensure that the proposed SNSA provides for safe and efficient air transportation pursuant to the Federal Aviation Act of 1958 and meets FAA airport design standards, and to comply with Public Law 106-362.

BLM Purpose and Need

- **Purpose:** To convey the identified federal lands to facilitate the development the SNSA.
- **Need:**
  - Comply with Public Law 106-362, Public Law 107-282, and Public Law 113-291, provided conditions set forth in the Public Laws are met, and to meet agency responsibilities as required by Section 209 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA).
  - Evaluate the need to amend the 1998 Las Vegas Resource Management Plan/ Record of Decision to modify the Visual Resource Management (VRM) class for proposed infrastructure within the Interstate 15 South Corridor designated per Public Law 107-282.

FHWA/NDOT Purpose and Need

FHWA Purpose: to fulfill the FHWA's statutory mission to ensuring that America's roads and highways continue to be among the safest and most technologically sound in the world as set forth under 23 U.S.C. § 111.

FHWA Need: Ensure that the proposed new interchange and modifications to an existing interchange on Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport meet FHWA Standards and comply with Title 23, Code of Federal Regulations – *Highways*.

NDOT Purpose: Provide, operate, and preserve a reliable and sustainable transportation system in the State of Nevada that enhances safety, quality of life and economic development through innovation and collaboration.

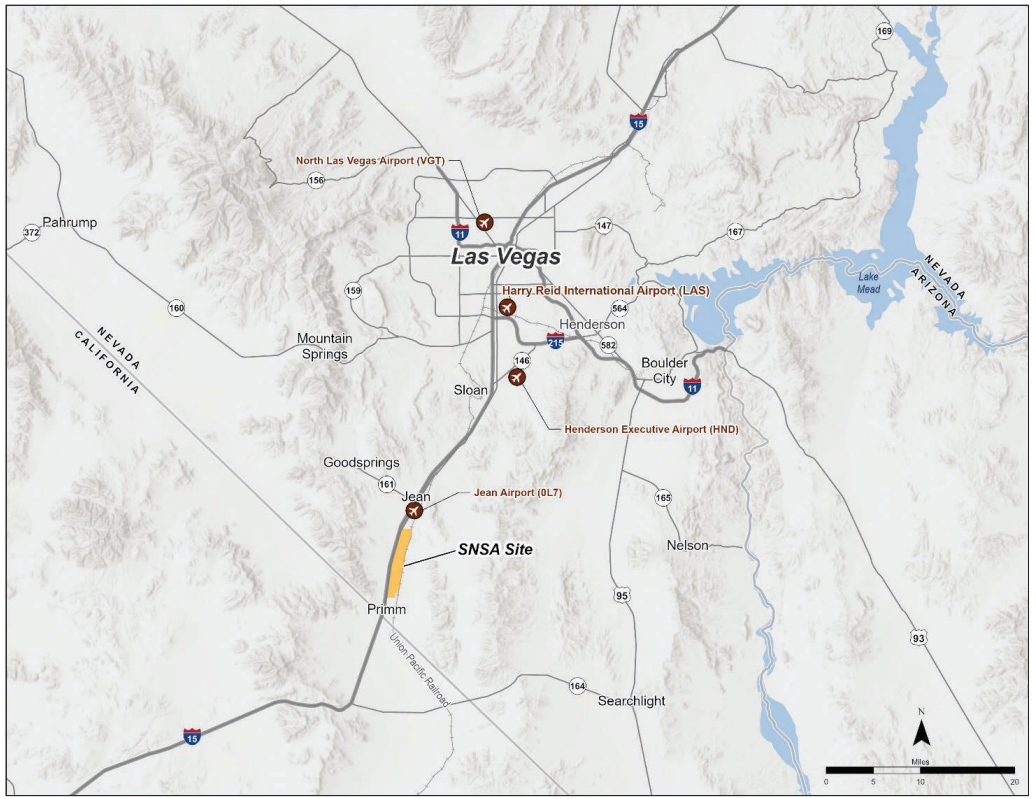
NDOT Need: Ensure the new airport, any proposed new interchange(s), modifications to an existing interchange(s), and potential modifications to Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport are in accordance with Nevada Revised Statutes (NRS) 408.210 and 408.423 and Nevada Administrative Code (NAC) 408.403 through 408.557.

Range of Alternatives

- No Action
- Other Modes of Transportation
- Air Traffic Demand Management Strategies
- Enhancement of Existing Airports including the use of Advanced Technologies
- New Airport

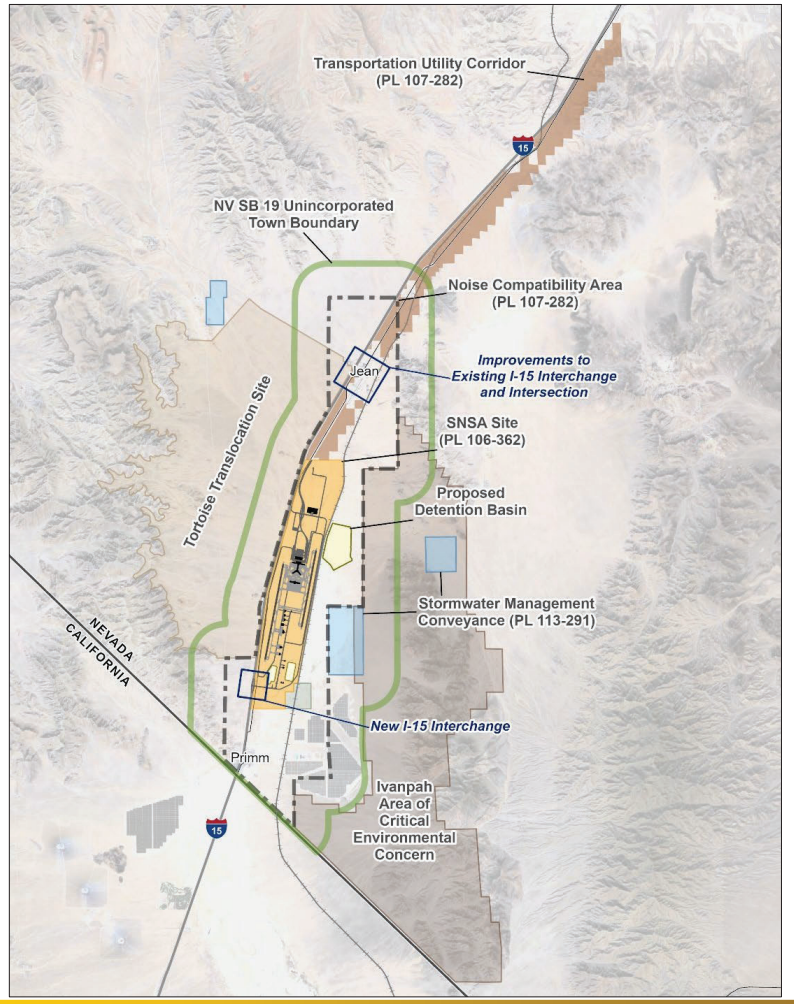
Proposed Project - SNSA

- New ***supplemental*** commercial airport.
- Located ~35 miles southwest of downtown Las Vegas, along I-15.
- Located ~6 miles south of Jean and ~5 miles north of Primm.
- 5,752 acres conveyed by BLM to CCDOA (commonly referred to as the “6,000 acre parcel”)



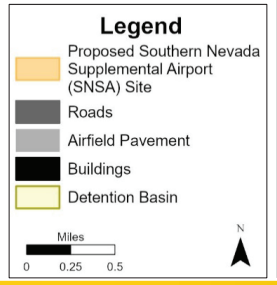
Proposed Project - SNSA

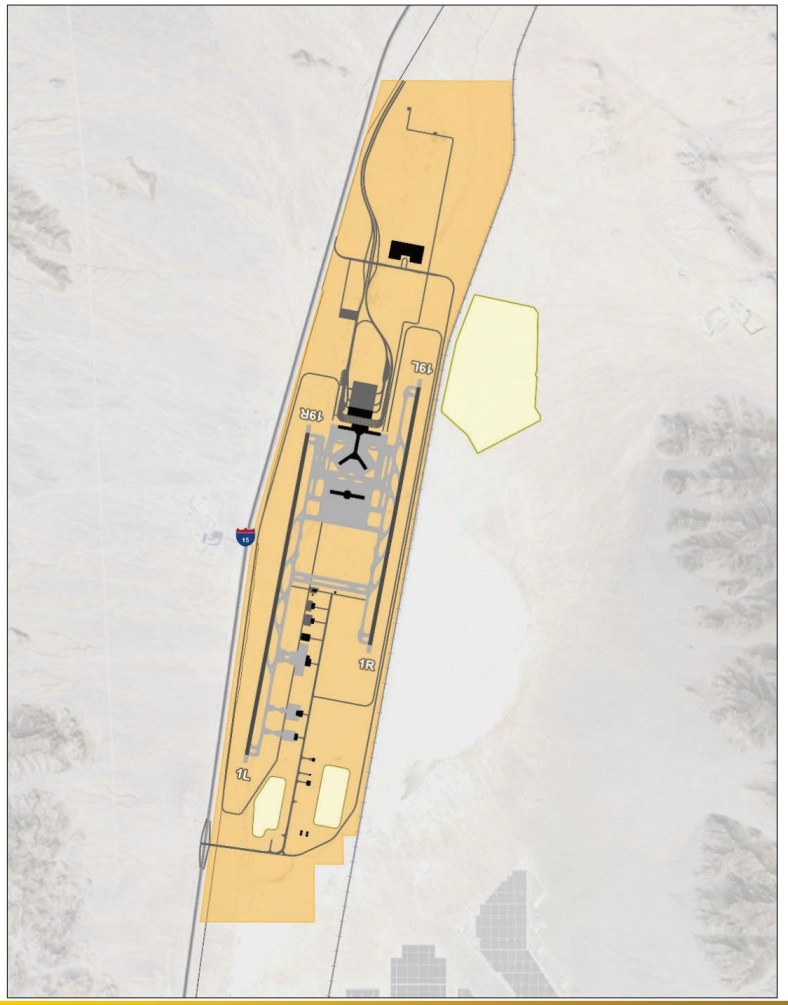
- Two parallel runways & supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing & takeoff
- Airspace & flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New I-15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor



Proposed Project - SNSA

- Two parallel runways & supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing & takeoff
- Airspace & flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New I-15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor





Environmental Resource Categories

Environmental Resource Categories for the EIS/RMPA

- Aviation Emissions and Air Quality
- Biological resources (including fish, wildlife & plants)
  - Special Status Species (Flora and Fauna)
  - Threatened and Endangered Species
- Department of Transportation Act, Section 4(f) (parks and other recreation resources)
- Farmlands
- Fuels and fire management
- Geology/mineral resources
- Hazardous materials, solid waste, and pollution prevention
- Historical, architectural, archaeological, and cultural resources
- Land use and realty
- Natural resources and energy supply
- National Historic Trails
- Noise and noise-compatible land use
- Recreation
- Socioeconomics and Children's environmental health and safety risks
- Soils, vegetation, non-native and noxious weeds
- Visual effects (including light emissions) and visual resource management
- Water resources (including wetlands, floodplains, surface waters, and groundwater)
- Wild horses and burros

EIS/RMPA Process & Schedule

RMPA Process

- A land use plan or resource management plan provides a framework for the BLM management of public lands.
- A land use plan amendment also known as Resource Management Plan Amendment (RMPA) is identified when there is “a need to modify management or accommodate a project that may result in a change in the scope of resource uses or a change in the terms, conditions, and decisions of the approved plan”. These changes may be to a specific resource area. (H-1601-1)
- BLM manages public lands under principles of multiple-use and sustained yield as mandated by the Federal Land Policy and Management Act (FLPMA).
- Uses a systematic interdisciplinary approach to integrate physical, biological, economic, and other sciences.

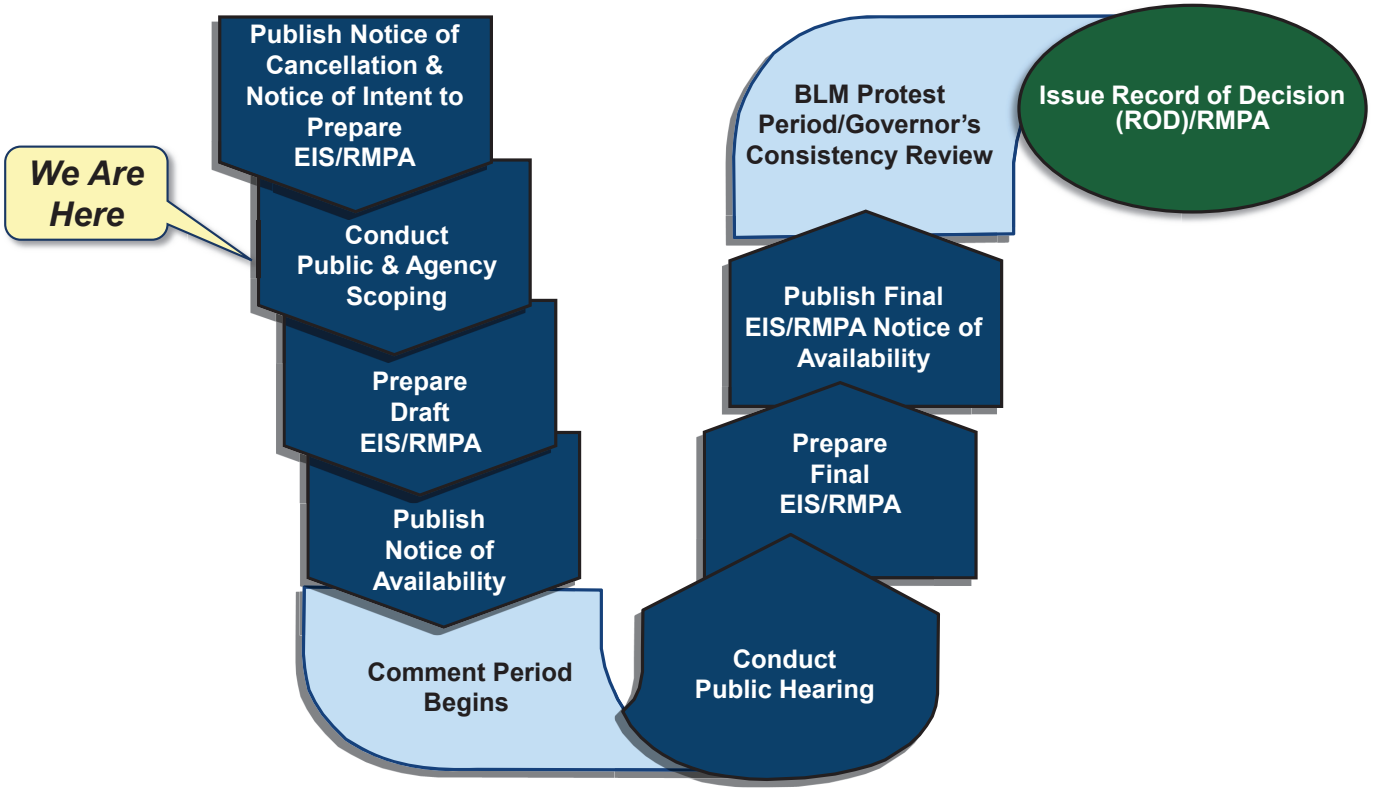
RMPA Process (Cont'd)

- Provides for meaningful involvement and is prepared with involvement of Federal, State, County, Local and Tribal governments.
- Prepared in compliance with National Environmental Policy Act (NEPA) requirements.
- Provides opportunities for meaningful public participation in the land use planning process, including but not limited to planning criteria development and review, advance notice of public meetings, comment periods and protest of planning decisions. Submission of the proposed RMPA for Governor's consistency review and appeal to the governor of the state(s) involved and must identify any relevant known inconsistencies with the officially approved and adopted plans of state and local governments.
- An RMPA is approved when a Record of Decision (ROD) is signed to adopt the RMPA.

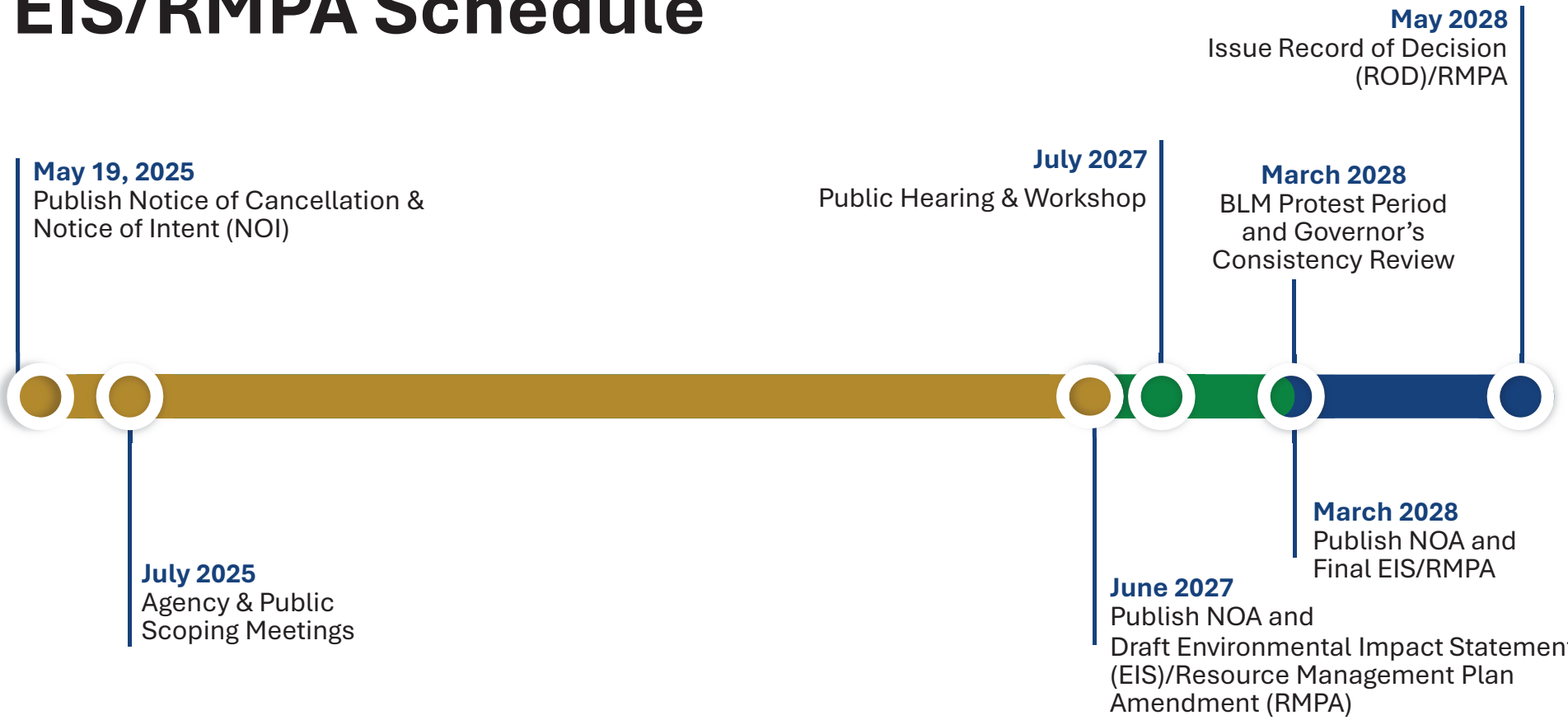
BLM Planning Criteria for Land Use Planning

- **Criteria 1:** Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies.
- **Criteria 2:** Existing valid Las Vegas Resource Management Plan decisions will not change, and any new plan decisions will not conflict with existing valid plan decisions.
- **Criteria 3:** Any resource management plan amendments will recognize valid existing rights.

EIS / RMPA Process



EIS/RMPA Schedule



How to Comment

Please Submit Your Comments Using One of these Methods by **September 5, 2025**:

IN PERSON TODAY:
Members of the public may submit their comments verbally

EMAIL:
SNSAEIS@landrumbrown.com

MAIL:
SNSA EIS / RMPA
Landrum & Brown, Inc
4445 Lake Forest Dr. Suite 700
Cincinnati, OH 45242

Visit the project website for more information:
snvairporteis.com

JLA Contact

FAA Project Manager

Mr. David B. Kessler, M.A., AICP

Telephone: 424-405-7315

Email: dave.kessler@faa.gov

BLM Project Manager

Joanie Guerrero

Telephone: 702-515-5274

Email: jjguerrero@blm.gov

Project Email Address:

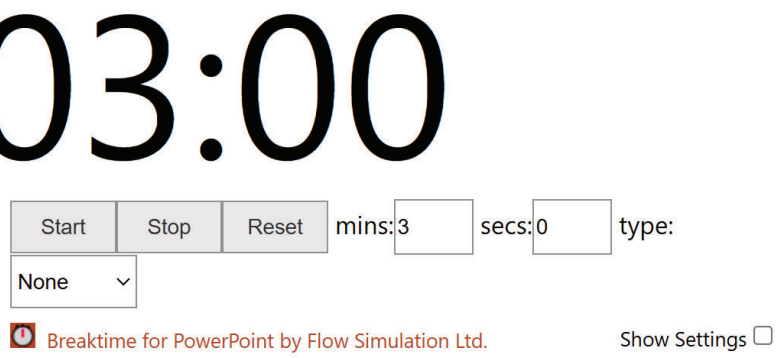
SNSAEIS@landrumbrown.com

Public Scoping Meeting

1. Enter a comment in the Chat box if you would like to submit a verbal comment. You will be able to unmute yourself only when your name is called
2. Each speaker will be allowed **3 minutes to speak**
3. If you exceed three minutes, you are encouraged to submit a written comment to the project email and mailing address

MAIL:
SNSA EIS / RMPA
Landrum & Brown, Inc
4445 Lake Forest Dr. Suite 700
Cincinnati, OH 45242

EMAIL:
SNSAEIS@landrumbrown.com



All comments must be submitted or postmarked by September 5, 2025

July 29, 2025

Questions?

Federal Aviation Administration

Bureau of Land Management

TABLE B-3 VIRTUAL PUBLIC SCOPING MEETING PARTICIPANTS

Name/Phone Number	Email
1(202) 957-3104	N/A
1(202) 957-3104	N/A
1(312) 479-8710	N/A
1(513) 658-6325	N/A
1(702) 377-6801	N/A
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
Aaron Aaron	aaron@snbtu.org
aaron kraft	krafta@bv.com
aaron kraft	krafta@bv.com
Albert Kaneshiro	albert.kaneshiro@hok.com
Albert Kaneshiro	albert.kaneshiro@hok.com
Albert Kaneshiro	albert.kaneshiro@hok.com
Albert Kaneshiro	albert.kaneshiro@hok.com
Albert Kaneshiro	albert.kaneshiro@hok.com
Albert Kaneshiro	albert.kaneshiro@hok.com
Albert Kaneshiro	albert.kaneshiro@hok.com
Albert Kaneshiro	albert.kaneshiro@hok.com

Name/Phone Number	Email
Amy Alonzo	amy@thenvindy.com
Amy Alonzo	amy@thenvindy.com
Andrea Cole	acole@gcgarciainc.com
Andrea Cole - G.C. Garcia# Inc. (Andrea Cole)	acole@gcgarciainc.com
Andy Roberts	nvw6281@gmail.com
Andy Roberts	nvw6281@gmail.com
Angelo Carvalho	acarvalho@gcgarciainc.com
Angelo Carvalho	acarvalho@gcgarciainc.com
Ashlee Younie	ayounie@asmaffiliates.com
Ashlee Younie	ayounie@asmaffiliates.com
BD (Bre Meinardus)	bre@centrex.cc
Blanca Lenzi	blenzi@lasvegasnevada.gov
Blanca Lenzi	blenzi@lasvegasnevada.gov
Borja Leon	borja.leon@dleonengineers.com
Borja Leon	borja.leon@dleonengineers.com
Bre Meinardus	bre@centrex.cc
Bryant Holt	bryanth@lasairport.com
Bryant Holt	bryanth@lasairport.com
Bryant Holt	bryanth@lasairport.com
Bryant Holt	bryanth@lasairport.com
Carlos Espinoza	cespinoza@cleanwaterteam.com
Carlos Espinoza	cespinoza@cleanwaterteam.com
Catherine van Heuven	cvanheuven@kaplankirsch.com
Catherine van Heuven	cvanheuven@kaplankirsch.com
Chuck Joseph	charles.joseph@c-agroup.com
Chuck Joseph	charles.joseph@c-agroup.com
Colleen Cepero	cceperorios@blm.gov
Colleen Cepero	cceperorios@blm.gov
Collin Haworth	collin.haworth@rwdi.com
Collin Haworth	collin.haworth@rwdi.com
Collin Haworth	collin.haworth@rwdi.com
Dag G (Dagmar Galvan)	dg722@nau.edu
Dagmar Galvan	dg722@nau.edu
dave Kessler	dave.kessler@faa.gov
dave Kessler	dave.kessler@faa.gov
david cherry	david.cherry@cityofhenderson.com
david cherry	david.cherry@cityofhenderson.com
david cherry	david.cherry@cityofhenderson.com
david cherry	david.cherry@cityofhenderson.com
Dawn Leaper	leaper@clarkcountynv.gov
Dawn Leaper	leaper@clarkcountynv.gov
Dawn Leaper	leaper@clarkcountynv.gov
Dean Schuerman	dnschuerman@leoadaly.com
Dean Schuerman	dnschuerman@leoadaly.com
Diana Wasiuk	dwasiuk@hmmh.com
Diana Wasiuk	dwasiuk@hmmh.com
Drew Teitelbaum	drew.teitelbaum@allegiantair.com
Drew Teitelbaum	drew.teitelbaum@allegiantair.com
Drew Teitelbaum	drew.teitelbaum@allegiantair.com

Name/Phone Number	Email
Drew Teitelbaum	drew.teitelbaum@allegiantair.com
Elizzeth Lopez- De La Torre	ellopez@lasvegasnevada.gov
Elizzeth Lopez- De La Torre	ellopez@lasvegasnevada.gov
Enrico Dagostini	enrico.dagostini@perkinswill.com
Enrico Dagostini	enrico.dagostini@perkinswill.com
Enrico Dagostini	enrico.dagostini@perkinswill.com
Enrico Dagostini	enrico.dagostini@perkinswill.com
Faviola Garcia	faviola.garcia@faa.gov
Faviola Garcia	faviola.garcia@faa.gov
Frederick Viszneki	freddy@ironworkers433.org
Frederick Viszneki	freddy@ironworkers433.org
Gaby Elizondo# L&B (Gaby Elizondo)	gaby.elizondo@landrumbrown.com
Gaby Elizondo, L&B	gaby.elizondo@landrumbrown.com
Heidi Konsten - Court Reporter (Heidi Konsten - NV CCR)	nv.scheduling@lexitaslegal.com
Heidi Konsten - NV CCR (Tracy Manning)	nv.scheduling@lexitaslegal.com
HM Weberg	hmweberg@hotmail.com
HM Weberg	hmweberg@hotmail.com
Jacob Snow	jacob.snow@atkinsrealis.com
Jacob Snow	jacob.snow@atkinsrealis.com
Jason Cabrera	jasonc@lasairport.com
Jason Cabrera	jasonc@lasairport.com
Jean Wolfers-Lawrence	jean.wolfers-lawrence@faa.gov
Jean Wolfers-Lawrence	jean.wolfers-lawrence@faa.gov
Jeremiah Reyes	jeremiah.b.reyes.nfg@army.mil
Jeremiah Reyes	jeremiah.b.reyes.nfg@army.mil
Jeremiah Reyes	jeremiah.b.reyes.nfg@army.mil
Jeremiah Reyes	jeremiah.b.reyes.nfg@army.mil
Jeremiah Reyes	jeremiah.b.reyes.nfg@army.mil
Jeremiah Reyes	jeremiah.b.reyes.nfg@army.mil
Jimmy Schwarz (Aaron Aaron)	aaron@snbtu.org
Joanie Guerrero	jjguerrero@blm.gov
Joanie Guerrero	jjguerrero@blm.gov
John Engstrom	jvengstr@bechtel.com
John Engstrom	jvengstr@bechtel.com
John Wagner	johnw@lasairport.com
John Wagner	johnw@lasairport.com
Jordan Doctors	jordan@sylvesterpolednak.com
Jordan Doctors	jordan@sylvesterpolednak.com
Jose Witt	jose_witt@tws.org
Jose Witt	jose_witt@tws.org
Joseph Varner	jvarner@landicagroup.com
Joseph Varner	jvarner@landicagroup.com
Joseph Varner	jvarner@landicagroup.com
Joseph Varner	jvarner@landicagroup.com
Josh Woods IBEW 357 (Aaron Aaron)	aaron@snbtu.org
Judd Hill	jhill@hwlochner.com
Judd Hill	jhill@hwlochner.com
Judd Hill	jhill@hwlochner.com
Judd Hill	jhill@hwlochner.com

Name/Phone Number	Email
Judy Hohman	jphohman@outlook.com
Judy Hohman	jphohman@outlook.com
Julie Wienberg	julie.wienberg@perkinswill.com
Julie Wienberg	julie.wienberg@perkinswill.com
Julie Wienberg	julie.wienberg@perkinswill.com
Justin Ignacio	jignacio@skyharbour.group
Justin Ignacio	jignacio@skyharbour.group
Keith Welch	keithwelch669@gmail.com
Keith Welch	keithwelch669@gmail.com
Keith Welch	keithwelch669@gmail.com
Keith Welch	keithwelch669@gmail.com
Keli Callahan	keli.callahan@stantec.com
Keli Callahan	keli.callahan@stantec.com
Kelly Knowles	kelly.knowles@wsp.com
Kelly Knowles	kelly.knowles@wsp.com
Kenneth Zarembski	kzarembski@walterpmoore.com
Kenneth Zarembski	kzarembski@walterpmoore.com
Kenneth Zarembski	kzarembski@walterpmoore.com
Kenneth Zarembski	kzarembski@walterpmoore.com
Kent Duffy	kent.duffy@faa.gov
Kent Duffy	kent.duffy@faa.gov
Kerensa Brooks	kerensa.brooks@geosyntec.com
Kerensa Brooks	kerensa.brooks@geosyntec.com
Kim Hughes	khughes@hntb.com
Kim Hughes	khughes@hntb.com
Laddie Irion	laddie.irion@stantec.com
Laddie Irion	laddie.irion@stantec.com
Laddie Irion	laddie.irion@stantec.com
Luke Brand	l.brand@iuoelocal12.org
Luke Brand	l.brand@iuoelocal12.org
Marc Leavitt (Aaron Aaron)	aaron@snbtu.org
Marcus Faust	marcusfaust@msn.com
Marcus Faust	marcusfaust@msn.com
Marcus Faust	marcusfaust@msn.com
Mariah Jackson	mariah.jackson@geosyntec.com
Mariah Jackson	mariah.jackson@geosyntec.com
Mark (Mark Moskowitz)	mark.moskowitz@clarkcountynv.gov
Mark Moskowitz	mark.moskowitz@clarkcountynv.gov
Mark Moskowitz	mark.moskowitz@clarkcountynv.gov
Mark Moskowitz	mark.moskowitz@clarkcountynv.gov
Mark Moskowitz	mark.moskowitz@clarkcountynv.gov
Mark Moskowitz	mark.moskowitz@clarkcountynv.gov
Mark Moskowitz	mark.moskowitz@clarkcountynv.gov
Mark Moskowitz	mark.moskowitz@clarkcountynv.gov
Mark Silverstein	mreloslesen@gmail.com
Mark Silverstein	mreloslesen@gmail.com
Michael Hines	michael.hines@faa.gov
Michael Hines	michael.hines@faa.gov
Michael Kidd	michael.kidd@cityofhenderson.com

Name/Phone Number	Email
Michael Kidd	michael.kidd@cityofhenderson.com
Michael Lawrance	michael.lawrance@faa.gov
Michael Lawrance	michael.lawrance@faa.gov
Michelle Alanis	malanis@lasvegasnevada.gov
Michelle Alanis	malanis@lasvegasnevada.gov
Michelle Alanis	malanis@lasvegasnevada.gov
Michelle Alanis	malanis@lasvegasnevada.gov
Molly Reyes (Jeremiah Reyes)	jeremiah.b.reyes.nfg@army.mil
Monika Bertaki	monikab@lasairport.com
Monika Bertaki	monikab@lasairport.com
Monika Bertaki	monikab@lasairport.com
Monika Bertaki	monikab@lasairport.com
Nathan Wagoner	nathan.wagoner@icf.com
Nathan Wagoner	nathan.wagoner@icf.com
Paulina Zawistowska	paulinaz@cwjgroup.com
Paulina Zawistowska	paulinaz@cwjgroup.com
Peggy Roberts	peggy.roberts@icf.com
Peggy Roberts	peggy.roberts@icf.com
Ric Paterson	ric.paterson@parsons.com
Ric Paterson	ric.paterson@parsons.com
Richard Velotta	rvelotta@reviewjournal.com
Richard Velotta	rvelotta@reviewjournal.com
Rob Adams	rob.adams@landrumbrown.com
Rob Adams	rob.adams@landrumbrown.com
Robert Fiaz	rdiaz@smw88.org
Robert Fiaz	rdiaz@smw88.org
Ronald Siecke	ron.siecke@jacobs.com
Ronald Siecke	ron.siecke@jacobs.com
Rosy Lyon	rlyon@walterpmoore.com
Rosy Lyon	rlyon@walterpmoore.com
Russell Rowe	russ@rowelawnv.com
Russell Rowe	russ@rowelawnv.com
Russell Rowe	russ@rowelawnv.com
Russell Rowe	russ@rowelawnv.com
S P	sprincecre@gmail.com
S P	sprincecre@gmail.com
Sarah Potter	sarah.potter@landrumbrown.com
Sarah Potter	sarah.potter@landrumbrown.com
Sarah Potter	sarah.potter@landrumbrown.com
Sarah Potter	sarah.potter@landrumbrown.com
Scott Russell	scottrlas@gmail.com
Scott Russell	scottrlas@gmail.com
Shawn Cunningham	desk@ktnv.com
Shawn Cunningham	desk@ktnv.com
Stephen Leslie	sleslie@blm.gov
Stephen Leslie	sleslie@blm.gov
Steve Culberson	sculberson@ricondo.com
Steve Culberson	sculberson@ricondo.com
Steve Riano	swriano@bechtel.com

Name/Phone Number	Email
Steve Riano	swriano@bechtel.com
Steve Riano	swriano@bechtel.com
Steve Riano	swriano@bechtel.com
SundayLee Cabrera	sundayl@lasairport.com
SundayLee Cabrera	sundayl@lasairport.com
Timothy Newell	tnewell@cleanwaterteam.com
Timothy Newell	tnewell@cleanwaterteam.com
Timothy Rogers	t.rogers@avairpros.com
Timothy Rogers	t.rogers@avairpros.com
Tracy Manning	nv.scheduling@lexitaslegal.com
Troy Hunt	thunt@gcwengineering.com
Troy Hunt	thunt@gcwengineering.com
Tyler Schneider	tyler.schneider@gmgvegas.com
Tyler Schneider	tyler.schneider@gmgvegas.com
Vidal Zambrano	lvba@ironworkers416.org
Vidal Zambrano	lvba@ironworkers416.org
Will Bradley	flyvegaswill@gmail.com
Will Bradley	flyvegaswill@gmail.com

Notes: Duplicates are attributed to the fact that Zoom records each participant based on the link used to join the meeting, not by the participant's unique name and email.

Source: Landrum & Brown, 2025.

July 30 & 31, 2025

Public Scoping Meeting

Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)

Federal Aviation Administration

Bureau of Land Management

About the Presenter

David B. Kessler, AICP

Project Manager, SNSA EIS

Federal Aviation Administration

About the Presenter

Stephen Leslie

Acting Deputy District Manager

Bureau of Land Management

Agenda

- Introductions
- Roles and Responsibilities
- Proposed Project Background & Overview
- Environmental Resource Categories
- Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA) Process & Schedule

Roles and Responsibilities

Roles and Responsibilities

Federal Aviation Administration (FAA) & Bureau of Land Management (BLM)

- Joint Lead Agencies (JLA) for preparation of the EIS/RMPA
- FAA is lead agency for the preparation of the required evaluation per the National Environmental Policy Act (NEPA)
- Coordinate with and seek comments/concurrence from federal, state, and local agencies and Tribal nations
- Ensure compliance with the NEPA, the Federal Land Policy and Management Act (FLPMA), and other special purpose laws
- Evaluate the Proposed Project and Reasonable Alternatives including No Action

Roles and Responsibilities

Federal Aviation Administration (FAA) & Bureau of Land Management (BLM) ***(Continued)***

- BLM to evaluate the need for a Resource Management Plan Amendment (RMPA) to modify the Visual Resource Management (VRM) class in order for the BLM to evaluate the established Ivanpah Transportation and Utilities Corridor (Public Law 107-282), as this will require amending the existing 1998 Las Vegas Resource Management Plan
- Prepare and issue a Record of Decision (ROD)

Roles and Responsibilities

Cooperating Agencies

- FAA Reauthorization Act of 2024 (Public Law 118-63) states that *"[a] Federal agency required to make an approval or take an action for a project"* must be treated as a **cooperating agency**.

  The proposed SNSA project includes modifications to an existing interchange and construction of a new interchange on Interstate Highway 15 (I-15)

- Therefore, the cooperating agencies for this EIS/RMPA are:
  - Federal Highway Administration (FHWA)
  - Nevada Department of Transportation (NDOT)

Roles and Responsibilities

Consultant Team

- Reports to JLA
- Under the supervision of the JLA, conducts the environmental impact analysis and supports JLA's coordination with federal, state, and local agencies
- Assists the JLA with preparing the EIS/RMPA documentation
- Assist the JLA to plan and conduct public outreach
- Provides subject matter experts that conduct associated field work

Roles and Responsibilities

Clark County Department of Aviation (CCDOA)

- CCDOA is the Sponsor for the proposed SNSA
- Owner and operator of Harry Reid International Airport (LAS), North Las Vegas Airport (VGT), Henderson Airport (HND), Jean Airport (0L7), and Overton Perkins Field (U08)
- Provide supporting planning, design, and other information to inform the EIS/RMPA
- Is a Participating Agency with the JLA in preparing the EIS/RMPA

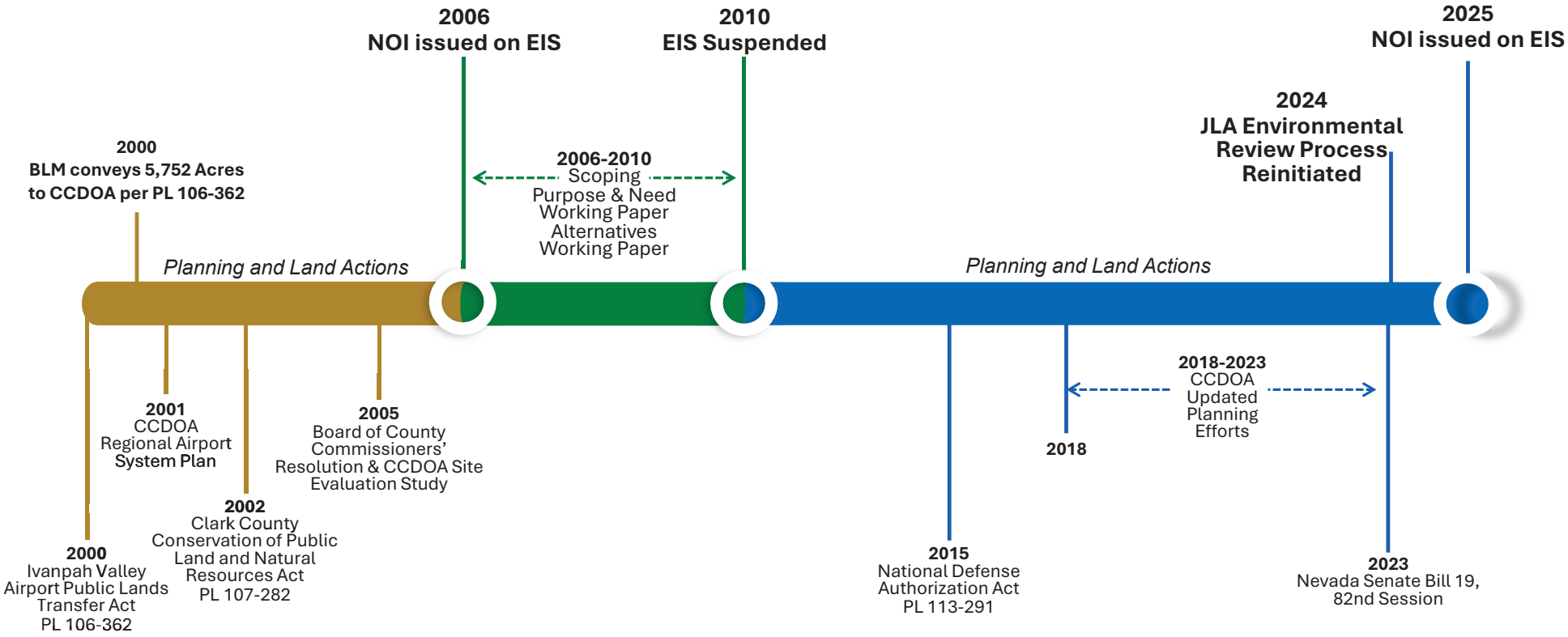
Roles and Responsibilities

Participating Agencies

- National Park Service (NPS)
- U.S. Environmental Protection Agency (US EPA)
- U.S. Fish and Wildlife Service (USFWS)
- Nevada Department of Wildlife (NDOW)
- Nevada Department of Environmental Protection (NDEP)
- Nevada Division of Forestry (NDF)
- Nevada State Historic Preservation Officer (SHPO)
- Nevada Division of Natural Heritage (NDNH)
- Regional Transportation Commission of Southern Nevada (RTC)
- Clark County Department of Environment and Sustainability (CCDES)
- Clark County Regional Flood Control District (CCRFCD)
- Clark County Department of Aviation (CCDOA)

Project Background & Overview

Proposed Project Background & Overview



Clark County Department of Aviation Preliminary Purpose and Need

- **Purpose:** To accommodate future aviation demand in the Las Vegas metropolitan area, while meeting FAA airport design standards, protect airspace from obstacle encroachment, and provide for safe and efficient flight procedures.
- **Need:** Insufficient facilities to accommodate future aviation demand in the Las Vegas metropolitan area and comply with Public Law 106-362.

FAA Purpose and Need

- **Purpose:** To fulfill FAA's statutory mission to ensure the safe and efficient use of navigable airspace in the United States as set forth under 49 U.S.C. § 47101 (a)(1).
- **Need:** Ensure that the proposed SNSA provides for safe and efficient air transportation pursuant to the Federal Aviation Act of 1958 and meets FAA airport design standards, and to comply with Public Law 106-362.

BLM Purpose and Need

- **Purpose:** To convey the identified federal lands to facilitate the development the SNSA.
- **Need:**
  - Comply with Public Law 106-362, Public Law 107-282, and Public Law 113-291, provided conditions set forth in the Public Laws are met, and to meet agency responsibilities as required by Section 209 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA).
  - Evaluate the need to amend the 1998 Las Vegas Resource Management Plan/Record of Decision to modify the Visual Resource Management (VRM) class for proposed infrastructure within the Interstate 15 South Corridor designated per Public Law 107-282.

FHWA/NDOT Purpose and Need

FHWA Purpose: to fulfill the FHWA's statutory mission to ensuring that America's roads and highways continue to be among the safest and most technologically sound in the world as set forth under 23 U.S.C. § 111.

FHWA Need: Ensure that the proposed new interchange and modifications to an existing interchange on Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport meet FHWA Standards and comply with Title 23, Code of Federal Regulations – *Highways*.

NDOT Purpose: Provide, operate, and preserve a reliable and sustainable transportation system in the State of Nevada that enhances safety, quality of life and economic development through innovation and collaboration.

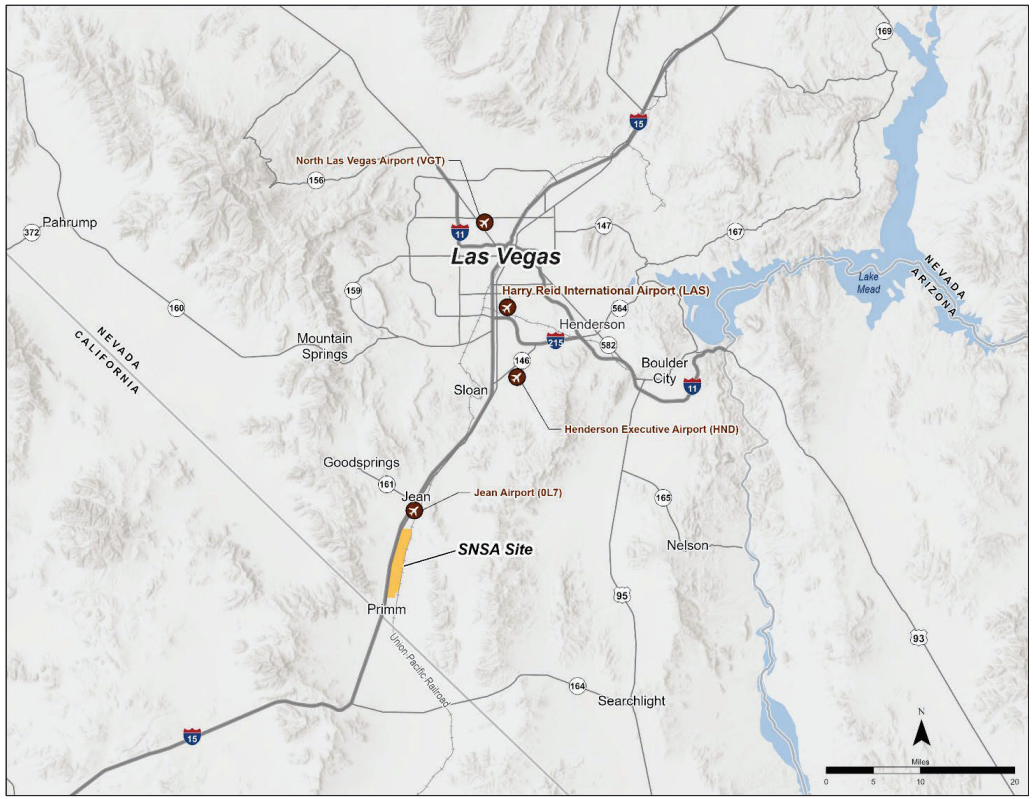
NDOT Need: Ensure the new airport, any proposed new interchange(s), modifications to an existing interchange(s), and potential modifications to Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport are in accordance with Nevada Revised Statutes (NRS) 408.210 and 408.423 and Nevada Administrative Code (NAC) 408.403 through 408.557.

Range of Alternatives

- No Action
- Other Modes of Transportation
- Air Traffic Demand Management Strategies
- Enhancement of Existing Airports including the use of Advanced Technologies
- New Airport

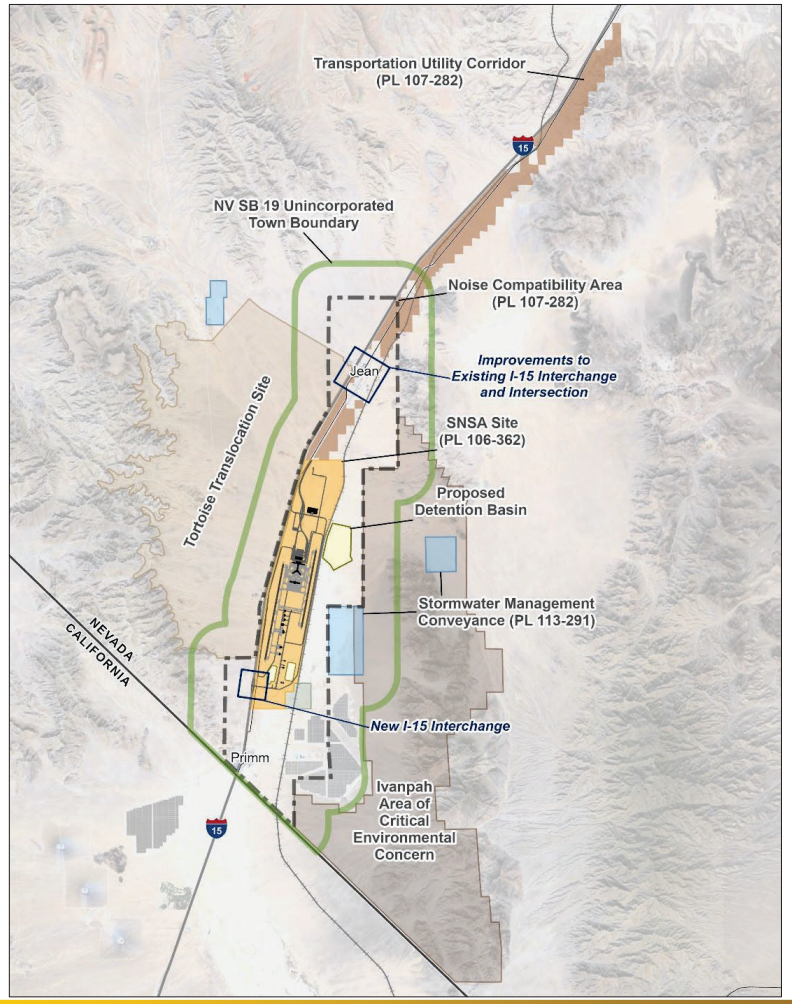
Proposed Project - SNSA

- New ***supplemental*** commercial airport.
- Located ~35 miles southwest of downtown Las Vegas, along I-15.
- Located ~6 miles south of Jean and ~5 miles north of Primm.
- 5,752 acres conveyed by BLM to CCDOA (commonly referred to as the “6,000 acre parcel”)



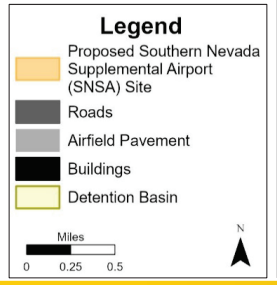
Proposed Project - SNSA

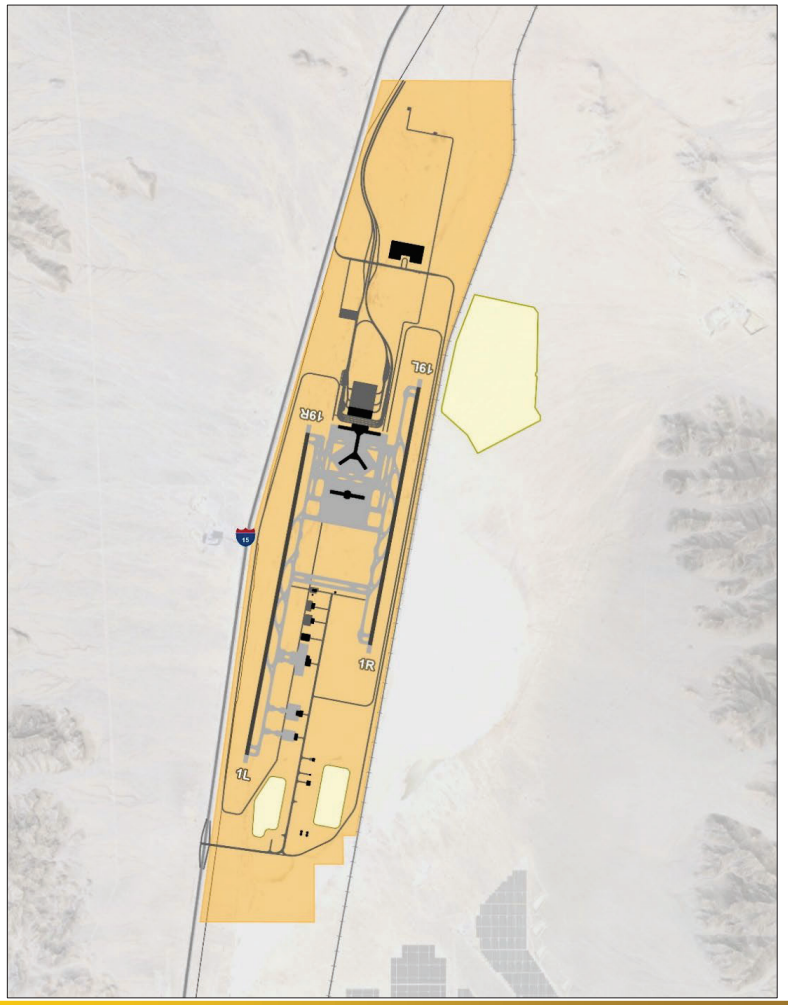
- Two parallel runways & supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing & takeoff
- Airspace & flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New I-15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor



Proposed Project - SNSA

- Two parallel runways & supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing & takeoff
- Airspace & flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New I-15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor





Environmental Resource Categories

Environmental Resource Categories for the EIS/RMPA

- Aviation Emissions and Air Quality
- Biological resources (including fish, wildlife & plants)
  - Special Status Species (Flora and Fauna)
  - Threatened and Endangered Species
- Department of Transportation Act, Section 4(f) (parks and other recreation resources)
- Farmlands
- Fuels and fire management
- Geology/mineral resources
- Hazardous materials, solid waste, and pollution prevention
- Historical, architectural, archaeological, and cultural resources
- Land use and realty
- Natural resources and energy supply
- National Historic Trails
- Noise and noise-compatible land use
- Recreation
- Socioeconomics and Children's environmental health and safety risks
- Soils, vegetation, non-native and noxious weeds
- Visual effects (including light emissions) and visual resource management
- Water resources (including wetlands, floodplains, surface waters, and groundwater)
- Wild horses and burros

EIS/RMPA Process & Schedule

RMPA Process

- A land use plan or resource management plan provides a framework for the BLM management of public lands.
- A land use plan amendment also known as Resource Management Plan Amendment (RMPA) is identified when there is “a need to modify management or accommodate a project that may result in a change in the scope of resource uses or a change in the terms, conditions, and decisions of the approved plan”. These changes may be to a specific resource area. (H-1601-1)
- BLM manages public lands under principles of multiple-use and sustained yield as mandated by the Federal Land Policy and Management Act (FLPMA).
- Uses a systematic interdisciplinary approach to integrate physical, biological, economic, and other sciences.

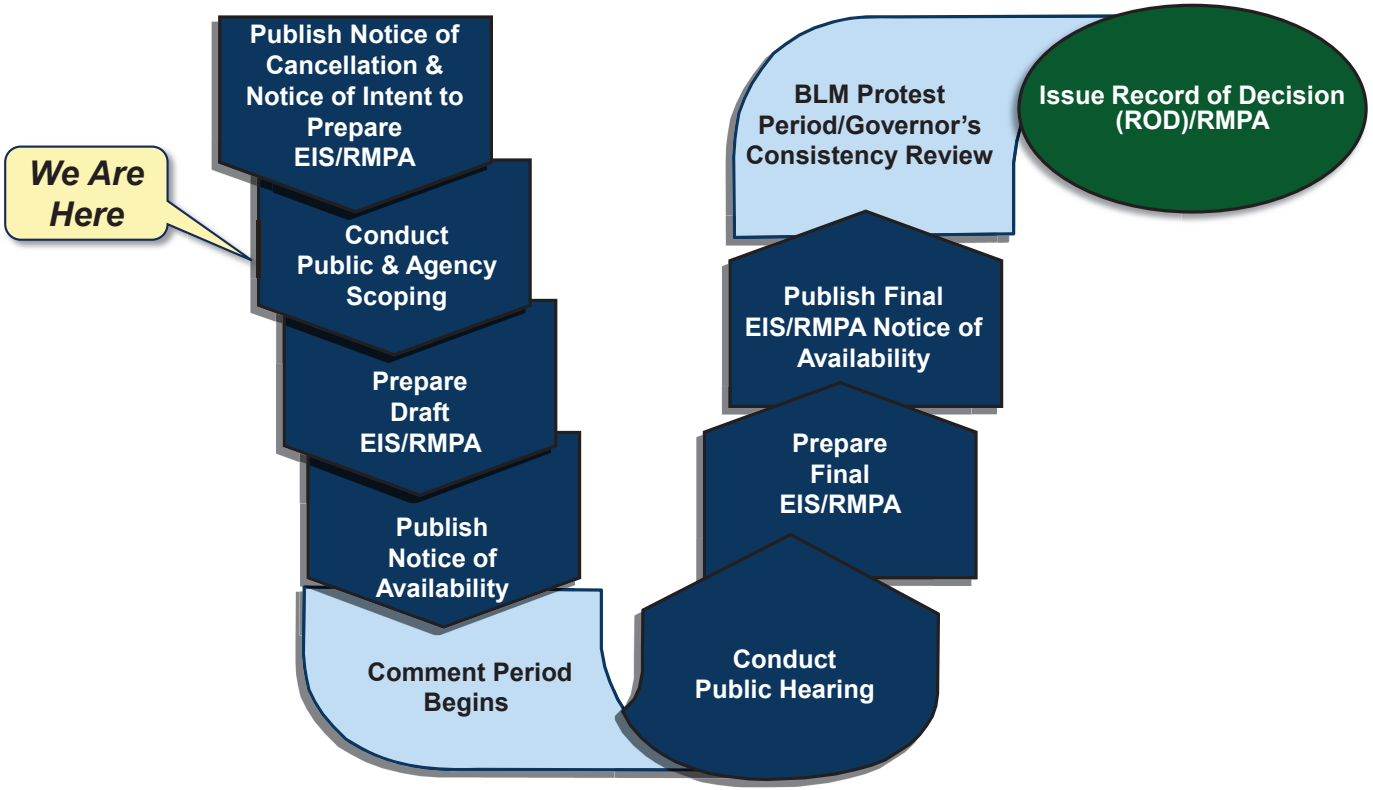
RMPA Process (Cont'd)

- Provides for meaningful involvement and is prepared with involvement of Federal, State, County, Local and Tribal governments.
- Prepared in compliance with National Environmental Policy Act (NEPA) requirements.
- Provides opportunities for meaningful public participation in the land use planning process, including but not limited to planning criteria development and review, advance notice of public meetings, comment periods and protest of planning decisions. Submission of the proposed RMPA for Governor's consistency review and appeal to the governor of the state(s) involved and must identify any relevant known inconsistencies with the officially approved and adopted plans of state and local governments.
- An RMPA is approved when a Record of Decision (ROD) is signed to adopt the RMPA.

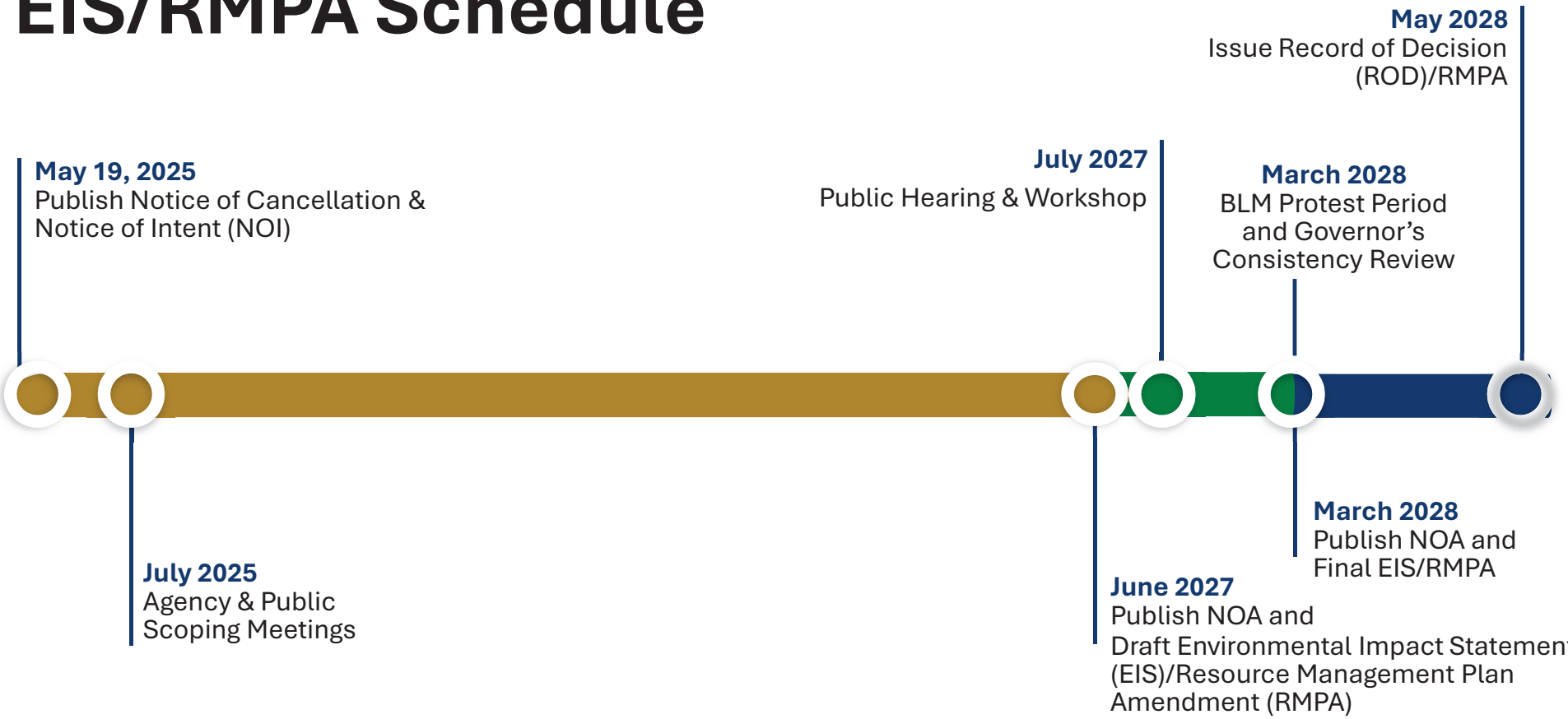
BLM Planning Criteria for Land Use Planning

- **Criteria 1:** Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies.
- **Criteria 2:** Existing valid Las Vegas Resource Management Plan decisions will not change, and any new plan decisions will not conflict with existing valid plan decisions.
- **Criteria 3:** Any resource management plan amendments will recognize valid existing rights.

EIS / RMPA Process



EIS/RMPA Schedule



How to Comment

All Comments Must be Submitted or Postmarked by September 5, 2025

In Person Today:

Members of the public may submit their comments in one of the following methods:

- ✓Verbally with the court reporter
- ✓Comment forms at the comment boxes
- ✓Comment forms via U.S. Postal Service

E-Mail:

SNSAEIS@landrumbrown.com

Mail:

SNSA EIS/RMPA
Landrum & Brown, Inc
4445 Lake Forest Dr. Suite 700
Cincinnati, OH 45242

Visit the project website for more information: snvairporteis.com

JLA Contact

FAA Project Manager

David B. Kessler, M.A., AICP

Telephone: 424-405-7315

Email: dave.kessler@faa.gov

BLM Project Manager

Joanie Guerrero

Telephone: 702-515-5274

Email: jjguerrero@blm.gov

Project Email Address:

SNSAEIS@landrumbrown.com

July 30 & 31, 2025
Federal Aviation Administration
Bureau of Land Management

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
David Donovan	8937 Antioch	89117		
Multiple Uses		89139	6028600356	
Scott Martin	P.O Box 22271, SLC UT	84060	801-6961308	JSMARTIN@BURNSMCD.com
Aurora Jackson		89147		Aurora.Jackson@usps.com
Mail Mailing	407 N. Pacific Coast Hy	90277		

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025
Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
Jarrett Simmons	312 B Birdsall St.	77007	312-371-3079	JWsimmons@burnsmcd.com
Rachael Dennis	1524 Greenhedge St LV, NV	89110	702 413 2900	rachael.dennis@kimley-horn.com
Charles A Martin	1048 Tam O Shante	89109	702-204-6028	Soldbychuck@msn.com
Stacie Brown	1414 Malik Elena Dr.	89101	702 4716025	brownstacie1ive.com
Deborah Hecht				

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025
Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
Michael Sholet	10465 cloud Whisper Dr.	89135	(702) 769-1536	msholet@compassdevco.com
Aline Labbar	9160 Dean Martin	89139	7022485370	alinelabbar@snei.com
David Armour	4113 Wake Forest Dr	89129	702 403 9171	danagosh@gmail.com
Jose Tabares		89122	702-582-3709	jose.tabares@gmgray.tv
Aster Kifle-Thompson				
Wagner		89106	702 237-0396	—
MARK SILVERSTEIN	6180 SANDY CREEK DR	89123	702-239 1254	mrelosiesen@gmail.com
Steven Butler	7940 LV, NV 5 Bermuda Rd, LV, NV	89123	703-789-821	Sthutler1990@gmail.com

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

3/9

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025
Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
Richard Worth	LVRJ			
Daniel Huang	2410 Fire Mesa, #130	89128	307-399-8212	dhuang@landiecgroup.com
JANET CARTER	5850 Sky Pointe Dr. #103	89130	775-772-9970	jkumar167@aol.com
Peter Frigerio	1801 Chapman WAY	89104	7025911657	peterfrigerio@gmail.com
NANCY J. OLDS	2144 FALLSBURG	89002	703-577-8624	njolds2@gmail.com
Ken Takahashi	1500 Forematter Ln	89101	702-279-3824	
Candace Wells	333 S Las Vegas Blvd	89101	725-312-2075	candace-wells@vegas.sandsgov

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
T/ Gentis	8021 Kimwood	89149	702-610-8132	ngentis@att.net
Jennifer Solis	5547 Waltham Ln	89122	702-957-4956	
EVA CHASE	5420 DANVILLE DR	89119	702 218 6131	evac3776@gmail.com
Braden McNeil	1425 Belcastro st	89117	702 860 6519	braden.mcneil@mail.house.gov
Morgan Ortiz	PO Box 6205 Reno 89513	89149	702-483-1656	mortiz@biological diversity.org
Patrick Donnelly	PO Box 127, Shoshone, CA	92384	775-990-9372	pdonnelly@biologicaldiversity.org
Scott Henry	1087 Yucatan CT	89012	702-303-7448	Scott.Henry@AECOM.com

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

5/9

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
Chris Giunchigliani	1717 S. 15th St	89104	702 521 1663	giunchigliani@aol.com
RIC PATERSON			678-488-8494	ric.paterson@parsons.com
Keith Spencer	6399 Palagio	89146	702-369-4810	rk.ca.spencer@gmail
Wendy Zeger		98642	5035830317	wzeger@cinpro.com
Ed Uehling	3418 Oneida	89169	702 808-600	ed.uehling@yahoo
Vinny Spotleson	468 Lennox Dr	89123	702-285-6588	vinny.spotleson@gmail.com
Ellen Huber	1445 Stonelake Cove Ave	89074	5713274420	ellenkh2@gmail.com
Pat Mortensen	293 Comfort Dr	89074	7024363954	
Carey Carlos	9160 Dean Martin Dr	89139	7024608925	careycarlos@snei.com
R Bollozos	910 TONI AVE	89119		arecizzle@gmail.com
Hector Lizaola	717 Ann Dr.	89107	702 813-3977	hector.lizaola@outlook.com
LUKE McCARTHY	9140 EAGLE RIDGE DRIVE	89134	702-601-8700	

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
Jeri Lee	4500 Lilliput Lane, Las Vegas, NV 89102	89102	702-362-6885	
Adam Kattein	9480 S Eastern Ave, LV, NV	89123	596-939-7697	
Ainsley Archibald	1955 Verbania Dr Las Vegas NV	89134	504.376.4922	ainsleearchibald@gmail.com
John Hinta	8160 Placid St Las Vegas	89123	702-361-1171	hihiatt@gmail.com
Will Bradley	2700 Las Vegas Blvd S.	89109	7025788545	flyvegaswill@gmail.com
Julios Lightfoot	2313 Logsdon Dr.	89032		JLightfoot@LasVegasNevada.gov
Taylor Murdock	80 Motherwell Ave	89012	702-388-0205	Taylor_murdock@rosen.senate.gov
MARIA MILLER	9515 W CHARLESTON	89117	702-683-2285	
Olivia Tanager	—	—	—	olivia.tanager@sierra club.org

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

7/9

SIGN-IN SHEET

Public Scoping Meeting
July 30, 2025
Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
Joseph Varner				JVarner@landicagroup.com
Mark Koester				mark.koester@stantec.com
Patricia Sheffield	217 Bruin way	89145		millertrisha7@gmail.com
Geneva Zoltek	Channel 13		702 790 1175	
Kris Omen				
Andres Garcia	1404 Avenida Arroyo	92762	773 225 7578	andresgarcia@hillintl.com
Dana Baker	5713 Sovereign			debitnbweaol.com
Bob Orr	-	33762	727 402-4133	robert@plan-tcu.com
ALBERT KANESHIRO	757 S. ALAMEDA ST, LA, CA	90021 90012		ALBERT.KANESHIRO@HKLK.COM
Minjia Yan				myanlasvegas@gmail.com
JOSHUA PARK		89148		JOYPAC@GMAIL.COM
CARA STROM		95324	213-271-2478	CSTROM@BECHTEL.COM

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

8/9

Sign Up Here to Submit a Verbal Comment

Public Scoping Meeting

July 30, 2025

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
~~[illegible]~~				
Patrick Donnelly	PO Box 127 Shoshone CA	92384	775-940-9332	pdonnelly@biologicaldiversity.org
EVA OLIVA CHAVEZ	5425 DANVILLE ST APT G LOS ANGELES CA	90011	7022168131	EVACB377@GMAIL.COM
Chris Giunchiglianni	1717 S. 15th St	89104	7025211663	giunchiglianni@aol.com
Will Bradley	2700 Las Vegas Blvd. S.	89109	7025788545	flyvegaswill@gmail.com
JANET CARTER	5850 Skyhoi Circle #103	89130	775-772-9970	jkcarter167@aol.com
Vinny Spotleson	468 Lenox Dr LV ~~[illegible]~~	89123	702-285-6588	

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

9/9

SIGN-IN SHEET

Public Scoping Meeting
July 31, 2025
Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
ROBERT SCHUTTENHELM	711 EAGLE AVE, JEAN	89019	562-754-0198	DYNASOAR64@PROTONMAIL.com
Vinny Spotleson	468 Lennox Pr [illegible]	89123	702-285-6588	vinny.spotleson@gmail.com
Bill VanHerck	21962 E CANYON PL	80016	720 286 5246	WILLIAM.VANHERCK@JACOBS.com
Jack Behrens	91900 LV Blvd So	89019	702-271-7535	jbehrense affinitygaming.com
AARON Glickstein	91900 LV BLVD SO	89019	725-200-6409	aglickstein@affinitygaming.com
Robert Schlies	2730 winterhaven Ct	89052	702-355-0180	RobertschiesLV@gmail.com
JUSTIN IGNACIO	7191 N HUALAPAI WAY	89166	702-703-7356	
Justin Bytheh	6726 Via Austi Pkwy	89049	3105691560	
DAVID SKEGA C	970 MOSSY VALLEY ST	89052	702-208-3110	DSKEGA@ARDURRA.COM
Michael Mosley	431 Pa Hi Ann Woods Drive	89002	702-862-3226	michael.mosley@kimley-horn.com

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

SIGN-IN SHEET

Public Scoping Meeting
July 31, 2025
Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
PAUL Amstutz	5461 Geronimo Trail	Sandy Valley 89019	541-601-0667	
Carol + Dale Kruep	2180 Shadow Canyon Dr. Henderson	89044	702-413-6827	clkruep@gmail.com
MARK SILVERSTEIN	8160 SANDY CREEK DR LVN	89123	702-239-1254	mreloslesen@gmail.com
Olivia Tanage	—	—	541-400-3113	olivia.tanage@sierraclub.org
Mo Mc—	7186 N. Hualapai	89166		Mo@—.—
Ryan Lombardi	540 Rugby Ct	20132	703-798-8065	rlombardi@gmail.com
John Karachepone	2695 BOTHWELL PL ~~89044~~	89044	702 813 4563	John.Karachepone@Kimley-Horn.com

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

Sign Up Here to Submit a Verbal Comment

Public Scoping Meeting

July 31, 2025

Proposed Southern Nevada Supplemental Airport (SNSA)

Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

NAME	ADDRESS	ZIP	PHONE	EMAIL
Carol Kruep	2180 Shadow Canyon Dr. Henderson	89044	702-413-6827	clkruep@gmail.com
Vinny Spotleson	468 Lennox Dr	89123	702-285-6588	Vinny.Spotlesnegmail.com
Robert Scholes	2730 waterton ct	89052	702-355-0180	RobertScholesLV@gmail.com
MARK SILVERSTEIN	5180 SANDY CREEK DR LV NV	89123	702-239-1254	mreloslesen@gmail.com

Before including your name, address and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

ENVIRONMENTAL IMPACT STATEMENT (EIS) & RESOURCE MANAGEMENT PLAN AMENDMENT (RMPA)

Proposed Southern Nevada Supplemental Airport in Clark County, Nevada

- The Clark County Department of Aviation (CCDOA), is proposing the development and operation of the Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada.
- The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for the preparation of a combined Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA).

snvairporteis.com

If you have questions, please contact:

David B. Kessler, AICP
Federal Aviation Administration
Western-Pacific Region, 777 South Aviation Blvd,
El Segundo, CA 90245
424-405-7315
Dave.Kessler@faa.gov

Joanie Guerrero
Bureau of Land Management
Las Vegas Field Office, 4701 N Torrey Pines Dr,
Las Vegas, NV 89130
702-515-5274
JJGuerrero@blm.gov

For more information, visit:
snvairporteis.com

Need for Proposed Project

FEDERAL AVIATION ADMINISTRATION (FAA):

* Ensure that the proposed SNSA provides for safe and efficient air transportation pursuant to the Federal Aviation Act of 1958 and meets FAA airport design standards, and to comply with Public Law 106-362.

BUREAU OF LAND MANAGEMENT (BLM):

* Comply with Public Law 106-362, Public Law 107-282, and Public Law 113-291, provided conditions set forth in the Public Laws are met, and to meet agency responsibilities as required by Section 209 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA).
* Evaluate the need to amend the 1998 Las Vegas Resource Management Plan/ Record of Decision to modify the Visual Resource Management (VRM) class for proposed infrastructure within the Interstate 15 South Corridor designated per Public Law 107-282.

CLARK COUNTY DEPARTMENT OF AVIATION:

* Insufficient facilities to accommodate future aviation demand in the Las Vegas metropolitan area and comply with Public Law 106-362.

Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) Process

1. Publish Notice of Intent to Prepare EIS / RMPA
2. Conduct Public & Agency Scoping ***WE ARE HERE***
3. Prepare Draft EIS / RMPA
4. Publish Notice of Availability
5. Comment Period Begins
6. Conduct Public Hearing
7. Prepare Final EIS / RMPA
8. Publish Final EIS / RMPA Notice of Availability
9. BLM Protest Period / Governor's Consistency Review
10. Issue Record of Decision (ROD) / RMPA

If you have questions, please contact:

David B. Kessler, AICP
Federal Aviation Administration
Western-Pacific Region, 777 South Aviation Boulevard,
El Segundo, CA, 90245
424-405-7315
Dave.Kessler@faa.gov

Joanie Guerrero
Bureau of Land Management
Las Vegas Field Office, 4701 N Torrey Pines Dr,
Las Vegas, Nevada 89130
702-515-5274
JJGuerrero@blm.gov

FOR MORE INFORMATION, VISIT:
snvairporteis.com

ENVIRONMENTAL IMPACT STATEMENT AND RESOURCE MANAGEMENT PLAN AMENDMENT

Proposed Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada

Environmental Impact Categories

- Aviation Emissions and Air Quality
- Biological Resources (Fish, Wildlife, and Plants)
  - Special Status Species (Flora and Fauna)
  - Threatened and Endangered Species
- Department of Transportation Act, Section 4(f) (parks and other recreation resources)
- Farmlands
- Fuels and Fire Management
- Geology/Mineral Resources
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archeological, and Cultural Resources
- Land Use and Realty
- Natural Resources and Energy Supply
- National Historic Trails
- Noise and Noise-Compatible Land Use
- Recreation
- Socioeconomics and Children's Environmental Health and Safety Risks
- Soils, Vegetation, Non-Native and Noxious Weeds
- Visual effects (including Light Emissions) and Visual Resource Management
- Water Resources (including Wetlands, Floodplains, Surface Waters, and Groundwater)
- Wild Horses and Burros

PROPOSED PROJECT ELEMENTS

- Two parallel runways and supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing and takeoff
- Airspace and flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New Interstate 15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor

Necesidad de la Acción Propuesta

ADMINISTRACIÓN FEDERAL DE AVIACIÓN (FAA, por sus siglas en inglés):

* Asegurar que la acción propuesta proporcione un transporte aéreo seguro y eficiente de conformidad con la Ley Federal de Aviación de 1958 y cumpla con los estándares de diseño de aeropuertos de la FAA, y que cumpla con la Ley Pública (PL, por sus siglas en inglés) 106-362.

OFICINA DE ADMINISTRACIÓN DE TIERRAS (BLM, por sus siglas en inglés):

* Cumplir con la PL 106-362, la PL 107-282 y la PL 113-291, siempre que se cumplan las condiciones establecidas en las PLs, y cumplir con las responsabilidades de la agencia según lo requerido por la Sección 209 de la Ley Federal de Política y Administración de Tierras de 1976, según enmendada (FLPMA, por sus siglas en inglés).
* Evaluar la necesidad de enmendar el Plan de Gestión de Recursos de Las Vegas de 1998 /Registro de Decisión para modificar la clase de la Gestión de Recursos Visuales (VRM, por sus siglas en inglés) para la infraestructura propuesta dentro del Corredor Sur de la Interestatal 15 designado por la PL 107-282.

DEPARTAMENTO DE AVIACIÓN DEL CONDADO CLARK (CCDOA, por sus siglas en inglés) PRELIMINAR:

* Instalaciones insuficientes para acomodar la demanda futura de aviación en el área metropolitana de Las Vegas y cumplir con la PL 106-362.

Proceso de Declaración de Impacto Ambiental (EIS, por sus siglas en inglés) y Enmendación del Plan de Gestión De Recursos (RMPA, por sus siglas en inglés)

1. Publicar aviso de intención de preparar EIS/RMPA
2. Llevar a cabo el alcance público y de agencias
3. Preparar el borrador de EIS/RMPA
4. Publicar aviso de disponibilidad del borrador de EIS/RMPA
5. Comenzar el período de comentarios
6. Llevar a cabo una audiencia pública
7. Completar el EIS/RMPA final
8. Publicar el Aviso de Disponibilidad del EIS/RMPA Final
9. BLM período de protesta/revisión de consistencia del Gobernador
10. Emitir registro de decisión (ROD, por sus siglas en inglés)/RMPA

Comuníquese con el Sr. Kessler o la Sra. Guerrero si tiene alguna pregunta:

David B. Kessler, AICP
Federal Aviation Administration
Western-Pacific Region, 777 South Aviation Boulevard,
El Segundo, CA, 90245
424-405-7315
Dave.Kessler@faa.gov

Joanie Guerrero
Bureau of Land Management
Las Vegas Field Office, 4701 N Torrey Pines Dr,
Las Vegas, Nevada 89130
702-515-5274
JJGuerrero@blm.gov

VISITE EL SITIO WEB PARA OBTENER MÁS INFORMACION:
snvairporteis.com

DECLARACIÓN DE IMPACTO AMBIENTAL Y ENMENDACIÓN DEL PLAN DE GESTIÓN DE RECURSOS

Aeropuerto Suplementario del Sur de Nevada (SNSA, por sus siglas en inglés) Propuesto en el Condado Clark, Nevada

Áreas de Recursos Ambientales

- Emisiones de la aviación y calidad del aire
- Recursos biológicos (peces, vida salvaje y plantas)
  - Especies de estatus especial (Flora y Fauna)
  - Especies amenazadas y en peligro deextinción
- Recursos bajo sección 4(f) de la ley del departamento de transporte (parques y otros recursos recreativos)
- Tierras de cultivo
- Combustibles y gestión de incendios
- Geología/recursos minerales
- Materiales peligrosos, prevención de contaminación, y desechos sólidos
- Recursos históricos, arquitectónicos, arqueológicos, y culturales
- Uso de terreno y los bienes inmuebles
- Recursos naturales y suministro de energía
- Caminos históricos nacionales
- Ruido y uso de terreno compatible con el ruido
- Recreación
- Socioeconomía y riesgos de salud y seguridad ambiental en niños
- Suelos, vegetación y malezas no nativas y nocivas
- Efectos visuales (incluidas las emisiones de luz) y la gestión de recursos visuales
- Recursos hídricos (incluidos humedales, llanuras de inundación, aguas superficiales y aguas subterráneas)
- Caballos y burros salvajes

ELEMENTOS DEL PROYECTO PROPUESTO

- Dos pistas paralelas y sistema de calles de rodaje de apoyo
- Torre de Control del Tráfico Aeroportuario
- Ayudas a la navegación de aeronaves para aterrizaje y despegue
- Cambios en el espacio aéreo y en los procedimientos de vuelo
- Radar(es) de vigilancia aeroportuaria primarios y suplementarios; y el sitio de radar suplementario de Vigilancia Dependiente Automática (ADS-B, por sussiglas en inglés)
- Terminal central con instalaciones del Servicio Federal de Inspección (FIS, por sus siglas en inglés)
- Nuevo intercambio de la Interestatal 15 y mejoras al intercambio existente en Jean
- Instalaciones de apoyo
- Estacionamiento para el público, empleados y dealquiler de automóviles
- Servicio publico
- Instalaciones de drenaje/mitigación de inundaciones
- Desarrollo no aeronáutico
- Corredor de transporte y servicios públicos

WELCOME TO THE

PUBLIC SCOPING MEETING

Proposed Southern Nevada Supplemental Airport
Environmental Impact Statement (EIS) and
Resource Management Plan Amendment (RMPA)
in Clark County, Nevada

Roles and Responsibilities

FEDERAL AVIATION ADMINISTRATION (FAA) & BUREAU OF LAND MANAGEMENT (BLM)

- Joint Lead Agencies (JLA) for preparation of the EIS/RMPA
- FAA is lead agency for the preparation of the required evaluation per the National Environmental Policy Act (NEPA)
- Coordinate with and seek comments/concurrence from federal, state, and local agencies and Tribal nations
- Ensure compliance with the NEPA, the Federal Land Policy and Management Act (FLPMA), and other special purpose laws
- Evaluate the Proposed Project and Reasonable Alternatives including No Action
- BLM to evaluate the need for a Resource Management Plan Amendment (RMPA) to modify the Visual Resource Management (VRM) class in order for the BLM to evaluate the established Ivanpah Transportation and Utilities Corridor (Public Law 107-282), as this will require amending the existing 1998 Las Vegas Resource Management Plan
- Prepare and issue a Record of Decision (ROD)

Roles and Responsibilities

CONSULTANT TEAM

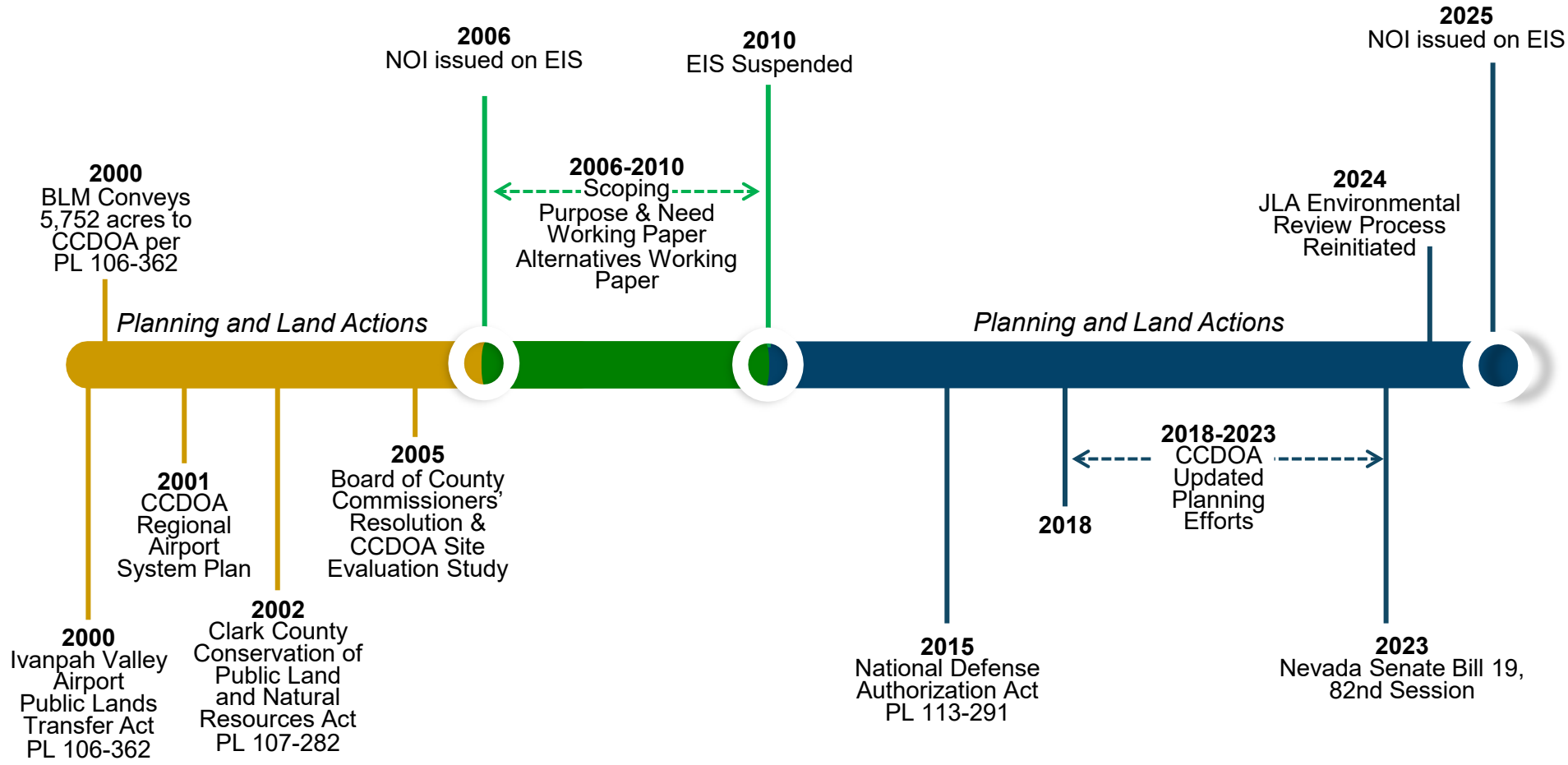
- Reports to JLA
- Under the supervision of the JLA, conducts the environmental impact analysis and supports JLA's coordination with federal, state, and local agencies
- Assists the JLA with preparing the EIS/RMPA documentation
- Assist the JLA to plan and conduct public outreach
- Provides subject matter experts that conduct associated field work

Roles and Responsibilities

CLARK COUNTY DEPARTMENT OF AVIATION (CCDOA)

- CCDOA is the Sponsor for the proposed SNSA
- Owner and operator of Harry Reid International Airport (LAS), North Las Vegas Airport (VGT), Henderson Airport (HND), Jean Sport Aviation Center (0L7), and Overton Perkins Field (U08)
- Provide supporting planning, design, and other information to inform the EIS/RMPA
- Is a Participating Agency with the JLA in preparing the EIS/RMPA

Project Background and Overview



Clark County (Sponsor) Preliminary Purpose and Need

PURPOSE:

- To accommodate future aviation demand in the Las Vegas metropolitan area, while meeting FAA airport design standards, protect airspace from obstacle encroachment, and provide for safe and efficient flight procedures.

NEED:

- Insufficient facilities to accommodate future aviation demand in the Las Vegas metropolitan area and comply with Public Law 106-362.

FAA Purpose and Need

PURPOSE:

- To fulfill FAA's statutory mission to ensure the safe and efficient use of navigable airspace in the United States as set forth under 49 U.S.C. § 47101 (a)(1).

NEED:

- Ensure that the proposed SNSA provides for safe and efficient air transportation pursuant to the Federal Aviation Act of 1958 and meets FAA airport design standards, and to comply with Public Law 106-362.

BLM Purpose and Need

PURPOSE:

- To convey the identified federal lands to facilitate the development of the SNSA.

NEED:

- Comply with Public Law 106-362, Public Law 107-282, and Public Law 113-291, provided conditions set forth in the Public Laws are met, and to meet agency responsibilities as required by Section 209 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA).
- Evaluate the need to amend the 1998 Las Vegas Resource Management Plan/Record of Decision to modify the Visual Resource Management (VRM) class for proposed infrastructure within the Interstate 15 South Corridor designated per Public Law 107-282.

Cooperating Agencies' Purpose and Need

FEDERAL HIGHWAY ADMINISTRATION (FHWA)

PURPOSE:

- To fulfill the FHWA's statutory mission to ensuring that America's roads and highways continue to be among the safest and most technologically sound in the world as set forth under 23 U.S.C. § 111.

NEED:

- Ensure that the proposed new interchange and modifications to an existing interchange on Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport meet FHWA Standards and comply with Title 23, Code of Federal Regulations – *Highways.*

Cooperating Agencies' Purpose and Need

NEVADA DEPARTMENT OF TRANSPORTATION (NDOT)

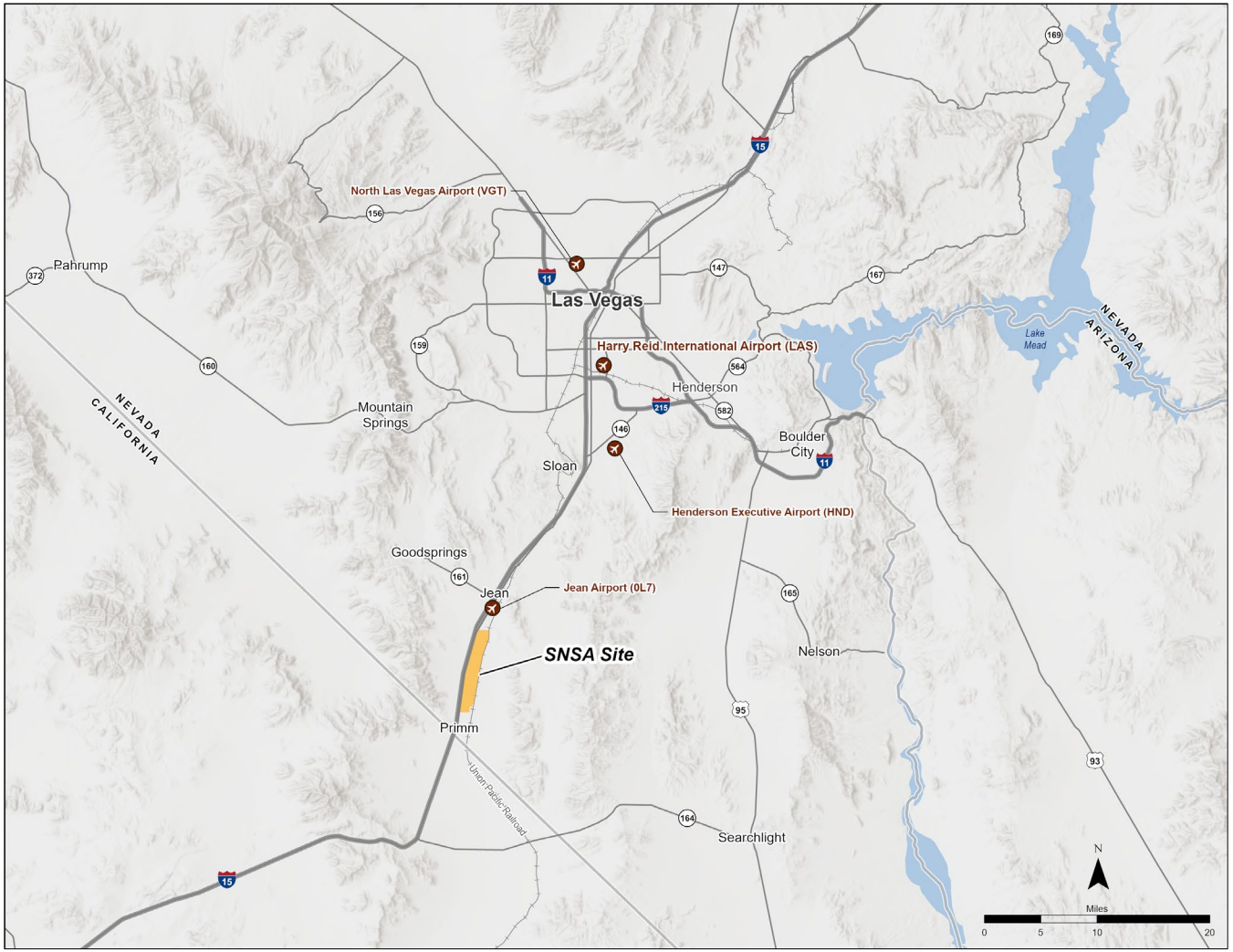
PURPOSE:

* Provide, operate, and preserve a reliable and sustainable transportation system in the State of Nevada that enhances safety, quality of life, and economic development through innovation and collaboration.

NEED:

* Ensure the new airport, any proposed new interchange(s), modifications to an existing interchange(s), and potential modifications to Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport are in accordance with Nevada Revised Statutes (NRS) 408.210 and 408.423 and Nevada Administrative Code (NAC) 408.403 through 408.557.

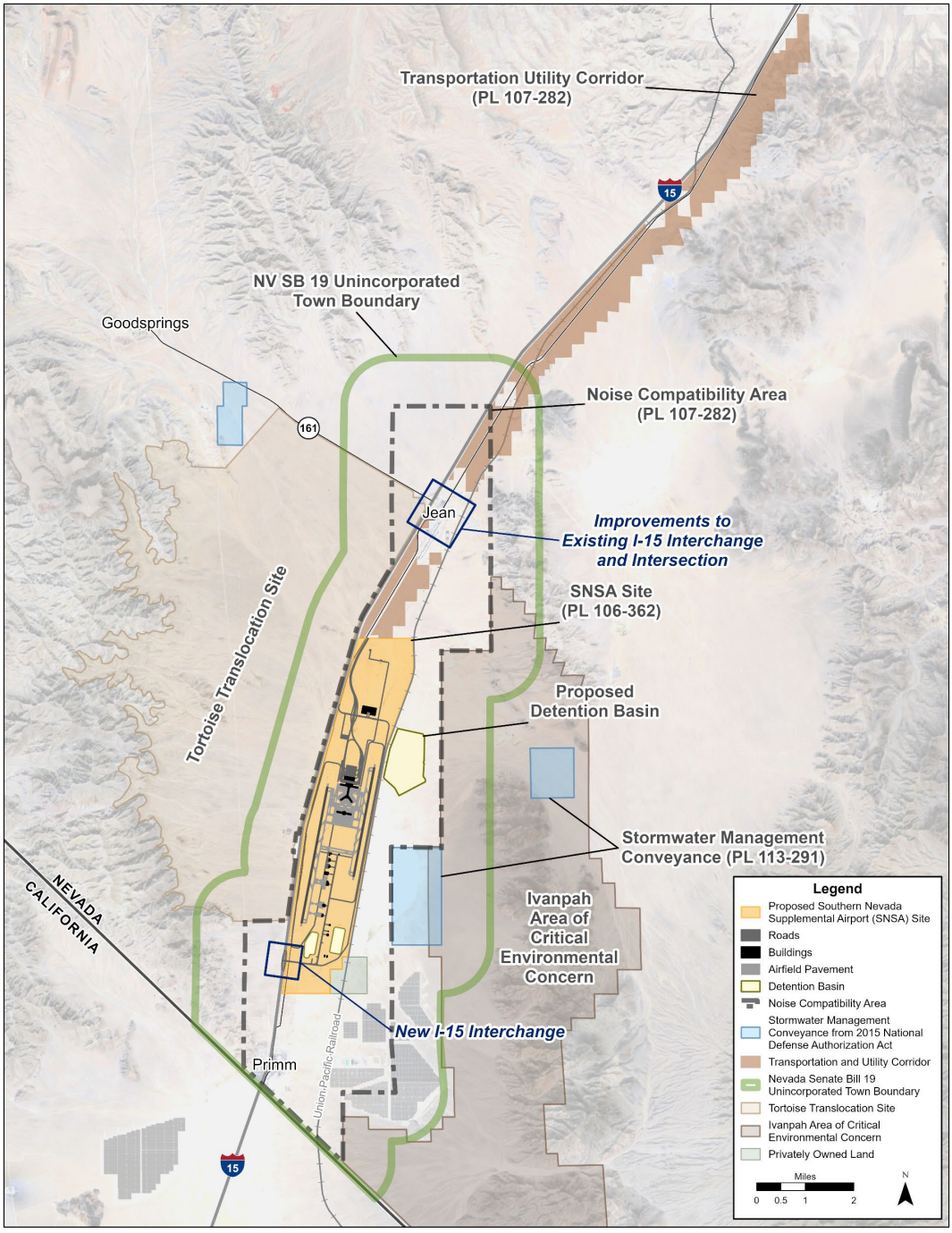
Project Location



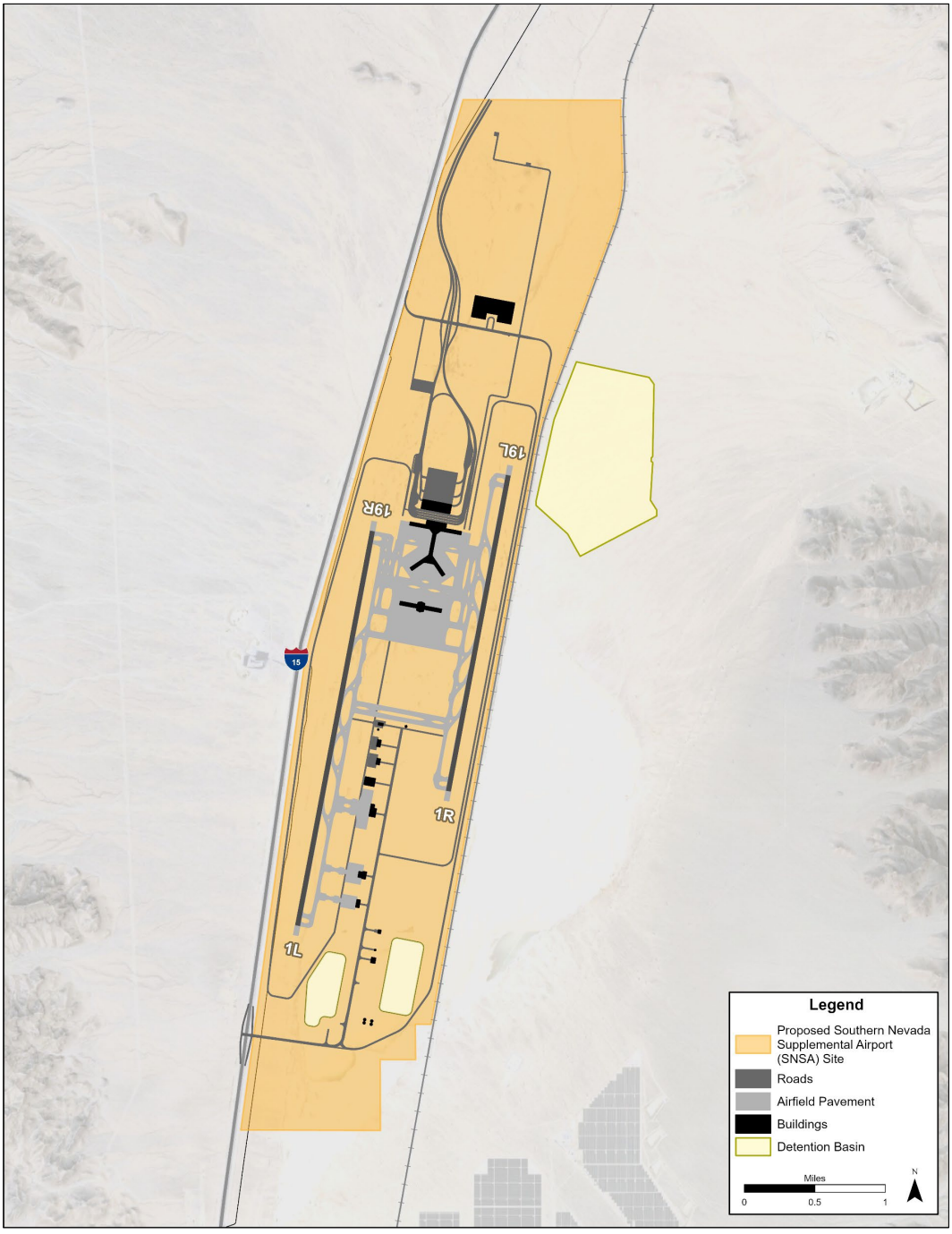
Sponsor's Proposed Project

- Two parallel runways & supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing & takeoff
- Airspace & flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New I-15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor

Sponsor's Proposed Project



Sponsor's Proposed Project



Consideration of Alternatives

No Action

Other Modes of Transportation
- Use of Automobile
- Use of Intercity Bus and Passenger Rail Service
- Use of High-Speed Ground Transportation Service

Air Traffic Demand Management Strategies
- Market-based approaches
- Administrative approaches
- Voluntary flight reductions

Environmental Impact Categories

- Aviation Emissions and Air Quality
- Biological Resources (Including Fish, Wildlife & Plants)
  - Special Status Species (Flora and Fauna)
  - Threatened and Endangered Species
- Department of Transportation Act, Section 4(f) (parks and other recreation resources)
- Farmlands
- Fuels and Fire Management
- Geology/Mineral Resources
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archeological, and Cultural Resources
- Land Use and Realty
- Natural Resources and Energy Supply
- National Historic Trails
- Noise and Noise-Compatible Land Use
- Recreation
- Socioeconomics and Children's Environmental Health and Safety Risks
- Soils, Vegetation, Non-Native and Noxious Weeds
- Visual Effects (including Light Emissions) and Visual Resource Management
- Water Resources (including Wetlands, Floodplains, Surface Waters, and Groundwater)
- Wild Horses and Burros

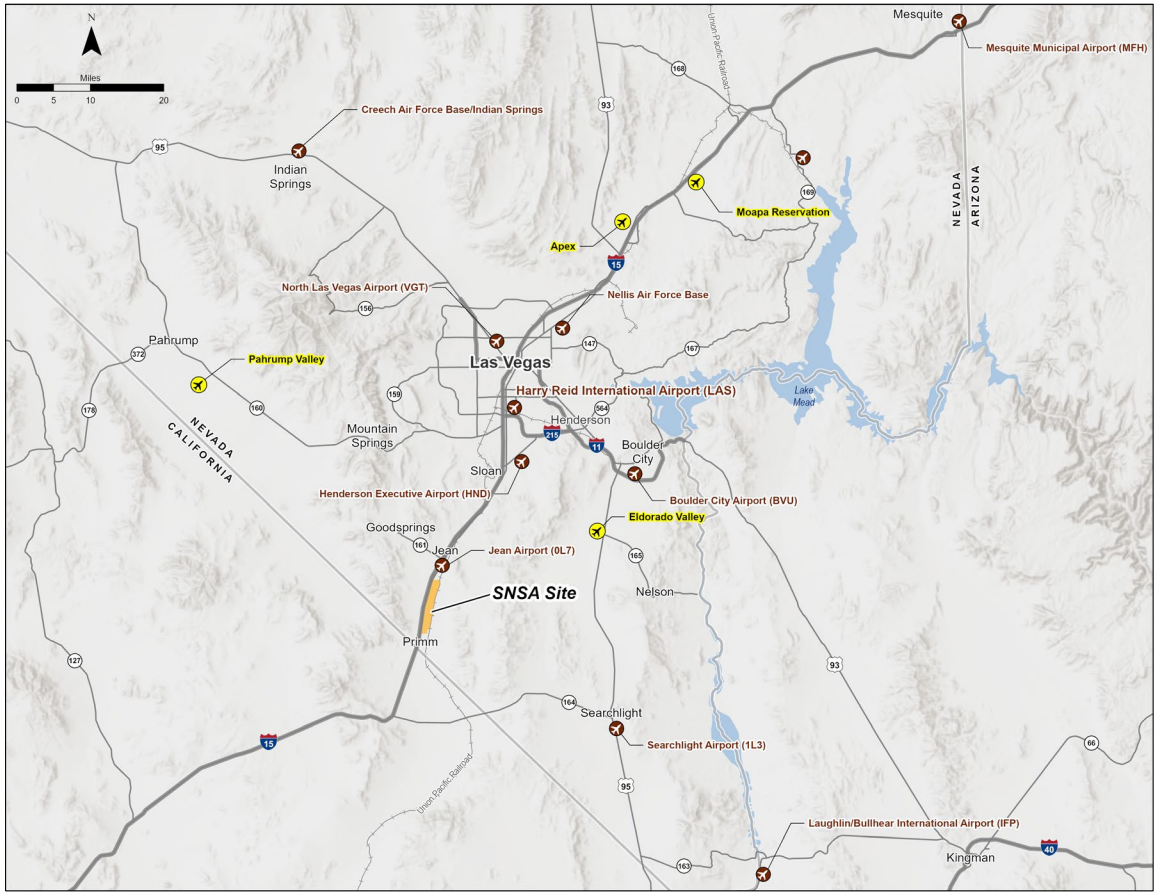
Consideration of Alternatives

Enhancement of Existing Airports including the Use of Advanced Technologies

- Use of Advanced Technologies
- Harry Reid International Airport
- Nellis Air Force Base
- Creech Air Force Base/Indian Springs
- Mesquite Municipal Airport
- North Las Vegas Airport
- Henderson Executive Airport
- Jean Airport
- Overton Municipal Airport
- Searchlight Airport
- Boulder City Airport
- Laughlin/Bullhead International Airport

New Airport

- Pahrump Valley
- Moapa Reservation
- Eldorado Valley
- Apex
- Proposed Site



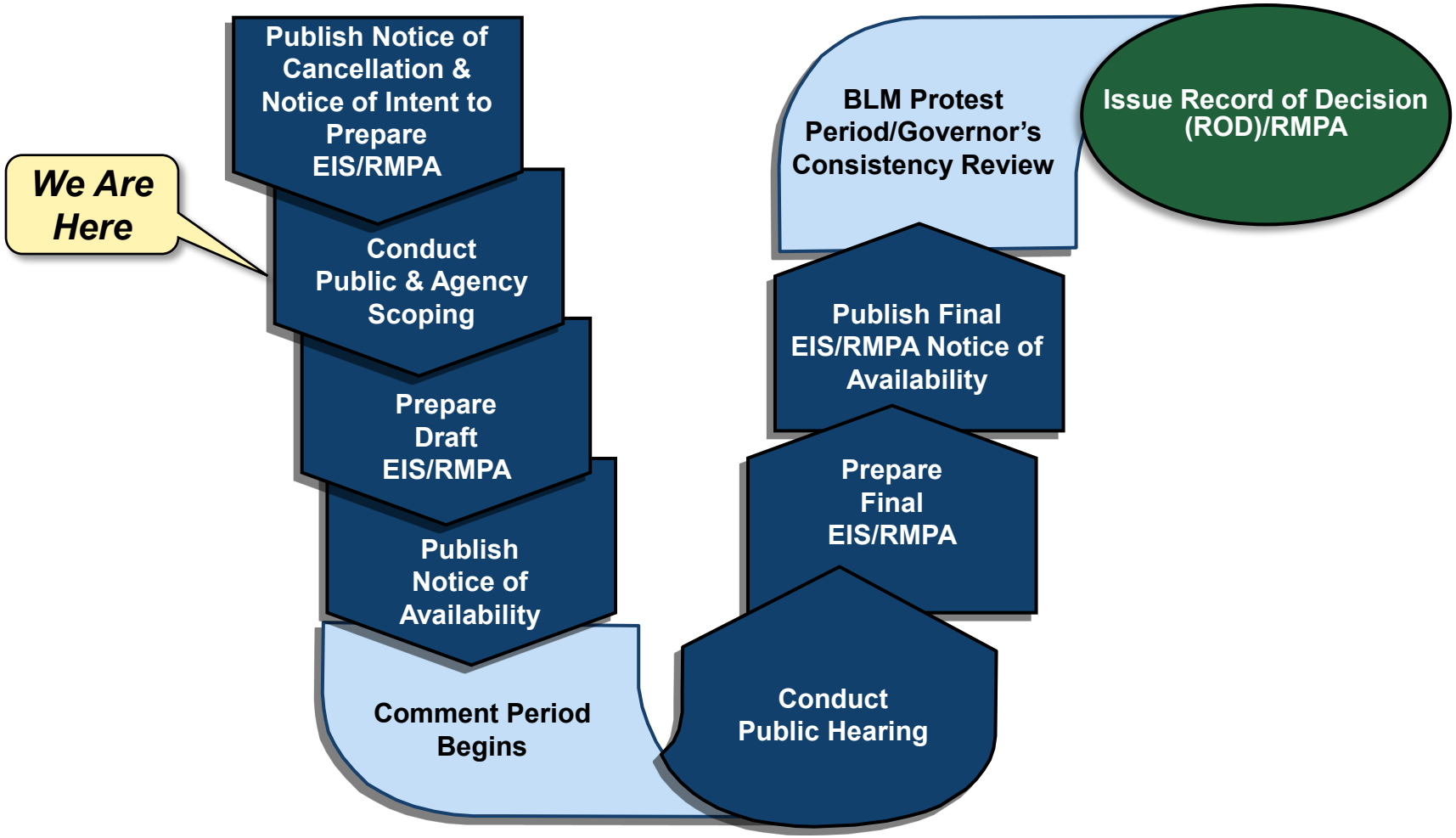
BLM Planning Criteria

Criteria 1: Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies.

Criteria 2: Existing valid Las Vegas Resource Management Plan decisions will not change, and any new plan decisions will not conflict with existing valid plan decisions.

Criteria 3: Any resource management plan amendments will recognize valid existing rights.

EIS/RMPA Process



How to Comment

Please Submit Your Comments by September 5, 2025 Using One of These Methods:

IN PERSON TODAY:

Members of the public may submit their comments in one of the following methods:

- Verbally with the court reporter
- Comment forms at the comment boxes
- Comment forms via U.S. Postal Service

EMAIL:

SNSAEIS@landrumbrown.com

MAIL:

SNSA EIS / RMPA
Landrum & Brown, Inc
4445 Lake Forest Dr. Suite 700
Cincinnati, OH 45242

All Comments Must be Submitted or Postmarked by September 5, 2025

COMMENT FORM

Public Scoping Meeting

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for the preparation of an EIS/RMPA for the Proposed SNSA. The purpose of this comment form is to receive your input on issues and concerns you would like to see addressed in the EIS/RMPA. Please use this form to submit written comments by topic. If you have multiple comments, you may include them on this form and/or provide additional pages. Either place the form in the comment box at tonight's meeting, or mail to the address below not later than 5:00 p.m. Pacific Daylight Time **September 5, 2025**. You can also submit your comments via email to SNSAEIS@landrumbrown.com by 5:00 p.m. Pacific Daylight Time **September 5, 2025.**

Before including your name, address, telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

TOPIC: _____

COMMENT: _____

Contact Information (Optional):

_____
NAME / AFFILIATION

_____
EMAIL

_____
ADDRESS

Would you like to be added to the email distribution list? ☐ YES ☐ NO

_____
CITY

Additional page included? ☐ YES ☐ NO

_____ _____
STATE ZIP CODE

Fold Here

Place
Stamp
Here

SNSA EIS/RMPA
Landrum & Brown, Inc
4445 Lake Forest Dr, Suite 700
Cincinnati, OH 45242

Fold Here

Attachment C Agency Scoping Meeting

Agency Scoping Meeting Notifications, distributed June 26, 2025

Agency Scoping Meeting Materials, meeting held July 29, 2025

TABLE C-1 AGENCY CONTACT DATABASE

Agency Name	Contact Name	Title	Email
Clark County Department of Aviation (CCDOA)	John Wagner	Airport Program Administrator - SNSA	johnw@lasairport.com
Clark County Department of Environment and Sustainability (CCDES)	Marci Henson	Director, Department of Environment and Sustainability	mhenson@clarkcountynv.gov
Federal Highway Administration (FHWA)	Jacob Waclaw	Team Leader, Senior Transportation Engineer Dist 3	jacob.waclaw@dot.gov
Federal Highway Administration (FHWA)	Ed Woolford	Realty & Environmental Program Manager	edward.woolford@dot.gov
Federal Highway Administration (FHWA)	Ammon Heier	Senior Transportation Engineer, Dist 1 (ADL) - AZ	ammon.heier@dot.gov
National Park Service – Mojave National Preserve	Jodi Bailey		Jodi_Bailey@nps.gov
National Park Service (NPS)	David Szymanski	Regional Director	David_Szymanski@nps.gov
Nevada Department of Environmental Protection (NDEP)	Mandy Hood	Main Office	mhood@ndep.nv.gov
Nevada Department of Transportation (NDOT)	My-Linh Nguyen	Chief, Environmental Division	mnguyen@dot.nv.gov
Nevada Department of Transportation (NDOT)	Chris Young	Chief, Environmental Services Program	cyoung@dot.nv.gov
Nevada Department of Transportation (NDOT)	Mary Taitano	Environmental Services Manager	mtaitano@dot.nv.gov
Nevada Department of Wildlife (NDOW)	Alan Jenne	Director	ajenne@ndow.org
Nevada Division of Forestry (NDF)	Kacey KC	State Forester	kaceykc@forestry.nv.gov
Nevada State Historic Preservation Office (SHPO)	Robin K. Reed	Deputy State Historic Preservation Officer	rreed@shpo.nv.gov
Regional Transportation Commission of Southern Nevada (RTC)	M.J. Maynard-Carey	CEO	maynardm@rtcsnv.com
U.S. Environmental Protection Agency (USEPA)	Josh F.W. Cook	Regional Administrator, EPA Region 9	cook.josh@epa.gov
U.S. Fish and Wildlife Service (USFWS)	Paul Souza	Regional Director, Pacific Southwest Region	Paul_Souza@fws.gov
U.S. Fish and Wildlife Service (USFWS)	Brian Croft	Palm Springs and Southern Nevada Offices, Field Supervisor	brian_croft@fws.gov
U.S. Forest Service (USFS)	Cheva Gabor	Nevada State Liaison	cheva.gabor@usda.gov
Nevada Division of Natural Heritage (NDNH)	Jamey McClinton	Administrator, Department of Conservation and Natural Resources	jmcclinton@heritage.nv.gov
Clark County Regional Flood Control District (CCRFCD)	Andrew R. Trelease, P.E., CFM	General Manager/ Chief Engineer	atrelease@regionalflood.org

Source: Landrum & Brown, 2025.

From: Kessler, Dave (FAA)
Sent: Thursday, June 26, 2025 2:39 PM
To: jmcclinton@heritage.nv.gov; johnw@lasairport.com; maynardm@rtcsnv.com; mnguyen@dot.nv.gov; cyoung@dot.nv.gov; rreed@shpo.nv.gov; ajenne@ndow.org; mhenson@clarkcountynv.gov; mtaitano@dot.nv.gov; atrelease@regionalflood.org; mhood@ndep.nv.gov; cheva.gabor@usda.gov; brian_croft@fws.gov; Woolford, Edward (FHWA) <Edward.Woolford@dot.gov>; cook.josh@epa.gov; David_Szymanski@nps.gov; Paul_Souza@fws.gov; Heier, Ammon (FHWA) <ammon.heier@dot.gov>; kaceykc@forestry.nv.gov; ray_mcpadden@nps.gov; Waclaw, Jacob (FHWA) <Jacob.Waclaw@dot.gov>
Cc: Wolfers-Lawrence, Jean (FAA) <jean.wolfers-lawrence@faa.gov>; Aunger, Jonathan P (FAA) <Jonathan.P.Aunger@faa.gov>; Duffy, Kent (FAA) <Kent.Duffy@faa.gov>; Hines, Michael (FAA) <Michael.Hines@faa.gov>; Lawrance, Michael (FAA) <Michael.Lawrance@faa.gov>; Carlson, James J (FAA) <James.J.Carlson@faa.gov>; Orendorff, Gail (FAA) <Gail.Orendorff@faa.gov>; Guerrero, Joanie J <jjguerrero@blm.gov>; Cepero Rios, Colleen <cceperorios@blm.gov>; Leslie, Stephen O <sleslie@blm.gov>; Garcia, Faviola (FAA) <Faviola.Garcia@faa.gov>; Wong, Gordon (FAA) <Gordon.Wong@faa.gov>; Fowler, Kimberly (FAA) <kimberly.fowler@faa.gov>; Sarah Potter <sarah.potter@landrumbrown.com>; Rob Adams <rob.adams@landrumbrown.com>; Gaby Elizondo <gaby.elizondo@landrumbrown.com>
Subject: Southern Nevada Supplemental Airport EIS/RMPA - Agency Scoping

Good afternoon – this email is a follow up to one I sent you on May 16, 2025. As I mentioned before, the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport (SNSA).

As noted in the attached letter, the JLA is holding **virtual** Governmental Agency Scoping meeting on **Tuesday, July 29, 2025** from 1:00 p.m. to 3:00 p.m. Pacific Daylight Time. The link to the virtual meeting is in the attached letter.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region Voice: 424-405-7315
email: dave.kessler@faa.gov

Mailing address:
Federal Aviation Administration Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

As you have been previously notified, the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for preparation of an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for Clark County, Nevada's proposed Southern Nevada Supplemental Airport (SNSA). The JLA has invited the Federal Highway Administration (FHWA) and Nevada Department of Transportation (NDOT) to be cooperating agencies. Both agencies have accepted the invitation, The following agencies are invited to be *participating* agencies in the preparation of the EIS/RMPA.

- National Park Service (NPS)
- U.S. Environmental Protection Agency (US EPA)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Forest Service (USFS)
- Nevada Department of Wildlife (NDOW)
- Nevada Department of Environmental Protection (NDEP)
- Nevada Division of Forestry (NDF)
- Nevada State Historic Preservation Officer (SHPO)
- Nevada Division of Natural Heritage (NDNH)
- Regional Transportation Commission of Southern Nevada (RTC)
- Clark County Department of Environment and Sustainability (CCDES)
- Clark County Regional Flood Control District (CCRFCD)
- Clark County Department of Aviation (CCDOA)

The JLA is conducting a Virtual Agency Scoping Meeting for this EIS/RMPA process from 1:00 p.m. to 3:00 p.m. on Tuesday, July 29, 2025. At this meeting the JLA will present an overview of the project, description of roles and responsibilities, a summary of the EIS process, and the anticipated schedule for completion of the EIS. The meeting will be held virtually via Zoom Teleconference at the following link:

https://us02web.zoom.us/j/86710418812
or dial +1 346 248 7799 and use Meeting ID: 867 1041 8812.

The JLA appreciates your assistance in forwarding copies of this information to the appropriate staff within your organization. Please contact me if you have any questions at 424-405-7315 or at dave.kessler@faa.gov

David B. Kessler, M.A., AICP
Regional Environmental Protection Specialist
Federal Aviation Administration

July 29, 2025

Agency Scoping Meeting

Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)

Federal Aviation Administration

Bureau of Land Management

Thank you for joining us this afternoon! The meeting will begin at 1:03 p.m. PST

✓ Please mute yourself during the presentation to avoid echo and feedback. If you joined the meeting via phone, you can dial *6 to mute/unmute your line.

✓ You may submit questions into the chat box throughout the presentation. We will answer these at the end.

✓ This presentation will be automatically recorded.

About the Presenter

David B. Kessler, AICP

Project Manager, SNSA EIS

Federal Aviation Administration

About the Presenter

Joanie Guerrero

Realty Specialist

Bureau of Land Management

Agenda

- Introductions
- Roles and Responsibilities
- Proposed Project Background & Overview
- Environmental Resource Categories
- Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA) Process & Schedule

Roles and Responsibilities

Roles and Responsibilities

Federal Aviation Administration (FAA) & Bureau of Land Management (BLM)

- Joint Lead Agencies (JLA) for preparation of the EIS/RMPA
- FAA is lead agency for the preparation of the required evaluation per the National Environmental Policy Act (NEPA)
- Coordinate with and seek comments/concurrence from federal, state, and local agencies and Tribal nations
- Ensure compliance with the NEPA, the Federal Land Policy and Management Act (FLPMA), and other special purpose laws
- Evaluate the Proposed Project and Reasonable Alternatives including No Action

Roles and Responsibilities

Federal Aviation Administration (FAA) & Bureau of Land Management (BLM) ***(Continued)***

- BLM to evaluate the need for a Resource Management Plan Amendment (RMPA) to modify the Visual Resource Management (VRM) class in order for the BLM to evaluate the established Ivanpah Transportation and Utilities Corridor (Public Law 107-282), as this will require amending the existing 1998 Las Vegas Resource Management Plan
- Prepare and issue a Record of Decision (ROD)

Roles and Responsibilities

Cooperating Agencies

- FAA Reauthorization Act of 2024 (Public Law 118-63) states that *"[a] Federal agency required to make an approval or take an action for a project"* must be treated as a **cooperating agency**.

  The proposed SNSA project includes modifications to an existing interchange and construction of a new interchange on Interstate Highway 15 (I-15)

- Therefore, the cooperating agencies for this EIS/RMPA are:
  - Federal Highway Administration (FHWA)
  - Nevada Department of Transportation (NDOT)

Roles and Responsibilities

Consultant Team

- Reports to JLA
- Under the supervision of the JLA, conducts the environmental impact analysis and supports JLA's coordination with federal, state, and local agencies
- Assists the JLA with preparing the EIS/RMPA documentation
- Assist the JLA to plan and conduct public outreach
- Provides subject matter experts that conduct associated field work

Roles and Responsibilities

Clark County Department of Aviation (CCDOA)

- CCDOA is the Sponsor for the proposed SNSA
- Owner and operator of Harry Reid International Airport (LAS), North Las Vegas Airport (VGT), Henderson Airport (HND), Jean Airport (0L7), and Overton Perkins Field (U08)
- Provide supporting planning, design, and other information to inform the EIS/RMPA
- Is a Participating Agency with the JLA in preparing the EIS/RMPA

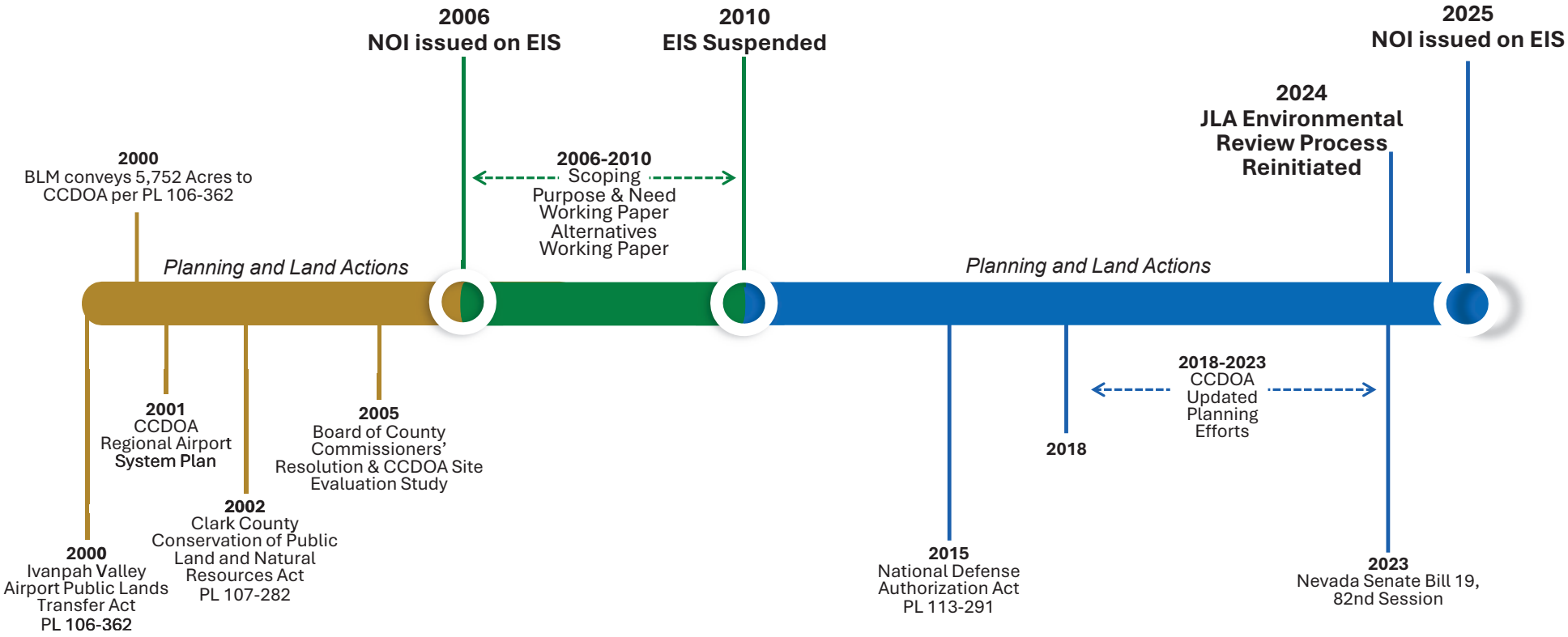
Roles and Responsibilities

Participating Agencies

- National Park Service (NPS)
- U.S. Environmental Protection Agency (US EPA)
- U.S. Fish and Wildlife Service (USFWS)
- Nevada Department of Wildlife (NDOW)
- Nevada Department of Environmental Protection (NDEP)
- Nevada Division of Forestry (NDF)
- Nevada State Historic Preservation Officer (SHPO)
- Nevada Division of Natural Heritage (NDNH)
- Regional Transportation Commission of Southern Nevada (RTC)
- Clark County Department of Environment and Sustainability (CCDES)
- Clark County Regional Flood Control District (CCRFCD)
- Clark County Department of Aviation (CCDOA)

Project Background & Overview

Proposed Project Background & Overview



Clark County Department of Aviation Preliminary Purpose and Need

- **Purpose:** To accommodate future aviation demand in the Las Vegas metropolitan area, while meeting FAA airport design standards, protect airspace from obstacle encroachment, and provide for safe and efficient flight procedures.
- **Need:** Insufficient facilities to accommodate future aviation demand in the Las Vegas metropolitan area and comply with Public Law 106-362.

FAA Purpose and Need

- **Purpose:** To fulfill FAA's statutory mission to ensure the safe and efficient use of navigable airspace in the United States as set forth under 49 U.S.C. § 47101 (a)(1).
- **Need:** Ensure that the proposed SNSA provides for safe and efficient air transportation pursuant to the Federal Aviation Act of 1958 and meets FAA airport design standards, and to comply with Public Law 106-362.

BLM Purpose and Need

- **Purpose:** To convey the identified federal lands to facilitate the development of the SNSA.
- **Need:**
  - Comply with Public Law 106-362, Public Law 107-282, and Public Law 113-291, provided conditions set forth in the Public Laws are met, and to meet agency responsibilities as required by Section 209 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA).
  - Evaluate the need to amend the 1998 Las Vegas Resource Management Plan/ Record of Decision to modify the Visual Resource Management (VRM) class for proposed infrastructure within the Interstate 15 South Corridor designated per Public Law 107-282.

FHWA/NDOT Purpose and Need

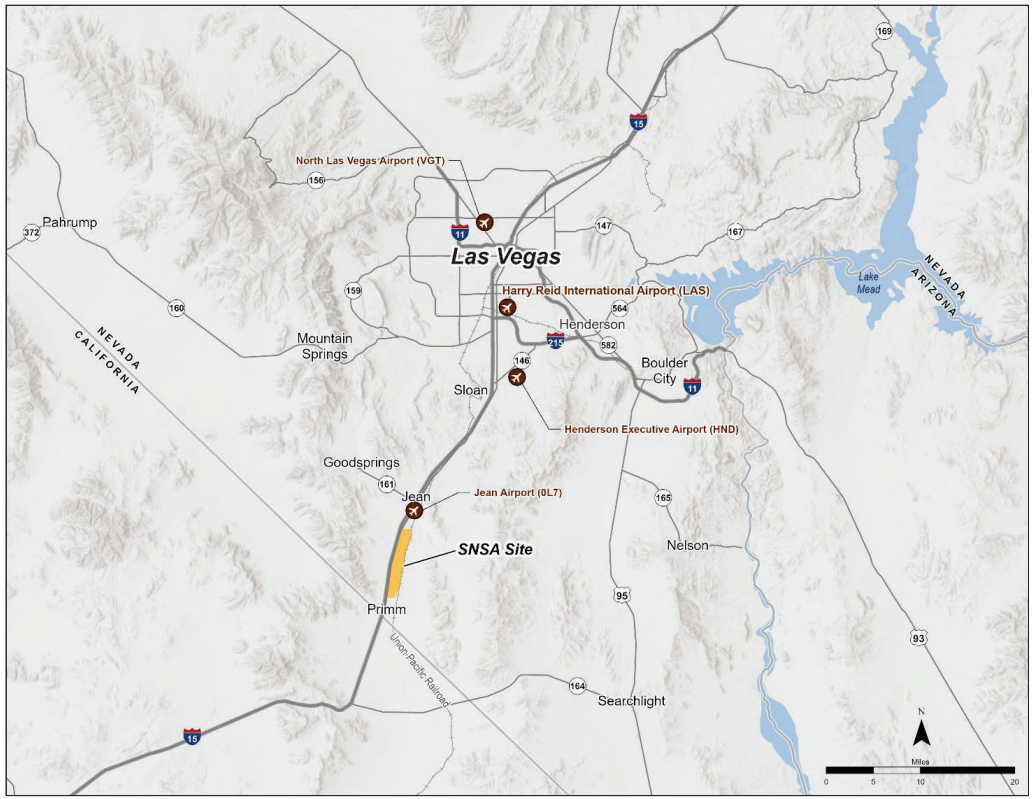
- **FHWA Purpose:** To fulfill the FHWA's statutory mission to ensuring that America's roads and highways continue to be among the safest and most technologically sound in the world as set forth under 23 U.S.C. § 111.
- **FHWA Need:** Ensure that the proposed new interchange and modifications to an existing interchange on Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport meet FHWA Standards and comply with Title 23, Code of Federal Regulations – *Highways*.
- **NDOT Purpose:** Provide, operate, and preserve a reliable and sustainable transportation system in the State of Nevada that enhances safety, quality of life and economic development through innovation and collaboration.
- **NDOT Need:** Ensure the new airport, any proposed new interchange(s), modifications to an existing interchange(s), and potential modifications to Interstate Highway 15 associated with the proposed Southern Nevada Supplemental Airport are in accordance with Nevada Revised Statutes (NRS) 408.210 and 408.423 and Nevada Administrative Code (NAC) 408.403 through 408.557.

Range of Alternatives

- No Action
- Other Modes of Transportation
- Air Traffic Demand Management Strategies
- Enhancement of Existing Airports including the use of Advanced Technologies
- New Airport

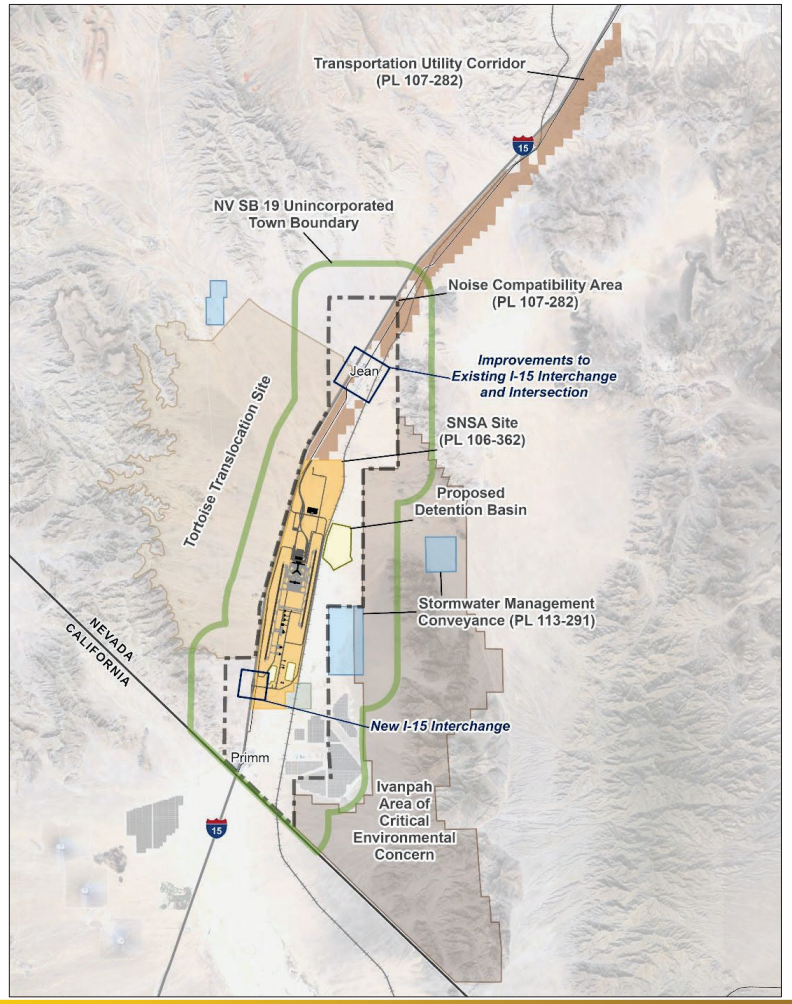
Proposed Project - SNSA

- New ***supplemental*** commercial airport.
- Located ~35 miles southwest of downtown Las Vegas, along I-15.
- Located ~6 miles south of Jean and ~5 miles north of Primm.
- 5,752 acres conveyed by BLM to CCDOA (commonly referred to as the “6,000 acre parcel”)



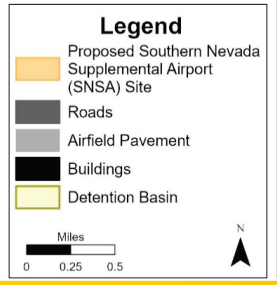
Proposed Project - SNSA

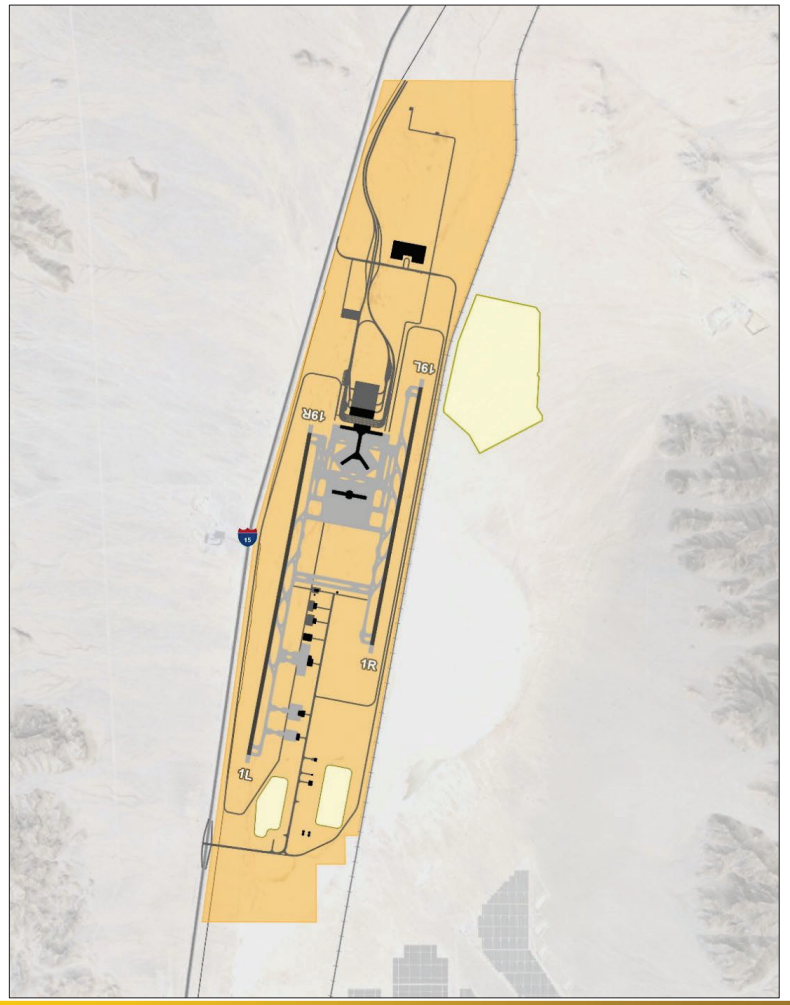
- Two parallel runways & supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing & takeoff
- Airspace & flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New I-15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor



Proposed Project - SNSA

- Two parallel runways & supporting taxiway system
- Airport Traffic Control Tower
- Aircraft navigational aids for landing & takeoff
- Airspace & flight procedure changes
- Airport surveillance radar(s) primary and supplemental; and Automatic Dependent Surveillance-Broadcast (ADS-B)
- Central terminal with Federal Inspection Service (FIS) facility
- New I-15 interchanges and improvements to existing interchange at Jean
- Support facilities
- Public, employee, and rental car parking
- Utilities
- Drainage/flood mitigation facilities
- Non-aeronautical development
- Transportation and utilities corridor





Environmental Resource Categories

Environmental Resource Categories for the EIS/RMPA

- Aviation Emissions and Air Quality
- Biological resources (including fish, wildlife & plants)
  - Special Status Species (Flora and Fauna)
  - Threatened and Endangered Species
- Department of Transportation Act, Section 4(f) (parks and other recreation resources)
- Farmlands
- Fuels and fire management
- Geology/mineral resources
- Hazardous materials, solid waste, and pollution prevention
- Historical, architectural, archaeological, and cultural resources
- Land use and realty
- Natural resources and energy supply
- National Historic Trails
- Noise and noise-compatible land use
- Recreation
- Socioeconomics and Children's environmental health and safety risks
- Soils, vegetation, non-native and noxious weeds
- Visual effects (including light emissions) and visual resource management
- Water resources (including wetlands, floodplains, surface waters, and groundwater)
- Wild horses and burros

EIS/RMPA Process & Schedule

RMPA Process

- A land use plan or resource management plan provides a framework for the BLM management of public lands.
- A land use plan amendment also known as Resource Management Plan Amendment (RMPA) is identified when there is “a need to modify management or accommodate a project that may result in a change in the scope of resource uses or a change in the terms, conditions, and decisions of the approved plan”. These changes may be to a specific resource area. (H-1601-1)
- BLM manages public lands under principles of multiple-use and sustained yield as mandated by the Federal Land Policy and Management Act (FLPMA).
- Uses a systematic interdisciplinary approach to integrate physical, biological, economic, and other sciences.

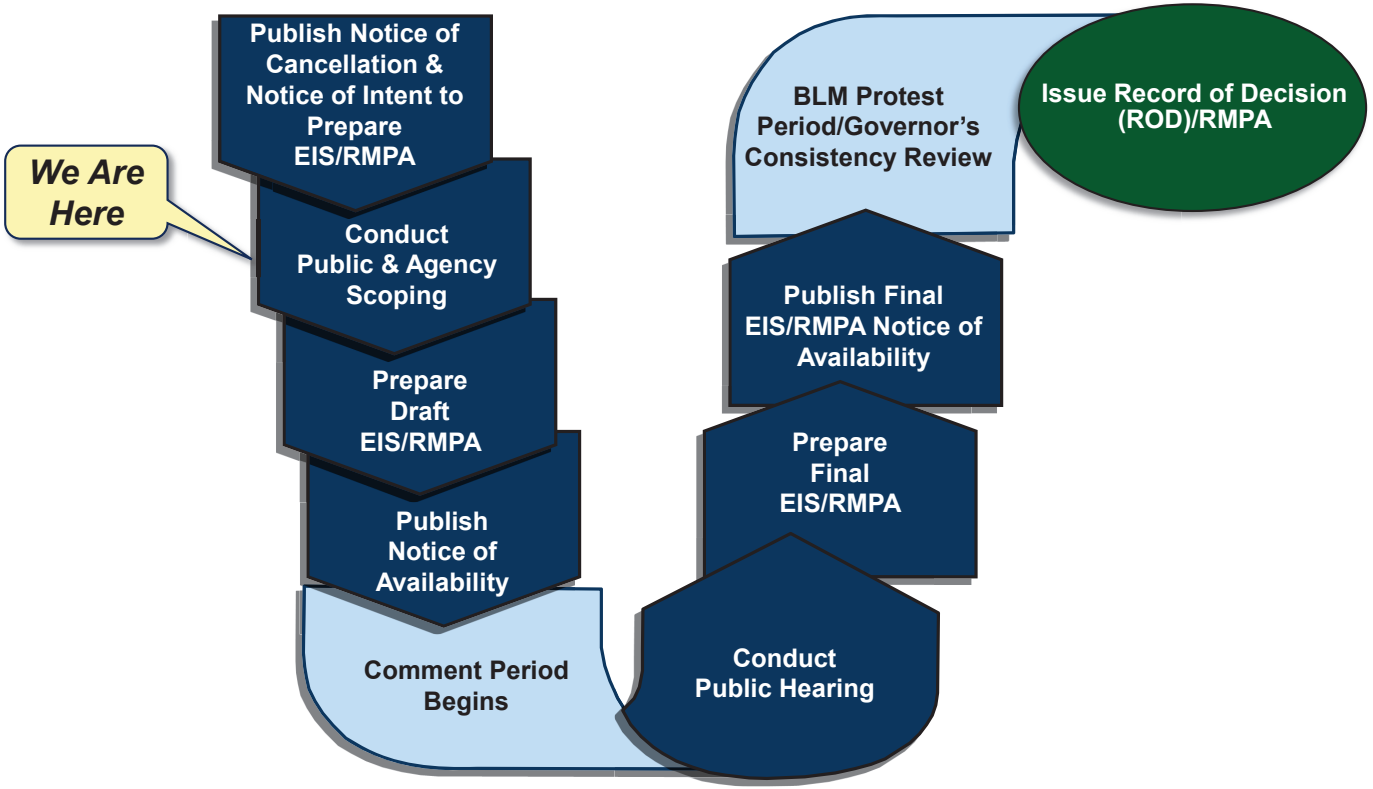
RMPA Process *(Cont'd)*

- Provides for meaningful involvement and is prepared with involvement of Federal, State, County, Local and Tribal governments.
- Prepared in compliance with National Environmental Policy Act (NEPA) requirements.
- Provides opportunities for meaningful public participation in the land use planning process, including but not limited to planning criteria development and review, advance notice of public meetings, comment periods and protest of planning decisions. Submission of the proposed RMPA for Governor's consistency review and appeal to the governor of the state(s) involved and must identify any relevant known inconsistencies with the officially approved and adopted plans of state and local governments.
- An RMPA is approved when a Record of Decision (ROD) is signed to adopt the RMPA.

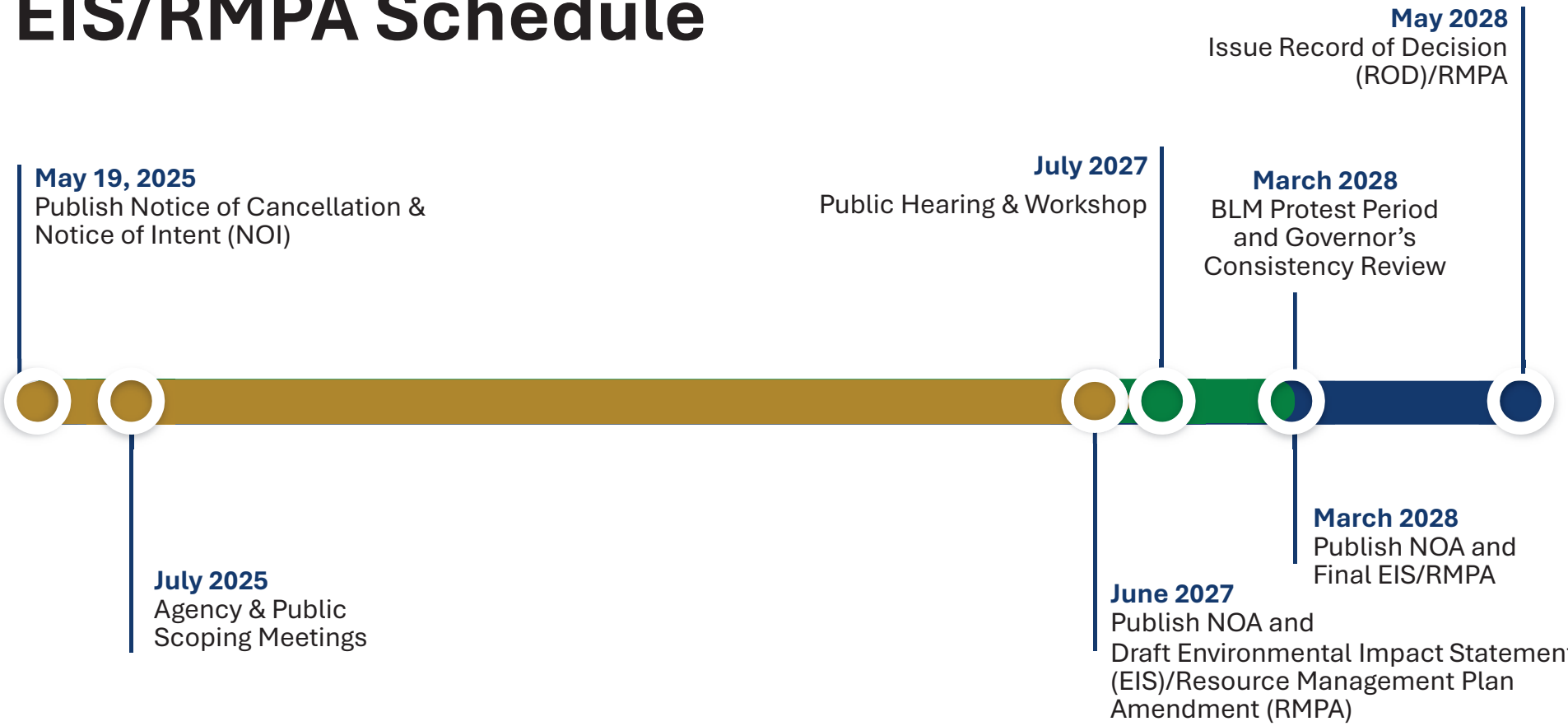
BLM Planning Criteria for Land Use Planning

- **Criteria 1:** Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies.
- **Criteria 2:** Existing valid Las Vegas Resource Management Plan decisions will not change, and any new plan decisions will not conflict with existing valid plan decisions.
- **Criteria 3:** Any resource management plan amendments will recognize valid existing rights.

EIS / RMPA Process



EIS/RMPA Schedule



Please Submit Comments on the EIS/RMPA Scope of Work by September 5, 2025

JLA Contact

FAA Project Manager

Mr. David B. Kessler, M.A., AICP

Telephone: 424-405-7315

Email: dave.kessler@faa.gov

BLM Project Manager

Joanie Guerrero

Telephone: 702-515-5274

Email: jjguerrero@blm.gov

Project Email Address:

SNSAEIS@landrumbrown.com

Please Submit Comments on the EIS/RMPA Scope of Work by September 5, 2025

July 29, 2025

Questions?

Federal Aviation Administration

Bureau of Land Management

TABLE C-2 AGENCY SCOPING MEETING PARTICIPANTS

Name/Phone Number
56397
61230
1(312) 479-8710
1(513) 658-6325
1(925) 413-7295
ammon.heier
Andrea Cole - GC GARCIA# INC (GC GARCIA, INC)
Barbara
Catherine (Katie) Miles
CCDOA
Chris Campos
Chris Nycz (NPS - Lake Mead NRA)
Colleen Cepero-BLM
Dave Kessler- Federal Aviation Administration
Dominic Poletta
Gaby Elizondo
GC GARCIA, INC
James Carlson - FAA
Jean Wolfers-Lawrence
Joanie Guerrero- BLM
Joanna Wadsworth, RTC of SNV
John M. Wagner, PhD
John Tennert
Jon Aunger (FAA PHX ADO)
JW
Katie van Heuven
Kaushal Shah# WSP USA (USKS675529)
Keith M
keith Morphis
Kent Duffy
Kimberley Goodwin, Clark County
Martin Nguyen - EPA
Michael Penic
Nathan Wagoner
read.ai meeting notes
Rob Adams
Santosh Mathew
Sarah Potter
Stephen Leslie
Steve Culberson
Syndi Dudley WSP
Ted Lendis, Clark County DES
tom kelly
USKS675529

Source: Landrum & Brown, 2025.

Attachment D Continued Government-to-Government Tribal Coordination

Email Notification to Tribal Governments, distributed July 24, 2025

TABLE D-1 TRIBAL GOVERNMENT CONTACT DATABASE

Tribe	Contact Name	Title	Email
Big Pine Paiute Tribe of the Owens Valley	Cheyenne Stone	Chairperson	cheyenne.stone@bigpinepaiute.org
Big Pine Paiute Tribe of the Owens Valley	Danelle Gutierrez	THPO	d.gutierrez@bigpinepaiute.org
Bishop Paiute Tribe	Steven Orihuela	Chairman	steven.orihuela@bishoppaiute.org
Campo Band of Diegueno Mission Indians of the Campo Indian Reservation, California	Marcus Cuerro	Chairman	info@campo-nsn.gov
Capitan Grande Band of Diegueno Mission Indians of California (Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California)	Raymond Welch	Chairman	counciloffice@barona-nsn.gov
Chemehuevi Indian Tribe	Glenn Lodge	Tribal Chairman	chairman@cit-nsn.gov
Chemehuevi Indian Tribe	Ron Escobar	Director of THPO	THPODir@cit-nsn.gov
Cocopah Tribe of Arizona			cocotcsec@cocopah.com
Cocopah Tribe of Arizona	Sherry Cordova	Vice Chairman	sherry@cocopah.com
Cocopah Tribe of Arizona	Brandon Walter	Cultural Resources Manager	walterb@cocopah.gov
Colorado River Indian Tribes	Brian Etsitty	Tribal Historic Preservation Office Director	betsitty@crit-nsn.gov
Fort Independence Indian Community of Paiute Indians	Carl Dahlberg	Chairman	carl@fortindependence.com
Fort Independence Indian Community of Paiute Indians	Sean Scruggs	THPO	falconkeeper22@gmail.com
Fort Independence Indian Community of Paiute Indians	Jessica Posie		receptionist@fortindependence.com
Fort Mojave Indian Tribe	Linda Otero	Director AhaMakav Cultural Society	LindaOtero@fortmojave.com
Fort Mojave Indian Tribe	Shan Lewis	Chairman	shanlewis@fortmojave.com
Fort Mojave Indian Tribe	Tim Williams	Chairperson	timothywilliams@fortmojave.com
Fort Yuma Quechan Indian Tribe	Manfred Scott	Acting Chairperson Quechan Cultural Committee	culturalcommittee@quechantribe.com
Fort Yuma Quechan Indian Tribe	Jordan Joaquin		executivesecretary@quechantribe.com
Fort Yuma Quechan Indian Tribe	Jill McCormick	Historic Preservation Office	historicpreservation@quechantribe.com

Tribe	Contact Name	Title	Email
Fort Yuma Quechan Indian Tribe	Scott Manfred	Acting Chairperson Quechan Cultural Committee	scottmanfred@yahoo.com
Havasupai Tribe			info@havasupai-nsn.gov
Havasupai Tribe	Bernadine Jones	Chairwoman	thchair@havasupai-nsn.gov
Hualapai Tribe	Duane Clarke	Chairperson, Tribal Council	duane.clarke@hualapai-nsn.gov
Hualapai Tribe	Ka-Voka Jackson	Director/Tribal Historic Preservation Officer	ka-voka.jackson@hualapai-nsn.gov
Indian Peaks Band of Paiute Indians of Utah	Tamra Borchardt-Slayton	Chairperson	tbslayton@utahpaiutes.org
Kaibab Band of Paiute Indians	Daniel Bullets	Southern Paiute Consortium/Cultural Resource Director	dbulletts@kaibabpaiute-nsn.gov
Kaibab Band of Paiute Indians	Roland Maldonado	Chairman, Tribal Council	rmaldonado@kaibabpaiute-nsn.gov
Las Vegas Paiute Tribe	Benny Tso	Chairman, Tribal Council	btso@lvpaiute.com
Las Vegas Paiute Tribe	Chris Spotted Eagle	Vice-Chairman	cspottedeagle@lvpaiute.com
Las Vegas Paiute Tribe	Dave Colvin	Tribal Attorney	dcolvin@lvpaiute.com
Las Vegas Paiute Tribe	Kenny Anderson	Cultural Coordinator	kanderson@lvpaiute.com
Las Vegas Paiute Tribe	Trudi Farber	Tribal Business Director	tfarber@lvpaiute.com
Lone Pine Paiute-Shoshone Tribe	Thomas Swab Jr.	Chairperson	chair@lppsr.org
Lone Pine Paiute-Shoshone Tribe	Kathy Bancroft	THPO	kathybncrft@gmail.com
Moapa Band of Paiutes	Mario Monroe	Chairman	chair.mbop@moapabandofpaiutes.org
Moapa Band of Paiutes	Darren Daboda	Tribal Historic Preservation Officer	moapathpo@moapabandofpaiutes.org
Pahrump Paiute Tribe	Eddie Jim		Rougepaiutewarrior1@gmail.com
Pahrump Paiute Tribe	Richard Arnold		rwarnold@hotmail.com
Paiute Indian Tribe of Utah	Laurel Yellowhorse	Chairwoman	Lyellowhorse@utahpaiutes.org
Pueblo of Zuni	Arden Kucate	Governor	Arden.kucate@ashiwi.org
San Juan Southern Paiute Tribe	Carlene Yellowhair	President	c.yellowhair@sanjuanpaiute-nsn.gov
San Pasqual Band of Diegueno Mission Indians of California	Stephen W. Cope	Chairperson	dorrisc@sanpasqualtribe.org
The Hopi Tribe	Stewart Koyiyumptewa	Tribal Historic Preservation Officer	skoyiyumptewa@hopi.nsn.us

Tribe	Contact Name	Title	Email
The Hopi Tribe	Timothy L. Nuvangyaoma	Chairman	tnuvangyaoma@hopi.nsn.us
Twenty-Nine Palms Band of Mission Indians	Darrell Mike	Chairman	chairman@29palmsbomi-nsn.gov
Twenty-Nine Palms Band of Mission Indians	Nicholas Garza	Cultural Resource Specialist	nicolas.garza@29palmsbomi-nsn.gov
Utu Utu Gwaitu Paiute Tribe (Owens Valley Paiute Benton Reservation)			s.saulque@bentontribe.org
Yavapai-Apache Indian Tribe	Chris Coder	Tribal Archaeologist	ccoder@yan-tribe.org
Yavapai-Prescott Indian Tribe	Linda Ogo	Director, Culture Research Department	logo@ypit.com
Yavapai-Prescott Indian Tribe	Robert Ogo	President	abradfield@ypit.com
Yavapai-Prescott Indian Tribe	Greg Glassco	Compliance Officer, Cultural Resources Department	gglassco@ypit.com

Source: Landrum & Brown, 2025.

From:	Kessler, Dave (FAA)
To:	chairman@cit-nsn.gov; THPODir@cit-nsn.gov; betsitty@crit-nsn.gov; Chairman; Jessica Posie; falconkeeper22@gmail.com; rmaldonado@kaibabpaiute-nsn.gov; dbulletts@kaibabpaiute-nsn.gov; btso@lvpaiute.com; cspottedeagle@lvpaiute.com; kanderson@lvpaiute.com; dcolvin@lvpaiute.com; tfarber@lvpaiute.com; chair.mbop@moapabandofpaiutes.org; Darren Daboda THPO; s.saulque@bentontribe.org; Lyellowhorse@utahpaiutes.org; c.yellowhair@sanjuanpaiute-nsn.gov; chairman@29palmsbomi-nsn.gov; nicolas.garza@29palmsbomi-nsn.gov; cheyenne.stone@bigpinepaiute.org; d.gutierrez@bigpinepaiute.org; steven.orihuela@bishoppaiute.org; chair@lppsr.org; kathybncrft@yahoo.com; indianpeaks@utahpaiutes.org; tnuvangyaoma@hopi.nsn.us; skoyiyumptewa@hopi.nsn.us; timothywilliams@fortmojave.com; shanlewis@fortmojave.com; LindaOtero@fortmojave.com; duane.clarke@hualapai-nsn.gov; Ka-Voka.jackson@hualapai-nsn.gov; executivesecretary@quechantribe.com; historicpreservation@quechantribe.com; culturalcommittee@quechantribe.com; scottmanfred@yahoo.com; sherry@cocopah.com; cocotcsec@cocopah.com; walterb@cocopah.gov; thchair@havasupai-nsn.gov; info@havasupai-nsn.gov; ccoder@yan-tribe.org; abradfield@ypit.com; logo@ypit.com; gglassco@ypit.com; Arden.kucate@ashiwi.org; counciloffice@barona-nsn.gov; info@campo-nsn.gov; dorrisc@sanpasqualtribe.org; rwarnold@hotmail.com; Rougepaiutewarrior1@gmail.com; cheyenne.stone@bigpinepaiute.org; d.gutierrez@bigpinepaiute.org; steven.orihuela@bishoppaiute.org; chair@lppsr.org; kathybncrft@yahoo.com; indianpeaks@utahpaiutes.org; tnuvangyaoma@hopi.nsn.us; skoyiyumptewa@hopi.nsn.us; timothywilliams@fortmojave.com; shanlewis@fortmojave.com; LindaOtero@fortmojave.com; duane.clarke@hualapai-nsn.gov; Ka-Voka.jackson@hualapai-nsn.gov; executivesecretary@quechantribe.com; historicpreservation@quechantribe.com; culturalcommittee@quechantribe.com; scottmanfred@yahoo.com; sherry@cocopah.com; cocotcsec@cocopah.com; walterb@cocopah.gov; thchair@havasupai-nsn.gov; info@havasupai-nsn.gov; ccoder@yan-tribe.org; abradfield@ypit.com; logo@ypit.com; gglassco@ypit.com; Arden.kucate@ashiwi.org; counciloffice@barona-nsn.gov; info@campo-nsn.gov; dorrisc@sanpasqualtribe.org; rwarnold@hotmail.com; Rougepaiutewarrior1@gmail.com
Cc:	Guerrero, Joanie J; Cepero Rios, Colleen; Leslie, Stephen O; Wolfers-Lawrence, Jean (FAA); Aunger, Jonathan P (FAA); Sarah Potter; Rob Adams; Gaby Elizondo
Subject:	Proposed Southern Nevada Supplemental Airport - Environmental Impact Statement/Resource Management Plan Amendment
Date:	Thursday, July 24, 2025 7:58:56 PM
Attachments:	SNSA EIS-RMPA letter to tribes from FAA 7 24 2025 fg.pdf

Good afternoon – I trust this email finds you well. Many of you may recall that the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for Clark County's proposed Southern Nevada Supplemental Airport (SNSA). The original EIS effort was started in 2006 and suspended in 2010. Clark County completed new planning work and the JLA has started a new EIS and Resource Management Plan Amendment effort.

As noted in the attached letter, the JLA is holding **virtual** Governmental Agency Scoping meeting on **Tuesday, July 29, 2025** from 1:00 p.m. to 3:00 p.m. Pacific Daylight Time. Also, on the same day, we're hold a virtual public scoping meeting. On the next two days, we will be holding in-person scoping meetings in Las Vegas and in Primm. The link to the virtual meetings are in the attached letter.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:

Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

U.S. Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Office of Airports

777 S. Aviation Blvd., Suite 150
El Segundo, CA 90245

July 24, 2025

The Federal Aviation Administration (FAA) and the Bureau of Land Management (BLM), as Joint Lead Agencies (JLA) under the Ivanpah Valley Airport Public Lands Transfer Act of 2000, are preparing federal environmental documentation under the National Environmental Policy Act (NEPA) of 1969, as amended, for the proposed Southern Nevada Supplemental Airport, in the Roach Dry Lake next to Interstate Highway 15 (I-15). You may recall this project was originally proposed back in the mid-2000s. The JLA conducted various meetings, site visits, and document review efforts at the time. The FAA is still the administrative lead for the JLA. Further, the FAA is the lead Federal agency for Government-to-Government consultation. The Clark County Department of Aviation is the Airport sponsor (Sponsor). As we did previously, the JLA is evaluating potential impacts associated with this request. Tribal sovereignty, culture, traditional values and customs will be respected at all times during the consultation process.

The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*, and FAA Order 1210.20, *American Indian and Alaska Native Tribal Consultation Policy and Procedures*, is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect the Tribes. I am the FAA Official with the responsibility of coordinating Government-to-Government consultations with Tribes under FAA Order 1210.20.

The JLA seek input on concerns that uniquely or significantly affect your Tribe related to proposed airport improvements. Early identification of Tribal concerns, or known properties of traditional religious and cultural importance, will allow the JLA to consider ways to avoid or minimize potential impacts to Tribal resources as project planning and alternatives are developed and refined. We are available to discuss the details of the proposed project with you.

Project Information

The Proposed Project involves development of an entirely new supplemental commercial service airport. Under the Ivanpah Valley Airport Public Lands Transfer Act of 2000 (Public Law 106-362), the BLM has transferred 5,752 acres of federally managed lands to Clark County for the purpose of building the new airport. Lands included for the EIS for evaluation of potential impacts from construction and operation of the proposed airport include:

- 5,752-acres for the airport site – 2000 Ivanpah Valley Airport Public Lands Transfer Act (Public Law 106-362).
- 17,000-acres for Noise Compatibility Area – Clark County Conservation of Public Land and Natural Resources Act of 2002 (Public Law 107-282).
- 2,640-foot-wide corridor between the Las Vegas Valley and the proposed SNSA site for the non-exclusive placement of transportation facilities and utilities – Clark County Conservation of Public Land and Natural Resources Act of 2002 (Public Law 107-282).
- 2,320-acres of land for flood mitigation infrastructure to protect the proposed SNSA – The National Defense Authorization Act of 2015 (Public Law 113-291).

The Proposed Project includes the following major components:

- Construction of a supplemental commercial service airport including two new runways 12,000 feet long by 150 feet wide and 15,000 feet long by 150 feet wide;
- Parallel and connecting taxiway system;
- Passenger terminal building with a Federal Inspection Services facility;
- Aircraft parking aprons;
- Airport Traffic Control Tower;
- Navigational aids, airport surveillance radar and automatic dependent-broadcast ground stations;
- Ground access infrastructure and associated utilities; and
- Development and use of associated arrival and departure flight procedures for the new runways

The Proposed Project will include fill material to elevate the earthen platform in the western half of Roach Dry Lake to support the airport about 7 to 10-feet above the current ground level. The material used to build this earthen platform will come from a drainage basin that is proposed to be excavated north of the Roach Dry Lake. The depth of physical disturbance would be approximately 25 feet below the existing ground level at its deepest point.

The BLM has also determined that it will evaluate the need for a Resource Management Plan Amendment for this project, and as a result the document will be a combined EIS/RMPA following the requirements of the BLM's land use planning regulations cited in 43 CFR part 1600. Accordingly, the BLM will consider whether to amend the 1998 Las Vegas Approved Resource Management Plan/Record of Decision within the proposed Project area to modify the Visual Resources Management (VRM) class.

While the JLA conducted various cultural resources inventories in the previous environmental review effort, the JLA's current environmental contractor, Landrum and Brown, is assisting the JLA with the NEPA process and ICF (their subconsultant) will be preparing the cultural resource inventory of the site. This work includes:

- Produce a Class I Inventory Report: This will include but is not limited to incorporation and syntheses of documentation the JLA completed during the initial EIS effort and a detailed review of the NVCRIS datasets informing the results and extent of previous cultural resource investigations. The report will meet all Nevada SHPO and federal standards and guidelines for Class I survey reports.
- Conduct a Class III intensive field survey to locate, record, and provide preliminary NRHP eligibility recommendations for cultural resources identified in the APEs and provide a technical report. Survey work is not limited to the documentation of precontact archaeological sites but will be an intensive survey aimed at identifying all cultural resources (e.g., archaeological resources, ethnographic sites, historical archaeological sites, historic built environment resources, tribal resources, traditional use areas). Site forms (new or updated) along with appropriate maps and photographs, will be included with the technical document. Survey efforts will consider and build from previous survey efforts.

The JLA published a Notice of Intent (NOI) to prepare the EIS/RMPA in the *Federal Register* on May 19, 2025. Release of the NOI initiated the formal scoping period, which is an early and open process for determining the scope of the alternatives to be considered and the issues to be addressed in the EIS/RMPA related to the proposed action. Additionally, the NOI includes the BLM planning criteria for public review. The BLM planning criteria guides the planning effort and lays the groundwork for effects analysis by identifying the preliminary issues and their analytical

frameworks. The scoping period is a collaborative effort that invites participation from federal, state and local agencies, and the general public. One virtual agency scoping meeting will be conducted along with two in-person public and one virtual public scoping meetings. The detail for each meeting is provided below.

Date	Tuesday, July 29	Tuesday, July 29	Wednesday, July 30	Thursday, July 31
Time	1-3 pm	6-8 pm	5-7 pm	6-8 pm
Location	Virtual	Virtual	East Las Vegas Library	Primm Valley Ballroom
Audience	Agencies	Public	Public	Public

The JLA is conducting a **Virtual** Agency Scoping Meeting for this EIS/RMPA process from 1:00 p.m. to 3:00 p.m. on **Tuesday, July 29, 2025**. At this meeting the JLA will present an overview of the project, description of roles and responsibilities, a summary of the EIS process, and the anticipated schedule for completion of the EIS.

The Agency meeting will be held **virtually** via Zoom Teleconference at the following link:
https://us02web.zoom.us/j/86710418812
or dial +1 346 248 7799 and use Meeting ID: 867 1041 8812.

You can get more information on the public meetings at**: https://www.snvairporteis.com/public-participation/**. Scroll to the bottom of the page and click on the yellow highlighted area "Click Here to Register for the Virtual Scoping Meeting."

Confidentiality

We understand that you may have concerns about the confidentiality of information on areas or resources of religious, traditional and cultural importance to your Tribe. We are available to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

Your timely response by September 5, 2025, will greatly assist us in incorporating your concerns into the federal environmental review process. If you wish to provide comments related to this proposed project, please contact David B. Kessler, Project Manager, Southern Nevada Supplemental Airport Environmental Impact Statement our Regional Office, by telephone at 424-405-7315 or by e-mail at dave.kessler@faa.gov

If you have any questions about this letter, or would like to have further discussion, please feel free to contact me directly at 424-405-7300 or Faviola.Garcia@faa.gov.

Sincerely,

FAVIOLA GARCIA

Digitally signed by FAVIOLA GARCIA
Date: 2025.07.24 16:13:36 -07'00'

Faviola Garcia
Acting Director, Airports Division
Western-Pacific Region

From:	Kessler, Dave (FAA)
To:	tbslayton@utahpaiutes.org
Cc:	Gaby Elizondo; Sarah Potter; Rob Adams; Wolfers-Lawrence, Jean (FAA); Aunger, Jonathan P (FAA); Guerrero, Joanie J; Cepero Rios, Colleen; Leslie, Stephen O
Subject:	FW: Proposed Southern Nevada Supplemental Airport - Environmental Impact Statement/Resource Management Plan Amendment
Date:	Thursday, July 24, 2025 8:02:31 PM
Attachments:	SNSA EIS-RMPA letter to tribes from FAA 7 24 2025 fg.pdf

Good afternoon, I received an automatic reply that indicated the original email address I had for you was no longer in use. Please see the email message below.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From: Kessler, Dave (FAA)
Sent: Thursday, July 24, 2025 4:58 PM
To: chairman@cit-nsn.gov; THPODir@cit-nsn.gov; betsitty@crit-nsn.gov; Chairman ; Jessica Posie ; falconkeeper22@gmail.com; rmaldonado@kaibabpaiute-nsn.gov; dbulletts@kaibabpaiute-nsn.gov; btso@lvpaiute.com; cspottedeagle@lvpaiute.com; kanderson@lvpaiute.com; dcolvin@lvpaiute.com; tfarber@lvpaiute.com; chair.mbop@moapabandofpaiutes.org; Darren Daboda THPO ; s.saulque@bentontribe.org; Lyellowhorse@utahpaiutes.org; c.yellowhair@sanjuanpaiute-nsn.gov; chairman@29palmsbomi-nsn.gov; nicolas.garza@29palmsbomi-nsn.gov; cheyenne.stone@bigpinepaiute.org; d.gutierrez@bigpinepaiute.org; steven.orihuela@bishoppaiute.org; chair@lppsr.org; kathybncrft@yahoo.com; indianpeaks@utahpaiutes.org; tnuvangyaoma@hopi.nsn.us; skoyiyumptewa@hopi.nsn.us; timothywilliams@fortmojave.com; shanlewis@fortmojave.com; LindaOtero@fortmojave.com; duane.clarke@hualapai-nsn.gov; Ka-Voka.jackson@hualapai-nsn.gov; executivesecretary@quechantribe.com; historicpreservation@quechantribe.com; culturalcommittee@quechantribe.com; scottmanfred@yahoo.com; sherry@cocopah.com; cocotcsec@cocopah.com; walterb@cocopah.gov; thchair@havasupai-nsn.gov; info@havasupai-nsn.gov; ccoder@yan-tribe.org; abradfield@ypit.com; logo@ypit.com; gglassco@ypit.com; Arden.kucate@ashiwi.org; counciloffice@barona-nsn.gov; info@campo-nsn.gov; dorrisc@sanpasqualtribe.org; rwarnold@hotmail.com; Rougepaiutewarrior1@gmail.com; cheyenne.stone@bigpinepaiute.org;

d.gutierrez@bigpinepaiute.org; steven.orihuela@bishoppaiute.org; chair@lppsr.org; kathybncrft@yahoo.com; indianpeaks@utahpaiutes.org; tnuvangyaoma@hopi.nsn.us; skoyiyumptewa@hopi.nsn.us; timothywilliams@fortmojave.com; shanlewis@fortmojave.com; LindaOtero@fortmojave.com; duane.clarke@hualapai-nsn.gov; Ka-Voka.jackson@hualapai-nsn.gov; executivesecretary@quechantribe.com; historicpreservation@quechantribe.com; culturalcommittee@quechantribe.com; scottmanfred@yahoo.com; sherry@cocopah.com; cocotcsec@cocopah.com; walterb@cocopah.gov; thchair@havasupai-nsn.gov; info@havasupai-nsn.gov; ccoder@yan-tribe.org; abradfield@ypit.com; logo@ypit.com; gglassco@ypit.com; Arden.kucate@ashiwi.org; counciloffice@barona-nsn.gov; info@campo-nsn.gov; dorrisc@sanpasqualtribe.org; rwarnold@hotmail.com; Rougepaiutewarrior1@gmail.com
Cc: Guerrero, Joanie J ; Cepero Rios, Colleen ; sleslie ; Wolfers-Lawrence, Jean (FAA) ; Aunger, Jonathan P (FAA) ; Sarah Potter ; Rob Adams ; Gaby Elizondo
Subject: Proposed Southern Nevada Supplemental Airport - Environmental Impact Statement/Resource Management Plan Amendment

Good afternoon – I trust this email finds you well. Many of you may recall that the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for Clark County's proposed Southern Nevada Supplemental Airport (SNSA). The original EIS effort was started in 2006 and suspended in 2010. Clark County completed new planning work and the JLA has started a new EIS and Resource Management Plan Amendment effort.

As noted in the attached letter, the JLA is holding **virtual** Governmental Agency Scoping meeting on **Tuesday, July 29, 2025** from 1:00 p.m. to 3:00 p.m. Pacific Daylight Time. Also, on the same day, we're hold a virtual public scoping meeting. On the next two days, we will be holding in-person scoping meetings in Las Vegas and in Primm. The link to the virtual meetings are in the attached letter.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From:	Kessler, Dave (FAA)
To:	Guerrero, Joanie J; Cepero Rios, Colleen; Leslie, Stephen O; Gaby Elizondo; Sarah Potter; Rob Adams
Cc:	Wolfers-Lawrence, Jean (FAA); Aunger, Jonathan P (FAA)
Subject:	FW: Proposed Southern Nevada Supplemental Airport - Environmental Impact Statement/Resource Management Plan Amendment
Date:	Thursday, July 24, 2025 8:51:07 PM

Team – note the Yavapai-Apache Nation said the project is outside of their area of concern and do now wish to participate or consult further. See the email below.

Dave
David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From: Margaret Hangan
Sent: Thursday, July 24, 2025 5:43 PM
To: Kessler, Dave (FAA)
Subject: RE: Proposed Southern Nevada Supplemental Airport - Environmental Impact Statement/Resource Management Plan Amendment

You don't often get email from mhangan@yan-tribe.org. Learn why this is important

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Thank you for this invitation to the scoping event. This project is outside of our area of concern, therefore we do not wish to participate in your event nor in any further consultation.

Margaret Hangan
Archaeologist
Yavapai-Apache Nation
2400 W Datsi St
Camp Verde, AZ 86322
mhangan@yan-tribe.org
Cell:760 455-3024

From: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>
Sent: Thursday, July 24, 2025 4:58 PM
To: chairman@cit-nsn.gov; THPODir@cit-nsn.gov; betsitty@crit-nsn.gov; Chairman <carl@fortindependence.com>; Jessica Posie <receptionist@fortindependence.com>;

falconkeeper22@gmail.com; rmaldonado@kaibabpaiute-nsn.gov; dbulletts@kaibabpaiute-nsn.gov; btso@lvpaiute.com; cspottedeagle@lvpaiute.com; kanderson@lvpaiute.com; dcolvin@lvpaiute.com; tfarber@lvpaiute.com; chair.mbop@moapabandofpaiutes.org; Darren Daboda THPO <moapathpo@moapabandofpaiutes.org>; s.saulque@bentontribe.org; Lyellowhorse@utahpaiutes.org; c.yellowhair@sanjuanpaiute-nsn.gov; chairman@29palmsbomi-nsn.gov; nicolas.garza@29palmsbomi-nsn.gov; cheyenne.stone@bigpinepaiute.org; d.gutierrez@bigpinepaiute.org; steven.orihuela@bishoppaiute.org; chair@lppsr.org; kathybncrft@yahoo.com; indianpeaks@utahpaiutes.org; tnuvangyaoma@hopi.nsn.us; skoyiyumptewa@hopi.nsn.us; timothywilliams@fortmojave.com; shanlewis@fortmojave.com; LindaOtero@fortmojave.com; duane.clarke@hualapai-nsn.gov; Ka-Voka.jackson@hualapai-nsn.gov; executivesecretary@quechantribe.com; historicpreservation@quechantribe.com; culturalcommittee@quechantribe.com; scottmanfred@yahoo.com; sherry@cocopah.com; cocotcsec@cocopah.com; walterb@cocopah.gov; thchair@havasupai-nsn.gov; info@havasupai-nsn.gov; Chris Coder <ccoder@yan-tribe.org>; abradfield@ypit.com; logo@ypit.com; gglassco@ypit.com; Arden.kucate@ashiwi.org; counciloffice@barona-nsn.gov; info@campo-nsn.gov; dorrisc@sanpasqualtribe.org; rwarnold@hotmail.com; Rougepaiutewarrior1@gmail.com; cheyenne.stone@bigpinepaiute.org; d.gutierrez@bigpinepaiute.org; steven.orihuela@bishoppaiute.org; chair@lppsr.org; kathybncrft@yahoo.com; indianpeaks@utahpaiutes.org; tnuvangyaoma@hopi.nsn.us; skoyiyumptewa@hopi.nsn.us; timothywilliams@fortmojave.com; shanlewis@fortmojave.com; LindaOtero@fortmojave.com; duane.clarke@hualapai-nsn.gov; Ka-Voka.jackson@hualapai-nsn.gov; executivesecretary@quechantribe.com; historicpreservation@quechantribe.com; culturalcommittee@quechantribe.com; scottmanfred@yahoo.com; sherry@cocopah.com; cocotcsec@cocopah.com; walterb@cocopah.gov; thchair@havasupai-nsn.gov; info@havasupai-nsn.gov; Chris Coder <ccoder@yan-tribe.org>; abradfield@ypit.com; logo@ypit.com; gglassco@ypit.com; Arden.kucate@ashiwi.org; counciloffice@barona-nsn.gov; info@campo-nsn.gov; dorrisc@sanpasqualtribe.org; rwarnold@hotmail.com; Rougepaiutewarrior1@gmail.com
Cc: Guerrero, Joanie J <jjguerrero@blm.gov>; Cepero Rios, Colleen <cceperorios@blm.gov>; sleslie <sleslie@blm.gov>; Wolfers-Lawrence, Jean (FAA) <jean.wolfers-lawrence@faa.gov>; Aunger, Jonathan P (FAA) <Jonathan.P.Aunger@faa.gov>; Sarah Potter <sarah.potter@landrumbrown.com>; Rob Adams <rob.adams@landrumbrown.com>; Gaby Elizondo <gaby.elizondo@landrumbrown.com>
Subject: Proposed Southern Nevada Supplemental Airport - Environmental Impact Statement/Resource Management Plan Amendment

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders.

Good afternoon – I trust this email finds you well. Many of you may recall that the Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) under the *Ivanpah Valley Airport Public Land Transfer* Act of 2000 (Public Law 106-362) to prepare an Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for Clark County's proposed Southern Nevada Supplemental Airport

(SNSA). The original EIS effort was started in 2006 and suspended in 2010. Clark County completed new planning work and the JLA has started a new EIS and Resource Management Plan Amendment effort.

As noted in the attached letter, the JLA is holding **virtual** Governmental Agency Scoping meeting on **Tuesday, July 29, 2025** from 1:00 p.m. to 3:00 p.m. Pacific Daylight Time. Also, on the same day, we're hold a virtual public scoping meeting. On the next two days, we will be holding in-person scoping meetings in Las Vegas and in Primm. The link to the virtual meetings are in the attached letter.

Please forward this email and the attached letter to the appropriate individual(s) within your organization to assist the FAA and the BLM in the preparation of the EIS/RMPA.

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov
Mailing address:
Federal Aviation Administration
Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From: Guerrero, Joanie J
To: Kessler, Dave (FAA); Sarah Potter; Gaby Elizondo
Cc: Cepero Rios, Colleen; Leslie, Stephen O
Subject: Re: [EXTERNAL] RE: SNSA EIS/RMPA Native American contact
Date: Tuesday, July 29, 2025 12:19:25 PM

San Pasqual Band of Diegueno Mission Indians of California
dorisc@sanpasqualtribe.org Just Updated
dorrisc@sanpasqualtribe.org (the incorrect one)

Joanie Guerrero
Major Projects Team
Bureau of Land Management (BLM)
Southern Nevada District Office (SNDO)
(702) 515-5274

Attachment E Scoping Comments

From: Andrew Powell <Andrew.Powell@cityofhenderson.com>
Sent: Wednesday, July 30, 2025 8:17 AM
To: Sillitoe, Bruce L <bsillitoe@blm.gov>
Subject: [EXTERNAL] SNSA EIS

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Bruce
Our City managers Office asked if I could reach out to your team and inquire about the City of Henderson being a Cooperating Agency for the EIS process for the SNSA. I would be happy to serve as the City's primary point of contact and handle any necessary coordination on our side. Is that something you or someone on your staff could assist me with? Thanks!

Andrew Powell
Planning Manager
Long Range Planning Division
Community Development & Services Department

andrew.powell@cityofhenderson.com
T: 702-267-1555 | F: 702-267-1501 |
240 S. Water St. Henderson, NV 89009-5050

City of Henderson—A Place to Call Home
City Webpage Contact Henderson
Office Hours|Mon. – Thurs.: 7:30am – 5:30pm PST

PUBLIC RECORDS NOTICE: In accordance with NRS Chapter 239, this email and responses, unless otherwise made confidential by law, may be subject to the Nevada Public Records laws and may be disclosed to the public upon request.

Joanie Guerrero
Major Projects Team
Bureau of Land Management (BLM)
Southern Nevada District Office (SNDO)
(702) 515

From: Ted Lendis <Lendis@ClarkCountyNV.gov>
Sent: Tuesday, August 12, 2025 8:22 AM
To: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>
Cc: John Wagner johnw@lasairport.com>; Dawn Leaper <Leaper@ClarkCountyNV.gov>
Subject: SNSA Air Quality Conformity

You don't often get email from lendis@clarkcountynv.gov. Learn why this is important

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good morning, David,

You may recall I mentioned general conformity during your recent workshop after EPA reached out to my department. There's some question about including the SNSA emissions in our 2015 ozone SIP, which we are currently preparing.

We've recently discussed EPA's concerns with Tom Kelly and Scott Bohning (Region 9), and I'd like to explore this further with your team so we can plan our approach.

Would you be open to meeting with DES to clarify expectations and strategize? If so, I can send a few potential time slots to check your availability.

Thank you,

Ted Lendis
Planning Manager

CLARK COUNTY
Department of Environment & Sustainability
Division of Air Quality
4701 W Russell Road
Las Vegas, NV 89118
702-455-1653 (office)
702-455-5942 (main)

Customer hours: Mon-Thurs, 7:30 a.m. to noon/12:30 to 5:30 p.m. (closed Fridays)
My office hours: Mon–Thurs, 6:00 a.m. to 4:30 p.m.

From: Brandon Walter <walterb@cocopah.gov>
Sent: Thursday, August 28, 2025 5:14 PM
To: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>
Cc: Lilia Tafoya <tafoyal@cocopah.gov>
Subject: NEPA Consultation Regarding Proposed Southern Nevada Supplemental Airport Response Letter

You don't often get email from walterb@cocopah.gov. Learn why this is important

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Greetings Mr. Kessler,

Attached is a response to the request for consultation pursuant to NEPA regarding the proposed Southern Nevada Supplemental Airport project. Please let me know if you have any further questions or concerns.

Sincerely,

Brandon Walter
Cultural Resources Manager
Cocopah Indian Tribe
14515 S. Veterans Drive
Somerton, AZ. 85350
O- (928) 722-7521/C- 928-503-2291

THE COCOPAH INDIAN TRIBE
Cultural Resources Department
14515 S. Veterans Drive
Somerton, Arizona 85350
Telephone (928) 722-7521
Fax (928) 627-3173

TO: **David B. Kessler, Project Manager**

FROM: **Brandon Walter, Cultural Resources Manager**

DATE: **Thursday, August 28, 2025**

RE: **NEPA Consultation Regarding Proposed Southern Nevada Supplemental Airport**

Greetings Mr. Kessler,

The Cocopah Indian Tribe acknowledges the Federal Aviation Administration's (FAA) request for consultation pursuant to the regulations governing the National Environmental Policy Act regarding the proposed Southern Nevada Supplemental Airport. The Tribe considers the federal government's responsibility to safeguard Cocopah cultural heritage and that of other Colorado River Indigenous Nations critical to upholding their legal commitments to Indigenous Nations and the American public.

The Cocopah Indian Tribe has the following comments:

1) The traditional homelands of the Cocopah people are outside the project area, and the Cocopah Indian Tribe is consequently deferring to the Indigenous Nations whose ancestral lands are in the vicinity of the project area. No further communication to the Cocopah Indian Tribe will be required for this project.

The Cocopah Indian Tribe supports all consultations with Indigenous Nations and encourages the FAA to make every effort to address the concerns of the affected tribes.

Please contact Brandon Walter, Cultural Resources Manager, at walterb@cocopah.gov or 928-722-7521 with any additional questions or concerns.

Sincerely,

Brandon S. Walter

Brandon Walter
Cultural Resources Manager

From:	Kimberly Reinhart
To:	SNSA EIS
Cc:	Marci Henson (mhenson@co.clark.nv.us); jamesc@mccarran.com
Subject:	Scoping Comments- Southern Nevada Supplemental Airport
Date:	Thursday, September 4, 2025 6:31:06 PM
Attachments:	20250904_Scoping Comments_SIGNED.pdf

You don't often get email from kimberly.reinhart@snwa.com. Learn why this is important

The Las Vegas Valley Water District respectfully submits the attached scoping comments for the proposed Southern Nevada Supplemental Airport.

Kimberly Reinhart
Manager, Environmental Resources
Water Resources Department

Southern Nevada Water Authority
100 City Parkway, Suite 700, Las Vegas, NV 89106
Mailing Address: P.O. Box 99956, Las Vegas, NV 89193-9956
Telephone: 702-862-3457; Mobile: 702-539-7073; Fax: 702-691-5227
Email: kimberly.reinhart@snwa.com

LAS VEGAS VALLEY WATER DISTRICT
1001 South Valley View Boulevard
Las Vegas, NV 89153
702-870-2011 • lvvwd.com

Sent via Email

September 4, 2025

Joint Lead Agencies
ATTN: David B. Kessler, FAA Project Manager, Southern Nevada Supplemental Airport EIS
ATTN: Joanie Guerrero, BLM Realty Specialist, Las Vegas Field Office
SNSAEIS@landrumbrown.com

Dear Mr. Kessler and Ms. Guerrero:

RE: SCOPING COMMENTS; PROPOSED SOUTHERN NEVADA SUPPLEMENTAL AIRPORT ENVIRONMENTAL IMPACT STATEMENT / RESOURCE MANAGEMENT PLAN AMENDMENT

The Las Vegas Valley Water District (LVVWD) respectfully submit scoping comments for the Southern Nevada Supplemental Airport (SNSA) Environmental Impact Statement (EIS) / Resource Management Plan Amendment (RMPA).

LVVWD is responsible for delivering retail water to metropolitan Las Vegas and various unincorporated towns and areas in Clark County. In water resource planning and distribution, LVVWD works to conserve water resources in a manner that reflects the goal of achieving and maintaining a sustainable water supply for Southern Nevada. Since the proposed project will require construction of new water utility infrastructure, temporary water delivery for construction, and long-term water delivery for operations LVVWD seeks to provide accurate information and address concerns related to water resources during the environmental review process.

LVVWD requests to be added as a Participating Agency, so that we may provide expert information related to water delivery infrastructure required for temporary and long-term uses and address issues of concern related to water resource sustainability during the environmental review process as identified in the SNSA EIS Coordination Plan. During the scoping process, several comments included references to water resources availability in Southern Nevada. LVVWD provides unique expertise in this area.

There is a complex series of state law, municipal code, water service rules, and interlocal agreements that govern water use in Southern Nevada, making our region a global model for sustainable water resource management. Importantly, developments outside of the Las Vegas Valley will only be provided with water service if the wastewater generated will be treated and returned to Lake Mead. Other limitations on landscaping, evaporative cooling, and other consumptive water uses ensure new development has a minimal impact on water resources. This helps ensure sustainability of Southern Nevada's water resources for new uses like the airport, and any adjacent land development. Participating Agency status will help ensure alignment with these criteria.

Thank you for the opportunity to provide these comments. LVVWD stands ready to offer expertise regarding water resources as they relate to the SNSA EIS/RMPA. If you have any questions, please contact Kimberly Reinhart at 702-862-3457 or kimberly.reinhart@snwa.com.

Sincerely,

Colby N. Pellegrino
Deputy General Manager, Resources

cc: Marci Henson, Director, Department of Clark County Environment & Sustainability
James Chrisley, Senior Director of Aviation, Clark County Department of Aviation

From: Nycz, Chris A
To: SNSA EIS
Subject: Comment for SNSA EIS
Date: Wednesday, September 3, 2025 3:41:32 PM

You don't often get email from chris_nycz@nps.gov. Learn why this is important

Hello, please see below for a comment from Lake Mead National Recreation Area regarding the Southern Nevada Supplemental Airport.

On August 12, 2024, Lake Mead NRA executed Voluntary Agreements with air tour operators where the operators agreed to not fly over Avi Kwa Ame National Monument and Spirit Mountain out of respect for Tribal Nations and recognition of this sacred space. Avi Kwa Ame NM was established on March 21, 2023, via Presidential proclamation. Spirit Mountain is within Lake Mead NRA's boundary and was designated as a Traditional Cultural Property (site 26CK5392) that was entered in the National Register of Historic Places on September 8, 1999. Additional historic properties that hold significance to Tribal Nations remain within Avi Kwa Ame NM, Lake Mead NRA, and its immediate surrounding landscape. Extant Tribal Nations regularly visit and maintain spiritual and traditional practices at Avi Kwa Ame NM and Spirit Mountain. Lake Mead NRA recommends FAA and BLM consult with affiliated Tribal Nations on this matter under Section 106 of the National Historic Preservation Act, and consider this sacred air space when drafting flight paths to avoid or minimize visual, auditory, atmospheric, and cumulative impacts.

Christine Nycz
Cultural Resource Program Manager
Tribal Liaison, Section 106 Coordinator
(Acting Resource Stewardship and Interpretation Division Chief)
Lake Mead National Recreation Area, Department of the Interior Region 8
601 Nevada Way
Boulder City, NV 89005
Office: 702-293-8859
Work Cell: 702-286-5579
Typical Hours: Mon-Thurs, 6:30am-5pm

From: Jarrett, Jordan E <jordan_jarrett@nps.gov>
Sent: Wednesday, May 21, 2025 9:00 AM
To: Leslie, Stephen O <sleslie@blm.gov>; Cepero Rios, Colleen <cceperorios@blm.gov>
Cc: Sweeten, Robert L <rsweeten@blm.gov>; Jensen, Alicia E <aejensen@blm.gov>
Subject: Southern Nevada Supplemental Airport

Hi Stephen and Colleen,

I received notification of the Southern Nevada Supplemental Airport through our CEQ federal register notification system. I find it is more helpful and with a better chance of successful collaboration if I go direct with the project leads than to have general comments circulated through the system, which tend in some cases not to reach the project leads or, in other cases, not lead to consultation or put us in touch with those who might be leading the NEPA effort.

The Old Spanish National Historic Trail (NHT) intersects the planning area for the proposed EIS and RMP amendment, with the potential for impact to the trail. Should you need any data for the trail's high potential resources, I have cc'd the Nevada NHT lead, Alicia who is able to provide that information. Should you have any questions regarding impact analysis for the NHT under the National Trails System Act for NEPA purposes, please let myself or Rob know.

Best,
Jordan

Jordan Jarrett, M.A., RPA
Trails Resources Specialist
National Trails Office, NPS
1100 Old Santa Fe Trail
Santa Fe, NM 87505
(505) 470-0426

Working with you to protect and promote National Historic Trails.
http://www.nps.gov/ntir/

From: Dunning, Connell <Dunning.Connell@epa.gov>
Sent: Monday, July 7, 2025 11:40 AM
To: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>
Cc: Nguyen, Martin <Nguyen.Martin@epa.gov>
Subject: RE: Southern Nevada Supplemental Airport (SNSA) - Environmental Impact Statement (EIS)/Resource Management Plan Amendment (RMPA)

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello Dave,
Hope you are well. Martin and I are available as EPA points of contact as the project proceeds and we look forward to attending the July 29 1pm to 3pm virtual interagency meeting. We hope to provide scoping comments during the scoping period. Can you confirm that we can provide comments after the July 29th meeting, or should we provide them in advance?

Thank you!
Connell

Connell Dunning
U.S. Environmental Protection Agency, Region 9
Environmental Review Section 2
dunning.connell@epa.gov
415.947.4161

From: Nguyen, Martin <Nguyen.Martin@epa.gov>
Sent: Friday, August 8, 2025 3:04 PM
To: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>
Cc: Dunning, Connell <Dunning.Connell@epa.gov>; Kelly, ThomasP <Kelly.ThomasP@epa.gov>; Wickersham, Lindsay <wickersham.lindsay@epa.gov>; Ledezma, Andrew <Ledezma.Andrew@epa.gov>; Mays, Rory <Mays.Rory@epa.gov>; Wolfers-Lawrence, Jean (FAA) <jean.wolfers-lawrence@faa.gov>; Aunger, Jonathan P (FAA) <Jonathan.P.Aunger@faa.gov>; Guerrero, Joanie J <jjguerrero@blm.gov>; Cepero Rios, Colleen <cceperorios@blm.gov>; sleslie <sleslie@blm.gov>; Waclaw, Jacob (FHWA) <Jacob.Waclaw@dot.gov>; Heier, Ammon (FHWA) <ammon.heier@dot.gov>
Subject: RE: EPA Preliminary Air Quality/Conformity Questions for the Southern Nevada Supplemental Airport

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dave,

Thanks for offering to help answer our SNSA air-related questions. I am including FHWA on this thread as some of our questions are transportation conformity related. We are available to set up a call about these topics to avoid the need for you to prepare a reply in writing, and a conversation may help us best frame scoping comments. Thanks for considering.

Air Quality Methodology and Analysis
EPA encourages FAA and FHWA to coordinate with the R9 EPA Air Division as soon as possible to consult on the air quality analysis methodologies and assumptions for both NEPA and Clean Air Act General Conformity and Regional and Project Level Transportation Conformity. Some initial questions are below; however, these are only initial questions and do not consist of the comprehensive discussion that is needed to meet EPA's requirements as a consulting partner related to demonstrating conformity. We encourage a meeting now, to discuss these, and other questions, before publication of the Draft EIS and before air-related technical analyses are completed, to avoid any potential project delays due to conflicting analysis methodology, data inputs, and assumptions.

EPA notes that we may need to coordinate on future transportation conformity estimates given that FAA has confirmed there will not be transit incorporated into the project along the transportation corridor established in Public Law 282 to promote efficiency of passenger travel between the Las Vegas to SNSA corridor.

Questions related to Transit:

- To reduce individual passenger car and truck emissions induced from additional travelers to SNSA traveling along I-15 to Vegas, it would be optimal to integrate mass transit to/from Vegas and SNSA, rather than building the airport with an expectation of individual passenger vehicles at opening year. FAA has stated that mass transit along the dedicated transportation corridor will not be a part of the SNSA project, but that the SNSA project will be planned to accommodate future mass transit in the future.
    - If not for facilitating transportation between the airport site and Las Vegas, what is the intended use of the transportation corridor established by Public Law 107-282?
    - How will the design accommodate future tie-in to Brightline should the company and Clark County establish a partnership to provide transportation via Brightline? Or to any other future high-efficiency people mover using the dedicated transportation/utility corridor established in Public Law 107-282?
- Can FAA and FHWA analyze several scenarios disclosing vehicle tail-pipe emissions from the traffic accompanying the SNSA project, once built/operational, if various transportation options between Las Vegas and the airport site were to be included as project commitments?
    - Options to analyze include assuming a majority of travelers use Brightline, some other fixed guideway electrified system to move people, dedicated bus rapid transit, (other?). Such an analysis is critical for decisionmakers to understand the negative impact that large numbers of rental cars would have to county infrastructure and emissions when compared to dedicated, integrated transit reducing the need for individual trips.

Questions related to Air Quality:

- Does Clark County intend to incorporate renewable energy into the construction and operation to reduce project emissions and how would SNSA tie into renewable energy?
- Is Clark County committing to any sustainability or conservation measures for the construction and operation of SNSA that will reduce emissions? If so, what are those measures?
- Will there be a commitment to electrification and/or alternative energy sources for auxiliary power units and general support equipment and all on-airport fleet vehicles and maintenance equipment?

Questions related to General Conformity:

- Have you determined any of the assumptions for the operational emissions analysis?
- Do you know the geographic scope of the operational emissions analysis?
- Will nearby or co-located transit options and assumptions included in the conformity analysis?

Questions related to passenger transportation and Transportation Conformity:

- What elements of this project (altering existing I-15, construction of parking lots, transit facilities, and access roads) will require funding or approval by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA) and a demonstration of transportation conformity? Are these project elements included in a conforming Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP)?
- In working with Nevada Department of Transportation (NDOT) and Regional Transportation Commission of Southern Nevada (RTC) , are applicable elements of the proposed project consistent with future revisions of the RTP and TIP?
- What are the potential hotspot impacts, especially where parking lots and road modifications are proposed?
- How will the vehicle emissions from cars/trucks driving to/from the SNSA, be included in the emissions estimates?
    - Were they assessed assuming vehicles will use the *"2,640-foot-wide corridor between the Las Vegas valley and the proposed Ivanpah Airport for the placement, on a nonexclusive basis, of utilities and transportation"* as intended in Public Law 107-282?
    - Or will the EIS analyze emissions just within the footprint of the airport?
    - Are FAA and FHWA assuming that all SNSA travelers will be using I-15, instead of the dedicated 2,640 foot-wide transportation corridor, adding additional traffic to I-15?
- Did the numbers of individual vehicle trips estimated in NDOT and RTC's most recent regional transportation conformity analysis (and project-level transportation conformity analyses, as applicable if prepared yet), assume associated mass transit along the legislated 2,640 foot wide dedicated transportation corridor, or does the estimated VMT exclude use of transit by all SNSA visitors and employees traveling to and from Las Vegas?

Thank you,

Martin Nguyen
Environmental Review Section 2
U.S. EPA Region 9, Pacific Southwest
nguyen.martin@epa.gov
415.972.3590

From: Nguyen, Martin <Nguyen.Martin@epa.gov>
Sent: Friday, September 5, 2025 2:07 PM
To: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>; Guerrero, Joanie J <jjguerrero@blm.gov>
Subject: 2025-09-05_SNSA_Scoping_EPA_Comments

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hi Dave and Joanie,

Please see EPA's attached scoping comment letter for the Southern Nevada Supplemental Airport project.

Thank you,

Martin Nguyen
Environmental Review Section 2
U.S. EPA Region 9, Pacific Southwest
nguyen.martin@epa.gov
415.972.3590

REGION 9
SAN FRANCISCO, CA 94105

September 5, 2025

Dave Kessler
Project Manager
Federal Aviation Administration
Western-Pacific Region
777 South Aviation Boulevard, Suite 150
El Segundo, California 90245

Joanie Guerrero
Realty Specialist
Bureau of Land Management
Las Vegas Field Office
4701 North Torrey Pines Drive
Las Vegas, Nevada 89130

Subject: EPA Scoping Comments for Southern Nevada Supplemental Airport Draft Environmental Impact Statement

Dear Dave Kessler and Joanie Guerrero:

The U.S. Environmental Protection Agency has reviewed the Federal Register Notice published May 19, 2025, requesting comments on the Federal Aviation Administration and Bureau of Land Management decision to prepare a Draft Environmental Impact Statement and Resource Management Plan Amendment for the Southern Nevada Supplemental Airport (SNSA). Our attached comments are provided pursuant to the National Environmental Policy Act of Section 309 of the Clean Air Act.

Thank you for providing an interagency presentation about the proposed project on July 29, 2025. Given the scope of the proposed project and the complexity of the required environmental analysis, the EPA requests that the FAA and the BLM continue to coordinate with the EPA during the development of the Draft EIS/RMPA. We appreciate, and accept, the invitation to coordinate as a participating agency. The EPA can provide early input to improve both the environmental analysis and the environmental performance of the proposed project, specifically the scope of NEPA analysis, air quality, green design, and transportation-related aspects of the project. Please consider the topics described below, as well as additional recommendations provided in the enclosure, as the Draft EIS/RMPA is being prepared.

Scope of Analysis and Integration with Transportation Facilities

The proposed new airport will include new roads and modifications to existing roads, designated utility rights-of-way, impacts associated with future actions on transferred land, and activities associated with acquiring and disposing of soil. We recommend coordinating activities between FAA, BLM, and transportation agencies (Federal Highway Administration, Nevada Department of Transportation, Federal Railroad Administration, Federal Transit Administration, and any proponents of high-speed rail connectivity within the Clark County area (Brightline West or others)) to facilitate connectivity between airport locations and the urban centers surrounding Las Vegas. With a thoughtful and holistic approach to transportation options for workers and travelers, the development of a new airport located outside

of the Las Vegas urban area can reduce airport employee and air passengers (during construction and operation) making multiple single-automobile trips, contributing to air quality and traffic-related impacts in the basin. The EPA recommends that the Draft EIS/RMPA analyze the construction of the new airport with effective and easy opportunities for transit between Las Vegas as a part of the build project now, rather than planning to accommodate transit for a later phase of airport operation.

Air Quality

We recognize the importance of the SNSA to regional transportation needs and would like to highlight the potential for reducing unintended adverse air quality effects through collaborative planning, siting, and construction and operation commitments. We anticipate that, once operational, the new airport is likely to be the second largest source of ozone precursors in Nevada following the Harry Reid Airport. Additionally, the airport would be located upwind of the 2015 ozone nonattainment area and the bulk of the population in and near Las Vegas. While the airport is not expected to be operational until 2037, which is after the applicable 2015 ozone attainment date, we urge FAA and BLM to prioritize the minimization of ozone precursor emissions as a key design element for the project to ensure that the air quality does not diminish. Given that the proposed action involves the construction and operation of a completely new airport with multiple potential air pollutant sources, we offer the enclosed recommended air quality recommendations, and we would be happy to provide our technical assistance to identify further measures to mitigate reasonably foreseeable impacts related to the construction and operation of the future airport.

Green Design

The EPA recommends that FAA and BLM plan to construct and operate the new airport after establishing an Environmental Management System for identifying and tracking environmental commitments and measuring benefits to be gained from achieving pollution-reduction targets during both construction and operation. We recommend including green design and sustainable development for all aspects of the proposed project – landscaping, building materials, building design, staging and construction, operations, on- and off-site airport related transport, and monitoring.

We appreciate the opportunity to provide early comments on the preparation of the Draft EIS/RMPA, and look forward to continued participation in this project. Please contact me at nguyen.martin@epa.gov to discuss the above recommendations, and additional considerations in the enclosure, as well as how the EPA can coordinate as requested above and as recommended in the enclosure.

Sincerely,

Martin Nguyen
NEPA Reviewer
Environmental Review Section 2

ENCLOSURE:
EPA Detailed Scoping Comments

cc: John Wagner
Airport Program Administrator, Clark County Department of Aviation

Jacob Waclaw
Senior Transportation Engineer, Federal Highway Administration

Jessica Wilkinson
Environmental Protection Specialist, Federal Transit Administration

My-linh Nguyen
Environmental Division Chief, Nevada Department of Transportation

Paul Souza
Regional Director, United States Fish and Wildlife Service

Steve Roberts
Executive Assistant of Regulatory Affairs, Army Corps of Engineers

Alan Jenne
Director, Nevada Department of Wildlife

Mandy Hood
Program Development Coordinator, Nevada Department of Environmental Protection

M.J. Maynard-Carey
Chief Executive Officer, Regional Transportation Commission of Southern Nevada

Ted Lendis
Planning Manager, Clark County Department of Environment and Sustainability

Scope of Analysis

The Environmental Protection Agency appreciates that the Notice of Intent to prepare an Environmental Impact Statement and Resource Management Plan Amendment (Draft EIS/RMPA) for the Southern Nevada Supplemental Airport (SNSA) confirms that the Federal Aviation Administration and Bureau of Land Management will include consideration of Public Law 107-282 when developing the environmental document. The EPA recommends including an assessment of all reasonably foreseeable environmental impacts from the future uses resulting from the designation of the 150,000-acre, ½-mile wide utility corridor right-of-way between Las Vegas and the SNSA site (for future utility, electricity, water, etc.), with appropriate mitigation measures to reduce anticipated impacts to environmental resources. We further recommend that FAA and BLM analyze the transfer of 17,000-acres site from BLM to Clark County for the noise compatibility area near the SNSA site and include appropriate mitigation measures to reduce anticipated impacts to environmental resources. While specific impacts may not be known, there are multiple examples of utility corridors being developed across BLM lands that can serve as an example for analyzing and disclosing impacts.

The EPA also appreciates that the NOI acknowledges that the Draft EIS/RMPA will consider the 5,752 acres of previously transferred federally managed land by BLM to Clark County (Public Law 106-362*, Ivanpah Valley Airport Public Lands Transfer Act)* and the 2,320 acres of land to be conveyed from BLM to Clark County for flood mitigation infrastructure upon an acceptable Record of Decision (Public Law 113-291*, Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 – Land Conveyance for Southern Nevada Supplemental Airport)*.

In addition to the reasonably foreseeable impacts associated with land conveyances that are part of the SNSA project site, the EPA recommends that the Draft EIS/RMPA, identify all aquatic resources, natural areas, conservation areas, wildlife movement corridors, wildlife refuges, etc. that the intended uses of the conveyed lands and utility corridor will impact.

> ***Recommendations*:** Analyze the impact of designation of the right-of-way per Public Law 107-282, describe potential reasonably foreseeable impacts from actions associated with transport and utilities to and from Las Vegas and the airport site, describe all future uses and impacts, and provide mitigation measures to avoid and minimize potential impacts.
>
> Analyze and describe the potential reasonably foreseeable impacts resulting from the transfer of public land per Public Law 106-362*, Ivanpah Valley Airport Public Lands Transfer Act*, to Clark County.
>
> Describe the reasonably foreseeable impacts associated with the construction and operation of the intended flood control infrastructure – design, conveyance, infrastructure, and retention basins – to be designed to meet the requirements for flood control protection and management as described in Public Law 113-291: *"through proper engineering, the land described in this subsection flood mitigation infrastructure for the Southern Nevada Supplemental Airport may be consistent with the role of the Bureau of Land Management— (i) to protect and prevent irreparable damage to— (I) important historic, cultural, or scenic values;*

(II) fish and wildlife resources; or (III) other natural systems or processes; or (ii) to protect life and safety from natural hazards in the County and nearby areas."

Analyze any plans for using the surrounding area as a borrow site and storage site for removed soil and/or construction debris in the Draft EIS/RMPA along with measures to avoid and mitigate impacts to resources on the site. Describe the complete amount of soil to be transported to and from the project site with analysis of impacts associated with soil removal, soil hauling (number of truckloads and associated air emissions), trucking routes, ingress and egress of trucking on public roads, safety measures related to increased trucking, and temporary and permanent storage of soil and construction materials.

Relationship to Local Transportation Network

In addition to assisting in demonstrating air quality conformity and a reduction in auto trips, an effective transit system incorporated into the initial design and construction of the airport will reduce the need for excess parking areas, increased traffic congestion and related impacts at the new airport site and where travelers may be beginning and ending trips to and from the Las Vegas Valley. Should FAA and BLM decide to delay "opening day" integrated transit options (such as stations for a link to Brightline West or other high-speed rail, dedicated transit routes and vehicles, or dedicated bus rapid transit), the EPA recommends a robust analysis of any adverse air quality impacts resulting from multiple individual airport employee and air passenger auto trips and a justification of a decision to delay incorporation of transit into the first phase of airport design and operation. For example, if FAA and BLM determine that it is not economically feasible to incorporate transit into the first phase of airport development, describe the timeline and threshold for transit construction to be feasible (when transit will be incorporated if not opening day) as well as the resulting air quality impacts that the region will experience without dedicated transit.

Recommendations: Analyze multiple methods of transit connectivity between the population center of Las Vegas and the new airport; incorporate an analysis of benefits and impacts from building transit opportunities in the first construction phase; and quantify and compare the benefits that would be realized from the implementation of each transit option being analyzed (as well as adverse impacts that would result if transit connectivity is delayed).

Coordinate with the Federal Transit Administration (FTA) in the preparation of the Draft EIS/RMPA so that the document can serve as necessary environmental documentation should funding from FTA be pursued for the transit portion of the airport development. FTA being identified as a co-lead or cooperating agency may facilitate eligibility for federal funding and more expedient delivery of integrated transit.

Clarify the relationship between the adjacent Brightline West rail project and the proposed airport developments. The Draft EIS/RMPA offers an opportunity to explain how highway, rail, and dedicated transit all will integrate to meet transport needs while reducing adverse impacts of traffic, congestion, and associated adverse air quality impacts.

Clarify what Nevada Department of Transportation (NDOT) and Federal Highway Administration (FHWA) have committed to regarding use of NDOT right-of-way for any developments associated with the airport.

Air Quality

Air Quality Methodology and Analysis

The EPA has appreciated the coordination between our agency regarding conformity related issues associated with major infrastructure. The EPA encourages FAA and FHWA to coordinate with the R9 EPA Air Division early in the airport and highway modification planning process to consult on the air quality analysis methodologies and assumptions for both NEPA and Clean Air Act general conformity and regional and project level transportation conformity.

> ***Recommendations:*** Please consult with the EPA to initiate a comprehensive discussion to meet EPA's requirements as a consulting partner related to demonstrating conformity. We encourage a meeting early before publication of the Draft EIS/RMPA and before air-related technical analyses are completed, to avoid any potential project delays due to conflicting analysis methodology, data inputs, and assumptions. Further, the EPA notes that we may need to coordinate on future transportation conformity estimates to the extent that transit is or is not considered along the transportation corridor established in Public Law 107-282.

National Ambient Air Quality Standards

The State of Nevada uses the term "hydrographic areas" to set boundaries of areas for attainment or nonattainment designations for the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, and particulate matter. For designation purposes, Clark County has been divided into several hydrographic areas, the largest being the Las Vegas Valley, and others including the Ivanpah Valley where the proposed airport is located. The attainment status of some of the hydrographic areas in Clark County is as follows:

> ***2015, 2008, and 1997 Eight Hour Ozone NAAQS:*** At present, the Clark County area has been designated as nonattainment for the 2015 eight-hour ozone NAAQS. The nonattainment area is HA 212, which includes only the Las Vegas Valley.
> The Clark County area is also currently designated as maintenance for the 1997 8-hour ozone standard. The nonattainment area is Hydrographic Areas (HAs) 164A, 164B, 165, 166, 167, 212, 213, 214, 216, 217, and 218. This area includes the Ivanpah Valley (Has 164A, 164B, 165, and 166).
>
> ***Carbon Monoxide (CO) NAAQS*:** The Las Vegas Valley has been designated as maintenance for the CO NAAQS.
>
> ***1997, 2006, and 2012 Particulate Matter less than 2.5 Microns ($PM_{2.5}$) NAAQS:*** Clark County, like the rest of the State of Nevada was designated as attainment for the 1997, 2006 and 2012 24-hour and annual $PM_{2.5}$ NAAQS.
>
> ***Particulate Matter less than 10 microns (PM_{10}) NAAQS*:** The Las Vegas Planning area is designated as maintenance for the PM_{10} NAAQS. The maintenance area is the BLM disposal boundary within HA 212 and does not include the Ivanpah Valley.

As stated above, to reduce individual passenger car and truck emissions induced from additional travelers to SNSA traveling along I-15 to Vegas, it would be optimal to integrate mass transit to/from

the Las Vegas Valley and SNSA, rather than building the airport without a robust, integrated transit plan to be operational at opening day and during years of construction. Options to consider include a fixed guideway electrified system to move people and/or dedicated bus rapid transit. Such an analysis is critical for decisionmakers to understand reasonably foreseeable impacts from rental cars and individual passenger vehicle trips and associated emissions when compared to alternative strategies for transport including dedicated, integrated transit. EPA provides the following recommendations for incorporation into the Draft EIS/RMPA:

> ***Recommendations:*** Identify whether emissions will cause or contribute to exceedances of the NAAQS for ozone, PM_{10}, $PM_{2.5}$, or CO in any year from the start of construction through full build-out.
>
> Discuss the intended use of the transportation corridor established by Public Law 107-282 and how proposed actions either increase or decrease potential adverse air quality impacts. Include an analysis of how the airport design will make use of the dedicated transportation/utility corridor established in Public Law 107-282 and provide a scenario of reasonably foreseeable air quality impacts with, and without, a dedicated transit solution for workers and travelers at opening day and at the horizon build year.
>
> - Quantify the air quality benefits of an effective transit system for connecting employees and travelers from the economic center of Las Vegas to the airport.
> - Include a comparison table identifying tail-pipe emissions expected from multiple scenarios of employee and air passengers (1) driving between Las Vegas and the airport and (2) taking transit options constructed as a part of the Airport development, such as zero-emission rapid buses on dedicated lanes, high speed rail options, and others.
>
> Include on-airport emissions from operational sources (cargo and passenger aircraft, auxiliary power units, support vehicles, etc.), off-airport traffic emissions, and construction emissions in a comparative format (e.g., a table with estimated and mitigated on-airport, off-airport, and construction emissions). Present emissions information within the framework of total emissions for each criteria pollutant for each alternative, i.e., construction emissions and operational emissions, added to background levels.

General Conformity and Transportation Conformity

The Clean Air Act, Section 176(a), and EPA's regulations at 40 CFR 93.150, prohibit federal agencies from engaging in, supporting or providing financial assistance for, licensing or permitting, or approving, any activity which does not conform to an applicable state implementation plan. To address this requirement, in the Draft EIS/RMPA, include an estimate of direct and indirect emissions within nonattainment and maintenance areas. In many cases, these emissions are further categorized as construction and operational emissions. The emissions estimate would be used to support a general conformity applicability analysis as specified by 40 CFR 93.153. If applicable, the project may require a conformity determination, consistent with 40 CFR 150-165. In such cases, we recommend the Draft EIS/RMPA include the conformity determination, allowing for concurrent public notice of both documents.

The SNSA site appears to be located within the maintenance areas for the Clark County 1997 ozone.[1] The EPA-approved second maintenance plan[2] included an operational emissions budget of 4.68 tons per day, which can be used to demonstrate conformity for the airport's operational emissions. The site also appears to be located in the Clark County nonattainment area for the 2015 ozone NAAQS, and near the Clark County maintenance areas for CO[3] and PM_{10}[4] NAAQS. In addition, the airport is only a short distance from the San Bernardino nonattainment area for PM_{10} NAAQS.

General conformity only applies to emissions originating within a nonattainment or maintenance area, however, we recommend the Draft EIS/RMPA assess whether airport related activities will create emissions in nearly nonattainment or maintenance areas. Potential examples of nearby airport-related emissions could include airport worker commuting emissions, construction emissions from soil excavation and transportation at or from off-site soil borrow sources, and aircraft emissions to and from the airport through the 2015 ozone nonattainment area between the ground and the 10,000-foot mixing height.[5]

We note that while general conformity applies to federal action in nonattainment and maintenance area, it does not apply after the end of a 20-year maintenance period unless, in this case, the Clark County Department of Environmental Sustainability and the State of Nevada have chosen to extend it.

Further, regarding transportation conformity, the EPA recommends that FAA and BLM continue to work with FHWA to coordinate with NDOT and Regional Transportation Commission of Southern Nevada (RTC) and ensure that applicable elements of the proposed project are consistent with future revisions of the Regional Transportation Plan and transportation conformity requirements.

> ***Recommendations***: Discuss the assumptions and geographic scope of the operational emissions analysis. If the project requires a general conformity determination, consistent with 40 CFR 150-165. the EPA recommends that the Draft EIS/RMPA include the conformity determination, allowing for concurrent public notice of both documents simultaneously.
>
> Identify what elements of this project (altering existing I-15, construction of parking lots, transit facilities and access roads) will require funding or approval by the FHWA or FTA and a demonstration of transportation conformity. Work with the Clark County Department of Air Quality and Environmental Management and the RTC to ensure that methods to estimate emissions and anticipated emissions values from the proposed project are consistent with Air Quality Management Plans and Regional Transportation Plan conformity determinations. Demonstrate that project elements requiring funding or approval from FHWA or FTA are included in a conforming RTP and the transportation improvement program.
>
> Include an identification of potential hotspot impacts, especially where parking lots and road modifications are proposed.

[1] The twenty-year maintenance period for the 1997 ozone NAAQS will end on Feb 7, 2033 see 78 FR 1149 (Jan 8, 2013).
[2] EPA approved the maintenance plan in a final rule dated April 5, 2024 (89 FR 23916).
[3] The twenty-year maintenance period for carbon monoxide will end on Sept 27, 2030, see 75 FR 59090 (Sept 27, 2010).
[4] The twenty-year maintenance period for PM10 will end Nov 5, 2034, see 79 FR 60078, Oct 6, 2014.
[5] Clark County Department of Environmental Sustainability, Division of Air Quality staff confirmed the mixing height in a call with EPA Region 9 staff on August 11, 2025.

Identify whether the numbers of individual vehicle trips estimated in NDOT and RTC's most recent regional transportation conformity analysis (and project-level transportation conformity analyses, as applicable if prepared yet), assumed associated mass transit along the legislated 2,640-foot-wide dedicated transportation corridor.

Use the most current EPA-approved model to estimate mobile-source emissions and use AP-42[6] to calculate re-entrained PM_{10} emissions. Present all methods and assumptions for analyses with pertinent air quality analyses and conclusions.

Reasonably Foreseeable Air Quality Impacts - Minimization and Mitigation Measures

Air Quality Mitigation Measure for all Airport-related Operations: Discuss and evaluate the feasibility of incorporating the following measures to minimize emissions and quantify the air quality benefits achieved from adopting each feasible measure:

- Identify measures utilizing EPA's "Guidance on Airport Emission Reduction Credits for Early Measures through Voluntary Airport Low Emissions Programs". (https://www.faa.gov/sites/faa.gov/files/airports/resources/publications/reports/AERC_093004.pdf). On September 30, 2004, the EPA's Office of Air Quality Planning and Standards issued guidance for FAA's Voluntary Airport Low Emissions Program (VALE) to reduce emissions from airport equipment and infrastructure. Under the program, airport sponsors can use Airport Improvement Program funds and Passenger Facility Charges to finance low emission vehicles, refueling and recharging stations, gate electrification, and other air quality improvements. In turn, airports receive emission reduction credits that can be used for demonstrating general conformity or as new source review offsets**.**
- Consider mitigation strategies for aircraft emissions, such as: single/reduced engines for taxiing, derating takeoff power, reducing use of reverse thrust, Ground Power Units (GPU) and Pre-Conditioned Air at gates, auxiliary power units (APU) restrictions during ground operations, reducing aromatic content of jet fuel, etc. Identify specific, quantifiable emission-reduction targets for any strategy that is adopted.
- Consider and prioritize all mitigation approaches as part of the transportation system design, along with subsidies and restrictions to minimize personal vehicle use and maximize cleanest mass transit. Adopt and encourage incentive programs, including pricing structures, to reduce commute trips for airport and tenant employees.
- Establish specific, quantifiable goals to reduce emissions from ground support equipment (GSE) and APU which, together with aircraft, constitute the largest source of on-airport emissions, and establish incentive programs to motivate airlines use lower-emitting GSE.
- Transfer truck drayage mitigation proposals to cargo movement at the airfreight terminals, to drastically reduce the diesel particulate matter emissions from the existing diesel truck system, which routinely features extended idling.

[6] https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-section-1321-paved-roads-related-information-0. (Accessed September 3, 2025)

- Provide specific incentives to airlines to replace older, more polluting APUs with newer, more fuel efficient APUs with electronic engine control units and integration of the APU and aircraft control systems.
- Identify alternative fuel projects to reduce emissions from on-airport and off-airport sources and other methods and identify plans to incorporate renewable energy into the construction and operation of the new airport
- Identify any commitments to electrification and/or alternative energy sources for APU and GSE and all on-airport fleet vehicles and maintenance equipment.

Air Quality Mitigation Measure for all Airport-related Construction: Discuss and evaluate the feasibility of incorporating the following measures to minimize emissions. In addition, incorporate all feasible measures into a Construction Emissions Mitigation Plan, as appropriate, in order to reduce impacts associated with emissions of PM_{10}, diesel particulate matter (DPM) and other air toxics from construction-related activities and quantify the air quality benefits achieved from adopting each feasible measure.

- Use particle traps and other appropriate controls to reduce emissions of DPM and other air pollutants. Traps control approximately 80 percent of DPM, and specialized catalytic converters (oxidation catalysts) control approximately 20 percent of DPM, 40 percent of CO emissions, and 50 percent of hydrocarbon emissions.
- Avoid exceeding 20 percent opacity for more than three minutes in any hour of operation for visible emissions from all heavy-duty off-road diesel equipment.
- Minimize construction-related trips, including workers, trucks and heavy equipment.
- Lease or buy newer, cleaner equipment (1996 or newer model) and utilize low sulfur fuel (diesel with 15 parts per million or less).
- Employ periodic, unscheduled inspections to ensure that construction equipment is properly maintained, is tuned to manufacturer's specifications, and is not modified to increase horsepower, except in accordance with established specifications.
- Coordinate with the Clark County Department of Air Quality and Environmental Management to identify a construction schedule to limit impacts from multiple construction projects, and adopt appropriate construction dust control procedures.
- Locate construction equipment and staging zones away from sensitive receptors, as well as away from fresh air intakes to buildings and air conditioners, and reduce idling.

Air Toxics Analysis

Include speciated air toxics emissions for each of the major source categories at the airport, including aircraft, ground support equipment, ground access vehicles, and other potential sources, such as fuel storage and handling, surface coating operations, and maintenance activities. Include relevant mobile source air toxics, such as those listed in Table 1.1.-1 from the Regulatory Impact Analysis of the Final Standards to Control Hazardous Air Pollutants from Mobile Sources.[7] At a minimum, include polycyclic aromatic hydrocarbons (PAHs) and their broader class, polycyclic organic matter (POM) and the mobile source air toxics considered risk drivers or risk contributors in EPA's AirToxScreen: Formaldehyde, 1,3-Butadiene, Acetaldehyde, Benzene and Napthalene.

[7] https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1019VPM.pdf (Accessed September 2, 2025)

Include a relative weighting of emissions using readily available and commonly accepted toxicity information (e.g., EPA's Integrated Risk Information System web site - http://www.epa.gov/iris/). This approach, commonly referred to as toxicity-weighting, is useful for purposes of disclosure, evaluating build alternatives, identifying where to site activity centers, and informing mitigation decisions. The EPA is available and interested in further discussing how FAA will address HAPs at the new airport location.

Assess the proximity of high levels of toxicity-weighted emissions to future potentially exposed populations for the majority of HAP concerns, which tend to have more localized, or "hotspot," impacts. Portions of the Human Health and Risk Assessment completed for the Supplement to the EIS/EIR for the Los Angeles International Airport Proposed Master Plan[8] Improvements can be used as a model for identifying, assessing, and quantifying airport-related emissions.

Complete a dispersion modeling analysis to inform decisions on locations for a proposed hotel or other activity centers and to inform future land-use decisions outside of the airport, even those outside of FAA's control (i.e. avoiding areas of high, localized HAP impacts). There are few residential receptors in close proximity to the proposed SNSA site, however, because of potential future hotel operations and other activity centers on the airport site, a dispersion modeling analysis would be useful for informing decisions.

Green Design

We recognize that the construction of the airport facility, terminals, runways, and associated infrastructure provides an opportunity to fully integrate efficiency and green building designs. There is value in having a certified Environmental Management System, a third-party check and monitor system to ensure that contractors are in fact following through with environmental commitments.[9] For example, Denver International Airport has an ISO 14001 certified Environmental Management Plan. ISO 14001 is one example of an international standard that specifies a process for controlling and improving a company's environmental performance and multiple businesses are available to certify.

***Recommendations*:** Incorporate a chapter into the Draft EIS/RMPA specifically addressing all measures integrated into the development and design of the airport to maximize efficiency, energy use, and green building for all associated facilities, landscaping, and transportation infrastructure.

Develop an EMS for the planning, construction, operation, and follow-up monitoring of the new airport and consider pursuing certification of the EMS (under ISO 14001 or another comparable standard) through a 3rd party who will assess the effectiveness of the identified environmental management system and issue a certificate if it meets the requirements of the standard. A commitment to sustainability goals now, during development of the Draft EIS/RMPA, allows for critical environmentally sound design decisions to be planned and implemented early.

[8] https://www.lawa.org/sites/lawa/files/documents/4_3_MSC_DEIR_Human_Health_Risk_Assessment.pdf. (Accessed September 3, 2025)

[9] An Environmental Management System (EMS) is a set of processes and practices that enable an organization to reduce its environmental impacts, reduce costs, and increase its operating efficiency (https://www.epa.gov/ems). (Accessed September 3, 2025)

Incorporate the following green design measures into the project and incorporate commitments into the Draft EIS/RMPA:

- Consider and incorporate electric, hybrid, and compressed natural gas options into all surface and support vehicles and consider utilizing biodiesel prepared from food vendors at the airport.
- Implement an incentive program for airlines to adopt sustainable practices, such as minimizing use of diesel.
- Install power generating solar cells on the roof of parking garages and terminals and consider installing additional solar fields to tie-into and power the airport operations.
- Compost 100 percent of all food wastes from terminal restaurants, airline kitchens and any planned off-site hotels.
- Incorporate Re-use Measures, such as collecting magazines and newspapers from airplanes and send them to local schools.

Impacts to Hydrology, Flooding, Water Quality and Aquatic Resources

The proposed project site alternative in Ivanpah Valley would impact the dry lake bed of Roach Lake, a site which receives stormwater runoff draining hundreds of square miles of the adjoining desert habitat, with the acknowledgement that, "flood mitigation infrastructure is critical to the safe and uninterrupted operation" of the SNSA (Publc Law 113-291). The EPA provides the following recommendations related to hydrology and aquatic resources to reduce impacts associated with development on the airport site, and on all other alternative sites analyzed.

Recommendations: Include efforts to avoid and minimize impacts to water resources in the project area, including the 17,000-acre transfer site and the 150,000-acre BLM right-of-way, and any other areas impacted by dedicated highway modifications and airport-related transport and operational uses. Include a functional assessment of the waters occurring within the project study area to better understand the potential impacts on the surrounding ecosystem and identify opportunities for FAA and BLM to demonstrate environmental stewardship through preserving and enhancing intact and functioning ecosystems to the full extent possible.

Describe efforts to reduce flood potential. Identify how the proposed SNSA airport site may impact and contribute to on- and off-site future flooding events and describe measures to reduce flooding potential. Identify and consider in the analysis the status of current and proposed efforts related to flood protection in the project vicinity and discuss whether the proposed airport properties are at risk from 100-year and 500-year flood events. Identify if the proposed project will affect the potential for adverse impacts from flood events to off-site areas following the addition of new impermeable surfaces.

Describe specific measures to minimize flooding potential developed in coordination with the Clark County Regional Flood Control District and local efforts for flood prevention.

Address techniques proposed for minimizing groundwater contamination due to increased runoff from airport-related parking lots, roads, and runways**.** Describe stormwater detention facilities and work with planners, and vector control agencies to develop siting, design, and

maintenance strategies that incorporate guidelines to minimize or eliminate mosquitoes and other vector species.

Cultural Resources and Coordination with Tribes

The proposed project may impact a wide range of cultural sites, including sites and historic trails that are eligible for listing in the National Register of Historic Places.

Recommendations: Provide opportunities to involve affected Native American Tribes and to incorporate Native American concerns into the environmental review process and include a description of all coordination activities in the Draft EIS/RMPA. Include the full text of a completed Memorandum of Agreement with affected tribes in the Draft EIS/RMPA to disclose what concerns have been identified and what specific commitments will minimize impacts.

Identify flight paths from the proposed action and clarify whether these paths would cross Spirit Mountain or any other cultural resource.

Identify proposed methods for mitigating impacts to important resources along with a clear description of what resource impacts cannot be mitigated. If no mitigation is available for an adverse effect to a specific eligible site, clearly describe the significance of the impact to that site and what the impact means in the context of the remaining sites that are similar in origin and the historical meaning of that site.

Biological Resources

Executive Order 13112 on Invasive Species calls for the restoration of native plant and tree species. To the extent that this project will entail new landscaping and tree and plant replacement, describe how the project will meet the requirements of Executive Order 13112 by using native species and reducing potential for invasive species. In addition, continue to work with Nevada Department of Wildlife and the United States Fish and Wildlife Service to design measures to be protective of federal- and state-listed species and to facilitate wildlife connectivity in the areas surrounding the proposed airport facility and along the dedicated utility and transportation corridor.

Recommendations: Identify measures to reduce the potential for invasive species, particularly in all cases where native vegetation and soils will be removed and replaced with soils from another source. In addition, commit to measures such as collecting and saving removed native soils for use in revegetation projects to facilitate native seeds remaining in the project vicinity.

Identify anticipated impacts to threatened and endangered species, and state listed and protected species, from all aspects of the airport project siting and flight patterns. Describe all measures to reduce noise and habitat impacts to all threatened and endangered species, as well as other wildlife. Identify how the project may impact the desert tortoise relocation area.

Work with the Nevada Department of Wildlife and the United States Fish and Wildlife Service to identify potential impacts to wildlife movement and connectivity and commit to measures to allow for wildlife movement for all species (culverts, wildlife crossings, etc.) where possible.

From: Nguyen, Martin <Nguyen.Martin@epa.gov>
Sent: Wednesday, September 10, 2025 11:41 AM
To: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>; Guerrero, Joanie J <jjguerrero@blm.gov>
Cc: Kelly, ThomasP <Kelly.ThomasP@epa.gov>
Subject: RE: 2025-09-05_SNSA_Scoping_EPA_Comments

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hi all,

Please note there was a typo in our comment letter. On page 6, we wrote "The site also appears to be located in the Clark County nonattainment area for the 2015 ozone NAAQS [...]". That should read "The site also appears to be located near the Clark County nonattainment area for the 2015 ozone NAAQS".

The cover letter to our comments correctly states the Southern Nevada Supplemental Airport "would be located upwind of the 2015 ozone nonattainment area." Our letter also recommended "the Draft EIS/RMPA assess whether airport related activities will create emissions in nearly nonattainment or maintenance areas." Following that, we specifically mentioned "aircraft emissions to and from the airport through the 2015 ozone nonattainment area between the ground and the 10,000-foot mixing height." This demonstrates our understanding that the airport is not within the 2015 ozone nonattainment area. In addition, our recommendations for the Draft EIS/RMPA remains accurate despite our inconsistent statement.

Thank you,

Martin Nguyen
Environmental Review Section 2
U.S. EPA Region 9, Pacific Southwest
nguyen.martin@epa.gov
415.972.3590

From:	K. Emmerich
To:	SNSA EIS
Subject:	Comments on the Southern Nevada Supplemental Airport DOI-BLM-NV-S010-2025-0035-RMP-EIS
Date:	Friday, September 5, 2025 6:34:45 AM
Attachments:	USFWS 2019_DRAFT_RangewideMojaveDesertTortoiseMonitoring.pdf Allison_McLuckie_2018.pdf BRW-WWP-2025-Las Vegas airport.pdf

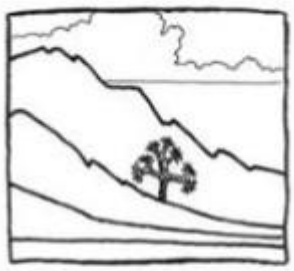
---

You don't often get email from atomicquailranch@gmail.com. Learn why this is important

Please accept these comments on the Southern Nevada Supplemental Airport DOI-BLM-NV-S010 2025-0035-RMP-EIS from Basin and Range Watch and Western Watersheds Project.

Thanks,

Kevin Emmerich
775-764-1080



Basin and Range Watch

WESTERN WATERSHEDS PROJECT

September 4th, 2025

To: Joanie Guerrero, Reality Specialist, Bureau of Land Management and David B. Kessler, AICP, Project Manager, SNSA, EIS, Federal Aviation Administration. Email sent to: SNSAEIS@landrumbrown.com

Re: Comments on the Southern Nevada Supplemental Airport DOI-BLM-NV-S010-2025-0035-RMP-EIS

Basin and Range Watch is a 501(c)(3) non-profit working to conserve the deserts of Nevada and California and to educate the public about the diversity of life, culture, and history of the ecosystems and wild lands of the desert.

Western Watersheds Project is a non-profit organization with more than 15,000 members and supporters. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives, and legal advocacy.

The Clark County Department of Aviation (CCDOA), the owner of Harry Reid International Airport (LAS), is proposing the development and operation of the Southern Nevada Supplemental Airport (SNSA) in Clark County, Nevada.

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for preparation of an Environmental Impact Statement (EIS) and will do so in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C. §4321 et seq.). BLM has also determined that it will evaluate the need for a Resource Management Plan Amendment (RMPA) for this project, and as a result the document will be a combined EIS/RMPA. The RMPA to modify the Visual Resource Management (VRM) class is being considered in order for the BLM to evaluate the established Ivanpah Transportation and Utilities Corridor, which will require amending the existing 1998 Las Vegas Resource Management Plan.

Alternatives:

Under the National Environmental Policy Act, BLM is required to consider a reasonable range of alternatives.

The "environmentally preferable alternative."

For projects requiring an EIS, the BLM must identify the "environmentally preferable alternative"—the one that would cause the least damage to the environment while also promoting NEPA's other goals. However, the agency is not required to select this alternative. A Record of Decision explains the ultimate choice and how it balances environmental, economic, and social considerations. 1

Due to the direct impacts that would be inflicted by the airport, we suggest that the following alternatives be considered. Under NEPA, BLM must consider alternatives outside of the jurisdiction of the lead agency.

Under Section 102 of FLPMA, Conservation is a priority: “the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use;”

The Moapa Paiute have asked for the airport to be considered on reservation land. While this would still have environmental impacts, it would remove the threats of increased overflights over the Mojave National Preserve, the Castle Mountains National Monument, and the Avi Kwa Ame National Monument.

Please consider an alternative that would expand existing airports in the region to accommodate more flights.

Please consider an alternative that would restrict all new flights resulting from the airport over the Mojave National Preserve and the Avi Kwa Ame National Monument.

A No Action Alternative is a Reasonable Alternative.

Because a “reasonable alternative” can be carried out based on environmental factors, BLM should consider the No Action Alternative as a Reasonable Alternative. Traditionally,

---

[1] Frequently Asked Questions — iNEPA

the BLM does a very minimal job of analyzing the No Action Alternative, but if the goals of conservation are carried through, No Action is the better alternative for this project.

Environmental Consequences:

Noise:

If more airport overflights are routed over the Mojave National; Preserve, Avi Kwa Ami National Monument and Castle Mountains National Monument, noise will impact wildlife and wilderness quality values. Species like desert tortoise, burrowing owls, several migratory bird species and even desert tortoises can be impacted by noise.

Noise impacts bighorn sheep by stressing individuals and leading to habitat avoidance, which can cause a decline in overall health, productivity, and population viability. Noise from sources like helicopters, off-highway vehicles, and human activity causes bighorn sheep to expend more energy fleeing, potentially impacting nutritional intake and reproduction, especially during critical periods like pregnancy.

Noise pollution from human activities can negatively impact burrowing owls by interfering with their ability to locate prey, detect predators, and communicate, though some species may show less avoidance of noise than others. The primary mechanism for hunting disruption is acoustic masking, where sounds of prey are masked by louder noise, and aversion to the noise itself. Increased noise also leads to more head-bobbing behavior as owls try to hear better, and it can force them to abandon suitable habitats.

Noise pollution negatively impacts migrating birds by degrading habitats, increasing stress, disrupting communication, and altering behavior, leading to reduced foraging efficiency, lower health, and potential avoidance of otherwise suitable stopover sites.

Noise impacts desert tortoises mainly through ground vibrations, not sound, triggering defensive behaviors like head withdrawal and freezing in response to events like aircraft noise, which can disrupt normal activity and expose them to unfavorable conditions. Although desert tortoises lack a strong acoustic startle response, they are sensitive to vibrations, which can affect their movement, communication, and overall energy expenditure, making them vulnerable to human-generated noise, especially from roads and other motorized recreation.

Noise from overflights will degrade the natural experience of people visiting the Mojave National Preserve, the Avi Kwa Ame National Monument and the Castle Mountains National Monument. These areas are surprisingly unspoiled yet are very close to the city of Las Vegas.

Noise will impacts residents who own properties within the Mojave National Preserve and Avi Kwa Ame National Monument.

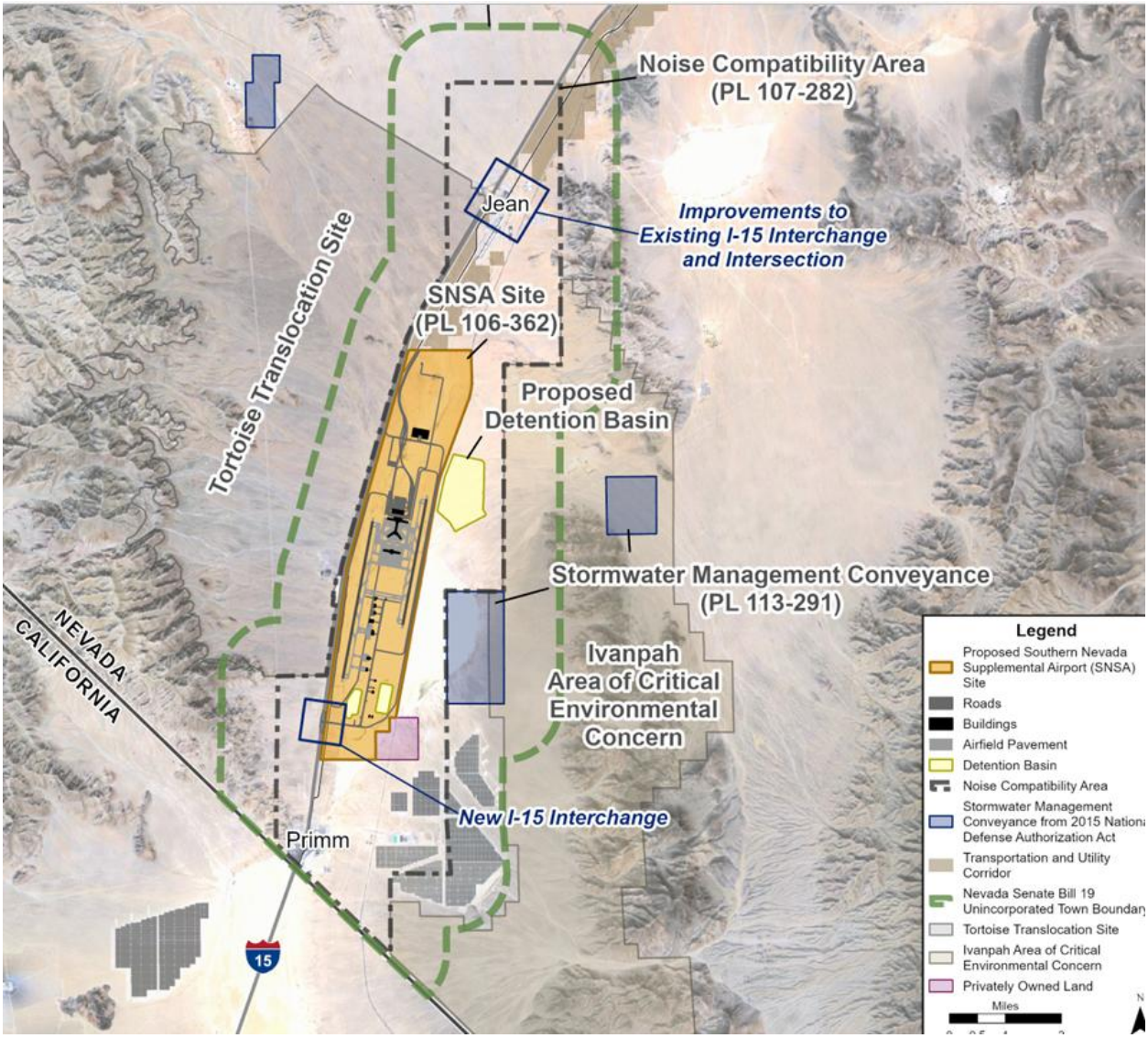
Constant overflight from planes will create unnatural visual impacts to adjacent national monuments and wilderness areas. The trails created by jets will also create unnatural visual impacts to these areas.

Cumulative Impacts from Growth and Urban Sprawl:

Building a 6,000-acre airport in this region will increase traffic and will bring new urban and residential development to the area and trigger more BLM land disposal for development. This will increase the population and bring a closer risk to the protected areas of overcrowding, vehicle trespass in restricted areas, illegal dumping, increased night lighting, illegal collecting of artifacts and protected biological resources, scaring wildlife and invasive weeds.

Direct Impacts of the Airport:

Desert Tortoise:



^The above map shows the airport plan but also shows the 31,000 Ivanpah Area of Critical Environmental Concern2 established in 2014 with a plan amendment to the Las Vegas Resource Management Plan and Record of Decision approving the Silver State South Solar Project. The Ivanpah Valley Area of Critical Environmental Concern (ACEC) protects significant wildlife, cultural resources, and critical desert tortoise habitat from threats like habitat fragmentation caused by solar development and other forms of urbanization.

Purpose:

[2] Final Supplementary Environmental Impact Statement for the Silver State Solar South Project and Las Vegas Field Office Resource Management Plan Amendment

To conserve intact habitat for the desert tortoise, which is a threatened species, and to protect cultural resources, scenic landscapes, and other important biological and cultural values.

Threats:

The ACEC was nominated and designated in response to the impacts of large-scale energy projects like the Ivanpah Solar Electric Generating System, Stateline Solar and the Silver State South Solar Project which were fragmented habitat and negatively affected the desert tortoise.

Management:

The BLM is responsible for managing the ACEC and developing associated management plans to balance conservation with other public land uses.

Mojave desert tortoise abundance between 2004 and 2014 declined 67% in the Eastern recovery Unit (Allison and McLuckie 2018, USFWS 2019).

The Mojave Population of the Agassiz's desert tortoise was listed as Threatened by the US Fish and Wildlife Service (USFWS) in 1990 followed by the designation of critical habitat in 1994. In 2000, the USFWS began systematically surveying tortoise populations in critical habitat and recovery unit areas to determine population trends. Based on their findings (USFWS 2015), which are briefly summarized in the chart, we convinced that the Mojave Population of the Agassiz's desert tortoise should be federally listed as Endangered rather than Threatened.

Recovery Unit: Designated Critical Habitat Unit/Tortoise Conservation Area	Surveyed area (km^2)	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km^2 (SE)	% 10-year change (2004–2014)
Western Mojave, CA	**6,294**	**24.51**	**2.8 (1.0)**	**–50.7 decline**
Fremont-Kramer	2,347	9.14	2.6 (1.0)	–50.6 decline
Ord-Rodman	852	3.32	3.6 (1.4)	–56.5 decline
Superior-Cronese	3,094	12.05	2.4 (0.9)	–61.5 decline
Colorado Desert, CA	**11,663**	**45.42**	**4.0 (1.4)**	**–36.25 decline**
Chocolate Mtn AGR, CA	713	2.78	7.2 (2.8)	–29.77 decline
Chuckwalla, CA	2,818	10.97	3.3 (1.3)	–37.43 decline
Chemehuevi, CA	3,763	14.65	2.8 (1.1)	–64.70 decline
Fenner, CA	1,782	6.94	4.8 (1.9)	–52.86 decline
Joshua Tree, CA	1,152	4.49	3.7 (1.5)	+178.62 increase
Pinto Mtn, CA	508	1.98	2.4 (1.0)	–60.30 decline
Piute Valley, NV	927	3.61	5.3 (2.1)	+162.36 increase
Northeastern Mojave	**4,160**	**16.2**	**4.5 (1.9)**	**+325.62 increase**
Beaver Dam Slope, NV, UT, AZ	750	2.92	6.2 (2.4)	+370.33 increase
Coyote Spring, NV	960	3.74	4.0 (1.6)	+ 265.06 increase
Gold Butte, NV & AZ	1,607	6.26	2.7 (1.0)	+ 384.37 increase
Mormon Mesa, NV	844	3.29	6.4 (2.5)	+ 217.80 increase
Eastern Mojave, NV & CA	**3,446**	**13.42**	**1.9 (0.7)**	**–67.26 decline**
El Dorado Valley, NV	999	3.89	1.5 (0.6)	–61.14 decline
Ivanpah, CA	2,447	9.53	2.3 (0.9)	–56.05 decline
Upper Virgin River	***115***	***0.45***	***15.3 (6.0)***	***–26.57 decline***
Red Cliffs Desert	*115*	*0.45*	*15.3 (6.0)*	*–26.57 decline*
Range-wide Area of CHUs - TCAs/Range-wide Change in Population Status	**25,678**	**100.00**		**–32.18 decline**

^ The table includes the area of each Recovery Unit and Tortoise Conservation Area (TCA), percent of total habitat, density (number of breeding adults/km2 and standard errors = SE), and the percent change in population density between 2004 and 2014. Populations below the viable level of 3.9 breeding individuals/km2 (10 breeding individuals per mi2) (assumes a 1:1 sex ratio) and showing a decline from 2004 to 2014 are in red.

Direct Impacts to Desert Tortoises:

These would include habitat removal, direct kills from construction, noise, invasive weed, herbicides and illegal poaching.

Cumulative Impacts:

The airport would create another big loss of habitat, in this case, about 6,000 acres. The Ivanpah Valley has already been impacted by a major highway, a jail, two big resorts, a golf course and 7,000 acres of large-scale solar development.

The airport would also be built inside the Ivanpah designated Critical Habitat for the desert tortoise. Approval of the airport would be a significant loss of habitat in this important conservation area.

Rare Plants:

Impacts to many species of sensitive plants need to be thoroughly analyzed, and populations avoided. White-margined penstemon (*Penstemon albomaginatus*) populations requite sandy Mojave Desert flats, and are protected by the Ivanpah ACEC. What will be the direct, indirect, and cumulative impacts to this rare plant and others as well? The white-margined penstemon is advancing through a petition to a positive 90-day finding by the U.S. Fish and Wildlife Service to be potentially listed on the federal Endangered Species Act.[3]

Clark County Multiple Species Habitat Conservation Plan:

Agreed-upon conservation lands in Clark County, NV, have been protected for decades for Mojave desert tortoise and many other covered species, including on lands where the supplemental airport is proposed. The cumulative impacts of numerous utility-scale solar projects, approved Greenlink West Transmission Project, and urban growth already threaten these public lands, potentially violating the plan. This needs to be analyzed.

Thank you,

Kevin Emmerich
Co-Founder
Basin and Range Watch
Box 70
Beatty, NV 89003
aromicquailranch@gmail.com

Laura Cunningham
California Director
Western Watersheds Project
Cima CA 92323
Mailing: P.O. Box 70
Beatty NV 89003
lcunningham@westernwatersheds.org

[3] https://biologicaldiversity.org/w/news/press-releases/nevada-wildflower-toad-advance-toward-endangered-species-protections-2024-01-24/

References:

Allison, L. J. and A. M. McLuckie. 2018. Population trends in Mojave desert tortoises (*Gopherus agassizii*). Herpetological Conservation and Biology 13(2):433–452.

U.S. Fish and Wildlife Service. 2019. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2018 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

Herpetological Conservation and Biology 13(2):433–452.
Submitted: 19 February 2018; Accepted: 24 June 2018; Published: 31 August 2018.

Population Trends in Mojave Desert Tortoises (*Gopherus agassizii*)

Linda J. Allison[1,3] and Ann M. McLuckie[2]

[1]*Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada 89502, USA*
[2]*Utah Division of Wildlife Resources, Washington County Field Office, 451 N SR-318, Hurricane, Utah 84737, USA*
[3]*Corresponding author, email: linda_allison@fws.gov*

***Abstract.*—Populations of the Mojave Desert Tortoise (*Gopherus agassizii*) experienced severe declines in abundance in the decades leading up to 1990, when the species was listed as threatened under the U.S. Endangered Species Act. Population responses to recovery efforts have not been well documented because of the difficulties of studying this low-density, cryptic species over a time period appropriate to its long generation time. We used line distance sampling to estimate annual adult densities since 1999 in Utah and since 2004 elsewhere in the range of Mojave Desert Tortoises. We used generalized least squares regression on log-transformed adult tortoise densities to estimate annual percentage change through 2014 in each of 17 Tortoise Conservation Areas (TCAs) in the five recovery units. We report annual proportional increases in density of adults in the Northeastern Mojave Recovery Unit, but declines in the other four recovery units. Adjusting these densities and trends for the area of potential habitat in each recovery unit, we estimated that in 2004 there were 336,393 adult tortoises (standard error [SE] = 51,596), with an overall loss of 124,050 adult tortoises (SE = 36,062) by 2014. The proportion of juveniles in our surveys has been decreasing in all five recovery units since 2007. Prevailing declines in the abundance of adults overall and in four of the five recovery units indicate the need for more aggressive implementation of recovery actions and more critical evaluation of the suite of future activities and projects in tortoise habitat that may exacerbate ongoing population declines.**

Key Words.—Colorado Desert; distance sampling; information theory; long-term monitoring; Mojave Desert; species recovery

Introduction

Turtles around the world face the highest level of endangerment of any vertebrate lineage today (Stanford et al. 2018). Historical extinctions and recent crises have characterized species on islands or with relatively localized and easily exploitable populations (Stanford et al. 2018). However, turtles as a group are vulnerable in part due to their shared life histories based on high adult survival, delayed age at first reproduction, and low rates of juvenile recruitment (Congdon et al. 1993; Stanford et al. 2018). Even tortoises with relatively large historical ranges are susceptible to threats with relatively small effects, in combination and acting over long generation times, and this life-history strategy also diminishes their ability to recovery quickly from population losses.

Populations of the Desert Tortoise (*Gopherus agassizii*, *sensu stricto*) experienced severe declines in abundance in the decades leading up to 1990, when populations in the Mojave and Colorado deserts west and north of the Colorado River were listed as Threatened under the U.S. Endangered Species Act (U.S. Fish and Wildlife Service [USFWS]1990). Murphy et al. (2011) split the full species into two: the Mojave Desert Tortoise (*Gopherus agassizii*) occupying the range north and west of the Colorado River (the same area listed as Threatened above and retaining this listing) and the Sonoran Desert Tortoise (*G. morafkai*) south and east of the Colorado River. Population responses to recovery efforts for *G. agassizii* have not been well documented, in part, because of the difficulties of studying this low-density, long-lived species. The current recovery plan (USFWS 2011) designates five recovery units for *G. agassizii* that are intended to conserve genetic, behavioral, and morphological diversity necessary for the long-term recovery of the entire listed species (Fig. 1). The recovery plan also defines criteria that form the basis for decisions about continued listing status. For instance, rates of population change of *G. agassizii* should be increasing for at least one tortoise generation (25 y) in all recovery units to warrant delisting (USFWS 2011).

Whereas *G. agassizii* (*sensu stricto*) were initially protected on the basis of population declines estimated on a limited number of small, selectively located mark-recapture study plots, over the longer term, status descriptions should be based on more extensive and rigorous population estimates (Tracy, R.C., R. Averill-Murray, W.I. Boarman, D. Delehanty, J. Heaton, E. McCoy, D. Morafka, K. Nussear, B. Hagerty, and

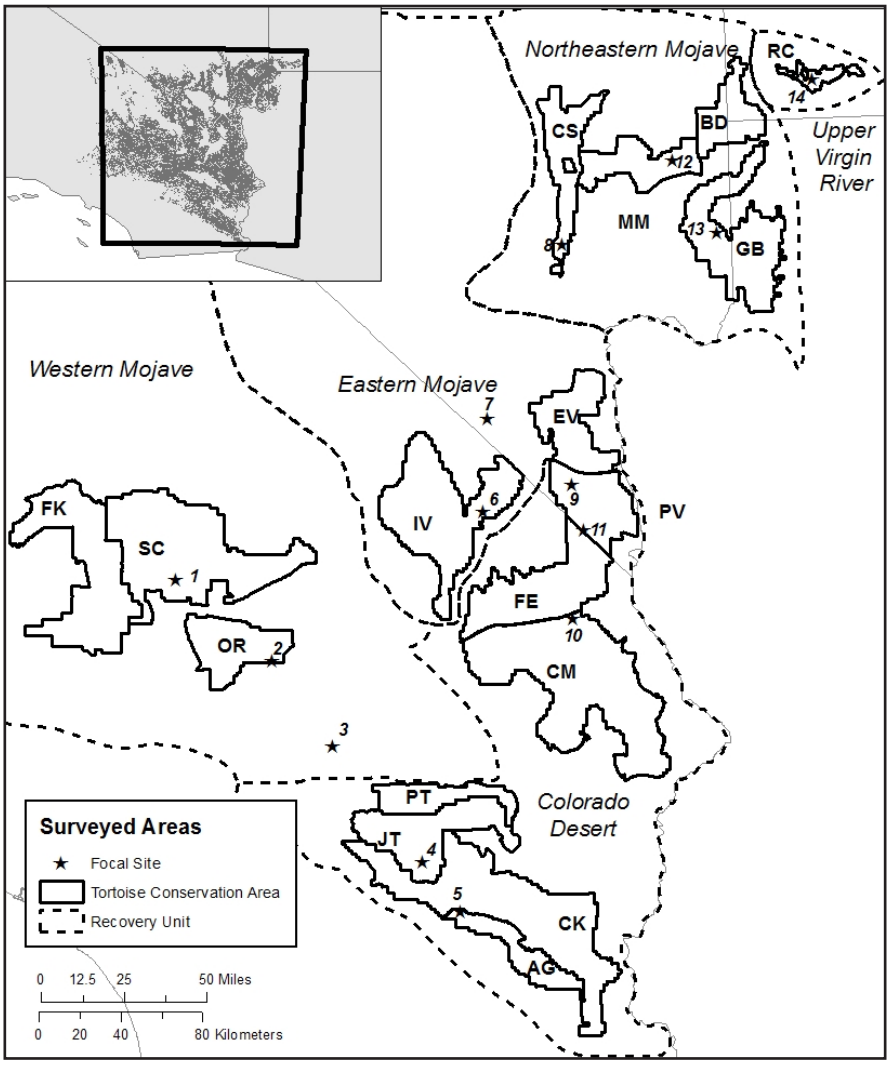


Figure 1. Tortoise Conservation Areas (TCAs, n = 17) for Mojave Desert Tortoises (*Gopherus agassizii*) that were monitored in the Mojave and Colorado deserts, USA. Sites were monitored through 2014 and began in 2004 except in the Red Cliffs Desert Reserve, where surveys started in 1999. TCAs and their codes are Chocolate Mountains Aerial Gunnery Range (AG), Beaver Dam Slope (BD), Chuckwalla (CK), Chemehuevi (CM), Coyote Springs Valley (CS), Eldorado Valley (EV), Fenner (FE), Fremont-Kramer (FK), Gold Butte-Pakoon (GB), Ivanpah (IV), Joshua Tree (JT), Mormon Mesa (MM), Ord-Rodman (OR), Pinto Mountains (PT), Piute Valley (PV), Red Cliffs (RC), Superior-Cronese (SC). Observations to estimate visibility were made of transmittered tortoises at the numbered focal sites: 1) Superior-Cronese, 2) Ord-Rodman, 3) Twentynine Palms, 4) Joshua Tree, 5) Chuckwalla, 6) Ivanpah, 7) Jean, 8) Indian Springs, 9) Piute Valley 1, 10) Chemehuevi, 11) Piute Valley 2, 12) Halfway Wash, 13) Gold Butte, 14) Red Cliffs. Potential habitat as defined in the text is overlain on the southwestern United States in the extent indicator.

P. Medica. 2004. Desert Tortoise Recovery Plan Assessment. Report to the U.S. Fish and Wildlife Service, Reno, Nevada. Available from http://www.fws.gov/nevada/desert_tortoise/documents/dtrpac/dtrpac_report.pdf [Accessed 15 August 2018]). In 1999, agencies cooperating on recovery of *G. agassizii* adopted distance sampling (Buckland et al. 2001) for estimating population density at large spatial scales. Surveyors use distance sampling to account for the proportion of the population that is not observed at increasing distances from the observers. We conducted distance sampling surveys for *G. agassizii* throughout Tortoise Conservation Areas (TCAs; Fig. 1), which include federally designated critical habitat for the species (USFWS 1994), as well as in contiguous areas with conservation designations and suitable tortoise habitat (Nussear et al. 2009). Most recovery units (USFWS 1994, 2011) contained more than one TCA (Fig. 1). Ongoing monitoring for *G. agassizii* based on distance sampling has been conducted since 1997 in the Upper

Virgin River Recovery Unit by the Utah Division of Wildlife Resources and by the USFWS in the remaining four recovery units starting in 2001.

In this paper, we start by developing annual density estimates for each TCA based on distance sampling. These efforts are typically collaboratively funded with each agency requiring annual reports that include annual population estimates. Our second and primary goal herein was to use these annual estimates to describe adult *G. agassizii* population trends for each TCA and recovery unit. These trends must account for precision of annual estimates that is often low, variable, and correlated between TCAs within years. Although we cannot fully evaluate the recovery criterion that requires increasing population numbers in each recovery unit until at least 25 y of surveys have been completed (USFWS 2011), this monitoring program is part of the adaptive management strategy for recovering *G. agassizii*. Our third goal was to use the interim regional population trends to evaluate the effectiveness of the recovery program. Our fourth goal was to characterize future trajectories for these populations based on changing patterns of relative abundance of juveniles.

Materials and Methods

Study areas.—*Gopherus agassizii* occur throughout large, continuous regions of the Mojave and Colorado deserts of North America (Fig. 1). They occupy a broad elevational range (sea level to 2,225 m) from valley bottoms and bajada slopes at lower elevations to upper alluvial and mountain slopes at higher elevations (Luckenbach 1982). Typical habitat for *G. agassizii* is Creosote Bush (*Larrea tridentata*) scrub in association with White Bursage (*Ambrosia dumosa*) but they are also found in Joshua Tree (*Yucca brevifolia*) woodland, Blackbrush (*Coleogyne ramosissima*) scrub, microphyll woodlands, Shadscale (*Atriplex confertifolia*) scrub, saltbush (*Atriplex* spp.) scrub, cactus scrub, and warm season grassland (Germano et al. 1994; Nussear et al. 2009). Throughout their range, tortoises inhabit areas that include deeply incised washes, sandstone outcrops, rugged rocky canyons, and basalt-capped ridges interspersed with sandy valleys (Bury et al. 1994). However, tortoises most commonly occur in areas with gentle slopes, sufficient shrub cover, and friable soils to allow burrow construction (Bury et al. 1994).

Starting in 1997 in Upper Virgin River Recovery Unit and in 2001 elsewhere, we surveyed 17 TCAs across the five recovery units (Fig. 1). We did not survey every TCA every year, but the total area of 29,127 km^2 comprises the long-term monitoring frame (Table 1). The TCAs named for Red Cliffs Desert Reserve (RC) and Joshua Tree National Park (JT) exclude portions of these jurisdictions that were not potential tortoise habitat (USFWS 1994); RC also excluded a portion that was used for translocations of wild tortoises displaced by development. Each year we made behavioral observations on tortoises at up to 11 of the 14 focal sites within the overall study area (Fig. 1) to estimate the proportion of tortoises that were potentially visible to transect surveyors.

Data collection.—Initially, we placed transects randomly within each TCA. In RC, these were permanent transect locations from the beginning of the program, and we surveyed the 153 transects annually between 1999 and 2001, then every other year. Between 2001 and 2003 in the rest of the range, there was restricted sampling based on various environmental criteria (USFWS 2006), so for comparability we only used data collected starting in 2004 when transects were sited at random throughout TCAs. Beginning in 2007 in these areas outside RC, we shifted from strictly random placement to random selection from a set of systematically placed transects that covered each TCA. Both of these methods result in transects that were located at random with respect to the location of tortoises, so the resulting annual density estimates are unbiased. Each year, available funding determined the number of transects assigned in each TCA.

Sampling methods we used adhered to study design considerations for distance sampling (Anderson, D.R., and K.P. Burnham. 1996. A monitoring program for the desert tortoise. Report to the Desert Tortoise Management Oversight Group. Available from https://www.fws.gov/nevada/desert_tortoise/documents/reports/Anderson-Burnham.1996.monitoringplan.pdf. [Accessed 15 August 2018]). We based initial transect and overall survey length on preliminary estimates of encounter rate and associated effort required to estimate density with a coefficient of variation (CV) of 0.10–0.15. We modified the number and length of transects as specified in Buckland et al. (2001) during earlier years of the surveys and based on updated information about encounter rates.

We completed surveys between mid-March and the end of May each year, when preferred food plants flower and *G. agassizii* are generally active outside of burrows. We started transects early enough so surveys would be completed before the hottest time of the day, scheduling survey dates in specific TCAs to correspond to peak daily tortoise activity based on past experience as well as observation of tortoises outfitted with radio-transmitters (see below). Surveys generally started around 0800 during March but started as early as sunrise by the beginning of May.

Generally, each two-person team walked one transect each day, using a compass and pre-specified bearings. Standard transects were 12 km long, walked in a

Table 1. Tortoise Conservation Areas within each Recovery Unit including total area (km²) and total effort (km) by year. Tortoise Conservation Areas (with acronym; Acr) are grouped under corresponding larger recovery units. Red Cliffs Desert Reserve was also surveyed in 1999 (307 km), 2000 (302 km), 2001 (314 km) and 2003 (309 km).

Tortoise Conservation Area	Acr	Area (km²)	2004	2005	2007	2008	2009	2010	2011	2012	2013	2014
Colorado Desert		13,530	3,319	3,984	2,007	1,348	1,375	2,383	1,316	1,403		
Chocolate Mtn Aerial												
Gunnery Range	AG	755	331	228	404	158	378	378		363	413	554
Chuckwalla	CK	3,509	1,083	866	747	112		613	280	213		
Chemehuevi	CM	4,038	836	1,129	180	84	119	458	354	176		
Fenner	FE	1,841	410	288	178	108	121	246	179	168		
Joshua Tree	JT	1,567	278	601	135	102	240	227	147	183		
Pinto Mountains	PT	751	56	155	131	72	162	213	118	140		
Piute Valley	PV	1,070	325	717	231	713	355	249	239	159		
Eastern Mojave		3,720	876	620	368	714	548	578	746	639		
Eldorado Valley	EV	1,153	361	452	188	594	427	212	331	320		
Ivanpah	IV	2,567	515	168	180	120	120	365	416	318		
Northeastern Mojave		4,889	1,037	1,489	2,304	1,485	4,154	4,265	3,984	4,184		
Beaver Dam Slope	BD	828		421	478	2578	631	662	751	819	683	
Coyote Springs Valley	CS	1,117	365	237	906	1,592	1,504	1,046	967	996		
Gold Butte-Pakoon	GB	1,977	361	432	300		733	1,258	1,039	1,116	923	
Mormon Mesa	MM	968	311	398	621	691	1,286	1,298	1,227	1,253		
Western Mojave		6,873	1,534	1,979	896	599	1,351	2,144	1,257	876		2,095
Fremont-Kramer	FK	2,417	463	661	300	216	361	566	264	193		815
Ord-Rodman	OR	1,124	381	310	141	102	197	270	174	158		472
Superior-Cronese	SC	3,332	690	1,009	456	281	793	1,307	820	525		808
Upper Virgin River		115		305	308		310		310		314	
Red Cliffs Desert Reserve	RC	115		305	308		310		310		314	

square that was 3 km on each side. Where relatively open creosote-bursage alluvial slopes dominated the landscape, we found that repeated searching near the centerline did not improve encounter rates or detection on the line (USFWS 2006), so we did not mark the transect centerline for additional search effort. Instead, the leader surveyed along a straight path with a 25-m cord trailing behind. The second observer followed at the end of the moving cord and searched independently. The cord served as the transect centerline when taking distance measurements, and we calculated the walked length of these transects as the straight-line distance between GPS point coordinates that were recorded approximately 500 m apart along the transect.

In RC, where terrain rendered tortoises less visible, surveyors used a three-pass survey to effectively search on and near the marked transect centerline. One crew member, Observer A, dragged the end of the 50-m surveyor tape, following the transect bearing to its intended location. Observer A then walked in a sinusoidal pattern back toward the beginning of the tape searching for tortoises on one side of the tape while the other crew member walked in a similar sinusoidal pattern on the opposite side. Observer A then searched directly along the tape back to the end. The process repeated itself, with the roles of the two surveyors reversing each time. This intensive searching and the rugged terrain limited transects to 2 km per team each day.

We measured the distance and bearing of the tortoise to the observer on the center line in order to calculate the perpendicular distance of the tortoise to the transect center line. We measured distances with 30-m fiberglass or 50-m surveyor tapes, and we measured bearings with compasses. We used all observations of tortoises > 180 mm carapace length (CL) to develop detection curves and density estimates, whether tortoises were in burrows, in the open, or under vegetation. When tortoises were on the surface or could be easily extracted from burrows, we recorded CL and sex. Without suggesting that there is a single size threshold for reproduction within or between populations (Germano 1994), we refer hereafter to tortoises that are at least 180 mm CL as adults and smaller tortoises as juveniles.

Because we placed transects at random with respect to terrain and human infrastructure, and because standard transects were 3 km on each side, it was not unusual for the surveyed path to cross through varied terrain or be blocked by an obstacle such as a highway.

The rules for modifying transects in these situations involved reflecting or elongating transects to avoid obstacles associated with human infrastructure (large roads, private inholdings, etc.), or shortening transects in rugged terrain. The sampling frame therefore represented the walkable area of each TCA. Transects that were partially outside TCA boundaries were initially completed without regard for these jurisdictional changes, but where the boundary was impassable, we reflected transect segments into TCAs as needed (Buckland et al. 2001) or pivoted shorter transects in RC on their northeastern corner to fit inside the TCA. By 2010 we reflected transects so that all paths were inside TCAs.

We used behavioral observations of tortoises carrying radio transmitters (Boarman et al. 1998) to estimate the proportion of individuals available to be seen above ground or in burrows during transect surveys, G_0 (Anderson and Burnham, *op. cit*.). Telemetry technicians used a VHF radio receiver and directional antenna to locate radio-equipped tortoises (n = 5–30) at each focal site (Fig. 1) during the same daily time period when field crews were walking transects in that region of the desert. Observers completed a survey circuit of all transmittered animals as many times as possible (range, 0–5 times per day) during the allotted time, recording each time whether the tortoise was visible.

Estimation of annual tortoise density in each TCA.—We used distance sampling (Buckland et al. 2001) to develop density estimates based on encounter rates in each TCA adjusted for imperfect detection of animals farther from the transect centerline. Estimates were developed each year separately for reporting to sponsoring agencies. We used Program DISTANCE, 6.2 (Thomas et al. 2010), to estimate P_a, the proportion of adult *G. agassizii* detected within w meters of the transect centerline. We truncated observations by distance from the centerline to improve model fit as judged by the simplicity of the resulting detection function (Buckland et al. 2001). Truncation typically reduced the number of observations overall by 5% or fewer, improving estimates of detection probability but reducing the number of observations to estimate encounter rate in each TCA. Sample size considerations also contributed to our decision to rely on pooling robustness (Buckland et al. 2001) rather than using covariates to model detection function estimates (Marques et al. 2007). Detection function estimation is robust in the face of pooling data from different observers, on different days, and in different areas (Buckland et al. 2001) as long as factors that cause variability in detection probability are represented proportionately (Marques et al. 2007). Such factors include vegetation that differentially obscures vision with distance and different detection patterns characteristic of individual crews (pairs). Crews on the same team walked the same number of transects although crews on different teams might not. For these reasons, we placed transects at random in each TCA and developed separate detection curves each year for each field team, pooling data from all TCAs surveyed by that team. Teams also correspond to regions of the desert, and years are correlated with precipitation conditions that affect spring vegetation height and cover, so detection curves that are created separately for teams and years also indirectly address additional factors that affect detection. In years when a team surveyed both in the Mojave and the Sonoran deserts, where the vegetation types may affect tortoise detection differentially, we used two separate detection curves if the sum of their AIC values was less than the AIC value for the single detection curve for the team. In RC, where the same transects were walked each year, we used a single detection curve for all years of the study. Although we pooled observations from multiple TCAs (or from multiple years in RC) for each detection curve, we estimated adult tortoise encounter rates (n/L) and the variance of n separately for each TCA each year.

The distance to which observations were truncated, w, determined the reported area searched in each TCA, $2wL$, where L is the total length in kilometers walked. We applied Akaike's Information Criterion (AIC) to select among detection-function models (uniform, half normal, and hazard-rate) and key function/series expansions recommended in Buckland et al. (2001). Where more than one model were strongly supported by the data, we selected on the basis of Chi-square goodness-of-fit statistics near the transect centerline.

If there is imperfect detection on the transect centerline, a further correction factor must be applied to estimate the true density of tortoises. Because transects in RC used a three-pass method to search the centerline, we assumed that all tortoises at the transect centerline were detected. Elsewhere, detections by two observers walking the centerline one after the other allowed estimation of the detection probability for tortoises within increasing distances from the transect centerline as for a two-pass removal estimator (White et al. 1982); this provides a test of the assumption that all tortoises on the transect centerline are recorded ($g(0) = 1$).

We used a final correction factor, G_0, to adjust the density estimate to account for tortoises hidden in burrows in addition to those that were visible. Each bootstrapped estimate of G_0 was based on one randomly selected visibility record for each tortoise outfitted with a radio transmitter on each day it was located. We generated 1,000 bootstrap samples in PASW Statistics (release 18.0.2, SPSS, Inc. Chicago, Illinois, USA) to estimate G_0 and its standard error by site.

Annual density in each TCA was estimated as:

$$D = \frac{n}{2wLP_aG_0g(0)}.$$

Whereas n and L were estimated separately for each TCA, observations from multiple TCAs were used to generate a single estimate of P_a. We also applied estimates of G_0 to more than one TCA, and we based estimates of $g(0)$ on all observations from the two-pass surveys. This pooling of information can lead to covariance between TCA estimates in a given year (see below). Although two of the correction factors have similar symbols, when the parameter symbol involves a capital letter (G_0), we are referring to the proportion visible; the lower-case letter refers to the probability of detection of visible tortoises at the centerline.

Describing trends in adult tortoise densities.—We used R 3.4.1 (R Core Team 2017) to develop marginal models (Pinheiro et al. 2017) describing the natural log of tortoise density per km^2 as a function of year and location. Logarithmic transformations have a special interpretation when modelling trends; a modest linear trend in a logarithmic quantity represents a proportional change rather than a linear one (Keene 1995). A slope of 0.05 for ln(density) regressed on years, for instance, would be interpreted as a 5% increase per year. Our models included TCA, Year, and Year^2. Year was centered before modeling (Schielzeth 2010). Year^2 was included to capture any curvilinear population responses, and we anticipate modeling additional polynomial terms in the future when we are considering a longer time period. The full model also included two-way interactions between TCA and the linear and quadratic time factors. We used generalized least squares regression to also weight annual density estimates based on their variance and to add covariance structure to account for sets of density estimates that were inherently correlated because they shared correction factors of P_a or G_0 (Pekar and Brabec 2016). This second level of analysis therefore incorporated information about the first-level (annual density) variances and covariances.

We used a model based on the full suite of fixed effects to select among different variance weighting and covariance structures (Zuur et al. 2009). We used model selection procedures based on second-order AIC (AIC_c, Burnham and Anderson 2002; Mazerolle 2015) to decide whether to weight the analysis by the variance or CV of the annual density estimates. We also considered whether to model correlations among residuals for density estimates from the same Year, or due to use of pooled G_0 and P_a estimates for multiple TCA density estimates (see above). For all subsequent tests of potential fixed-effects models, we selected a covariance structure to account for within-Year correlation of residuals and weighted optimization procedures as a function of the CV of annual density estimates.

With the final variance weighting and correlation structures in place, we used AIC_c for selection among alternative models and examined the fit of the best model using marginal r^2 (Nagelkerke 1991). We used ANCOVA to examine whether slopes and intercepts of TCAs in each recovery unit described the same pattern (Zar 1996). To apply tortoise densities from the TCAs to entire recovery units, we estimated the area of potential habitat in each of the five recovery units based on Nussear et al. (2009). We only considered 1-km^2 grid cells assigned a probability of occupancy > 0.5 as potential habitat (Liu et al. 2005) after removing any area identified as an impervious surface (Fry et al. 2011).

Describing trends in representation of juvenile size class.—During surveys, we noted all observed tortoises of any size; however, smaller tortoises were less detectable than adults and there were too few observations of smaller tortoises to make density estimates based on distance sampling. Instead, to complement our analysis of changes in the abundance of adult tortoises, we used mixed effects logistic regression (Bates et al. 2015) to evaluate the relative proportion of juvenile tortoises detected in each recovery unit, fitting the observations to models including Year, Year^2, Recovery Unit, and two-way interactions between Recovery Unit and the time factors as predictors. We also included the categorical form of Year as a random factor to account for any enforced correlation across the recovery units in proportion of juveniles present due to annual conditions. Because we observed many fewer juvenile tortoises than adults, we report results at the larger spatial scale of the recovery unit rather than for each TCA. Tortoises that could not be extracted from burrows were often classified as unknown rather than as adults or juveniles, especially earlier in the study period. We conservatively assumed all unclassified tortoises were adults, so that estimates of the proportion of juvenile observations earlier in the time series were not inflated. Lacking information on detectability of juveniles to correct our raw data, the relative proportion of juveniles that we examined reflected their representation among detected animals, not the actual proportion of juveniles in the population. We used AIC for model selection, weighting, and averaging (Barton 2015). Note that because the continuous input variable Year was standardized to a mean of zero and divided by two standard deviations before model development (Schielzeth 2010), we could consider models with the quadratic form of this variable even if the linear form was not present in the model; this is equivalent to assuming opposing trends at the start and end of the study period

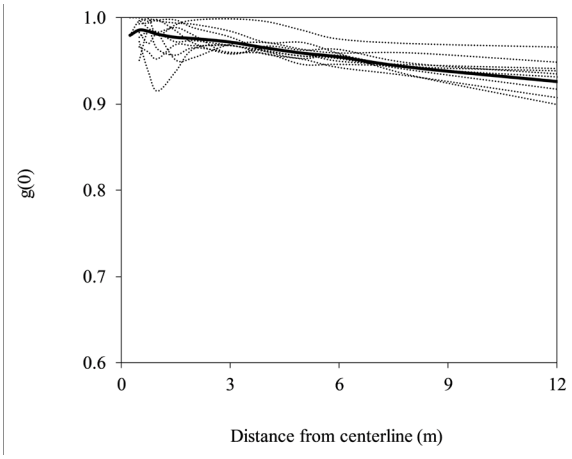


Figure 2. Detection of Mojave Desert Tortoises (*Gopherus agassizii*) at the transect centerline (*g(0)*) based on all two-pass survey observations as remote as x meters from the transect centerline. Dotted lines are annual curves; solid line is overall pattern across years from 2004 through 2014 (no surveys conducted in 2006). Note the convergence of *g(0)* on 1.0 as x goes to 0.

but no average trend overall. This standardization also allowed us to use model averaging on interaction terms (Schielzeth 2010). For models describing Year^2 effects, the inflection point at which trends shifted between increases and decreases in the odds of encountering juveniles on surveys was estimated as $-\beta_{Year}/2\beta_{Year}{}^2$.

Results

Adult densities and trends.—Annual probability of detection within 2 m of the transect centerline varied from 0.95 to 1.00, and converged on *g(0)* = 1.0 (Fig. 2), so we added no *g(0)* correction to annual density estimates. In contrast, although estimated tortoise visibility (G_0) was generally greater than 0.80, it was estimated as low as 0.35 at Chemehuevi in 2012 (Fig. 3, Appendix A), illustrating the degree of bias possible if tortoise density estimates do not include corrections for tortoises unavailable for detection. Some of our focal sites were consistently characterized by more above-ground activity than others (Fig. 3). The half-strip width, w, was generally between 12 and 22 m (Appendix B). Detection rate, P_a, was 0.64 in RC and averaged 0.45 in the other TCAs, where two-pass surveys were implemented; however, whether two- or three-pass sampling was used, the detection shoulder near the centerline consistently indicated nearly complete detection out to 2 m (10% of w) as recommended by Buckland et al. (2001).

Annual density estimates ranged from 0.2 adult tortoises/km^2 (SE = 0.2) in GB in 2005 to 28.0/ km^2 (SE = 4.0) in RC in 2000 (Table 2). During the first years reported here (2004 and 2005), TCAs in the Northeastern Mojave Recovery Unit had lower mean densities (< 5.0/

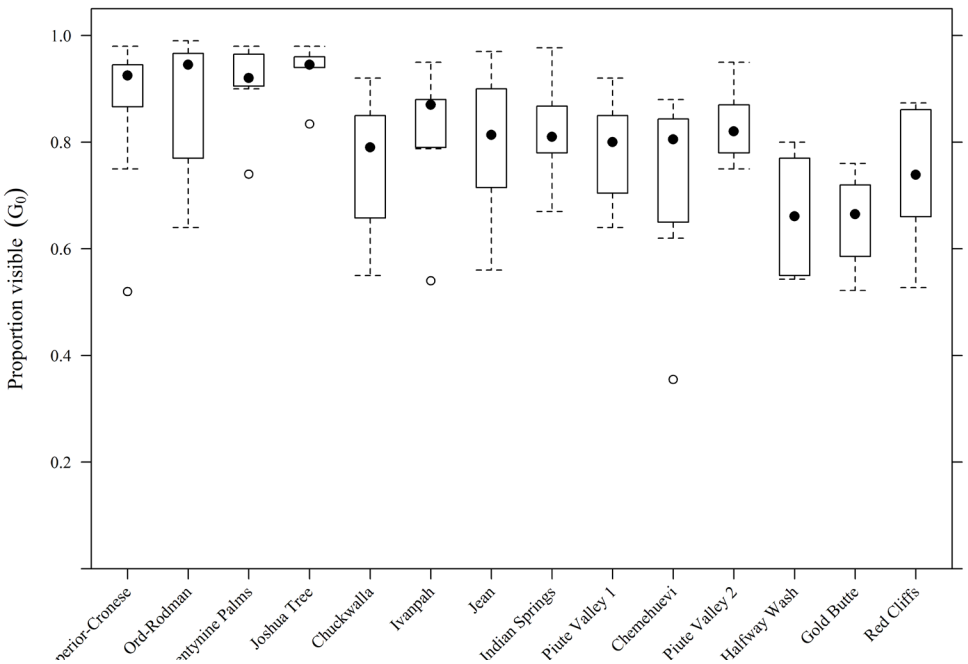


Figure 3. Box and whisker plots indicating the proportion of adult Mojave Desert Tortoises (*Gopherus agassizii*) visible (G_0) at each of 14 focal sites shown in Fig. 1 during transect surveys from 1999 through 2014. Boxes represent the interquartile range (values from the 25th – 75th percentile), crossed by a heavy bar at the median. Dotted-line whiskers indicate the extent of the 12.5–87.5 percentile, with any values outside this range shown as hollow dots below some whiskers. Sites are ordered from west on the left to east. Not all focal sites were used to correct density estimates each year. For instance, only Red Cliffs was monitored before 2004, and Jean was used in only one year of observation.

Table 2. Densities (n/km^2) of adult Mojave Desert Tortoises (*Gopherus agassizii*) and corresponding standard errors (SEs) in each Tortoise Conservation Area (TCA) from 2004 to 2014. Acronyms for TCAs are given in Table 1. RC was also surveyed earlier: 1999 (34.3, SE = 11.32), 2000 (25.7, SE = 5.61), 2001 (24.4, SE = 5.69), 2003 (14.0, SE = 2.79).

TCA within Recovery Unit	Year									
	2004	2005	2007	2008	2009	2010	2011	2012	2013	2014
Colorado Desert										
AG	11.4 (3.55)	13.4 (4.31)	6.5 (1.50)	4.5 (2.56)	7.5 (2.74)	13.8 (3.52)		6.0 (1.84)	7.3 (1.96)	8.4 (2.09)
CK	4.9 (1.49)	6.0 (1.77)	4.3 (1.19)	4.2 (2.84)		3.7 (1.14)	3.9 (1.37)	3.9 (1.62)		
CM	6.7 (1.27)	10.3 (3.10)	3.9 (1.71)	4.8 (3.07)	9.4 (5.98)	4.2 (1.40)	4.0 (1.51)	0.8 (0.90)		
FE	8.2 (1.94)	13.5 (2.80)	6.2 (2.37)	6.6 (3.05)	8.3 (4.01)	6.9 (2.49)	6.8 (2.78)	0.9 (0.95)		
JT	1.9 (0.53)	2.7 (0.79)	3.0 (1.94)	2.3 (1.75)	2.3 (1.56)	2.8 (1.56)	3.5 (1.33)	3.4 (1.63)		
PT	2.2 (2.12)	9.9 (3.58)	1.9 (0.98)	3.3 (3.53)	4.3 (2.38)	3.4 (1.85)	3.3 (1.39)	3.7 (1.57)		
PV	2.9 (1.13)	3.7 (0.90)	4.1 (1.88)	4.1 (1.28)	3.6 (1.64)	3.8 (1.37)	6.6 (2.62)	1.9 (1.46)		
Eastern Mojave										
EV	2.6 (0.94)	5.0 (1.25)	4.1 (1.69)	1.8 (0.85)	3.8 (1.56)	1.0 (0.62)	2.8 (1.13)	0.9 (0.74)		
IV	4.4 (1.19)	4.4 (2.46)	5.6 (1.95)	5.1 (2.92)	4.1 (1.86)	1.0 (0.48)	4.5 (1.72)	2.8 (1.79)		
Northeastern Mojave										
BD		0.9 (0.49)	1.1 (0.57)	1.1 (0.59)	3.2 (1.61)	3.3 (0.93)	3.3 (1.22)	5.4 (1.60)	2.6 (1.06)	
CS	1.3 (0.54)	3.3 (1.23)	1.4 (0.47)	1.2 (0.37)	2.0 (0.74)	3.6 (0.87)	4.0 (0.88)	2.9 (0.66)		
GB	0.6 (0.34)	0.2 (0.18)	1.1 (0.58)		2.2 (1.14)	1.7 (0.61)	1.6 (0.58)	2.3 (0.74)	1.7 (0.68)	
MM	2.4 (0.88)	4.9 (1.37)	3.0 (0.93)	1.9 (0.73)	7.3 (2.83)	5.5 (1.15)	6.3 (2.10)	4.3 (1.30)		
Upper Virgin River										
RC		22.5 (4.59)	22.1 (10.76)		15.5 (3.74)		19.3 (4.14)		18.3 (5.58)	
Western Mojave										
FK	8.4 (2.31)	5.3 (1.28)	3.0 (1.46)	0.5 (0.51)	3.3 (1.13)	2.4 (0.60)	3.5 (1.11)	2.2 (1.07)		4.7 (1.05)
OR	7.3 (2.25)	7.7 (1.80)	7.1 (3.26)	5.0 (5.34)	7.2 (2.65)	7.5 (1.85)	3.2 (1.18)	4.6 (2.14)		3.5 (0.88)
SC	6.3 (1.84)	6.3 (1.32)	5.9 (2.28)	1.9 (1.19)	4.6 (1.12)	2.6 (0.49)	3.4 (0.79)	4.3 (1.41)		2.5 (0.60)

km^2) than TCAs in other recovery units. Each year we surveyed RC, it consistently had the highest densities of adult tortoises.

The best model to describe variation in adult tortoise densities supported the hypothesis that densities changed proportionally over time, with different linear trends in each TCA (Table 3). Models based on linear trends had strong support (cumulative model weights = $\sum w$ = 0.9996; Table 3), whereas those including quadratic effects of time had essentially no support ($\sum w < 0.0001$). We report tortoise trend estimates based only on the best-performing model, with $w > 0.999$ and describing a large amount of variation in $\log_e$(Density). Estimates of r^2 (marginal r^2 = 0.84, Nagelkerke's modified r^2 = 0.92) indicated that after weighting to address variance heterogeneity and building in covariance structure, there was considerable variance in adult densities that could be explained by the effects of Year, TCA, and their interaction. Covariance between TCA density estimates from the same year accounted for 17.0% of the total

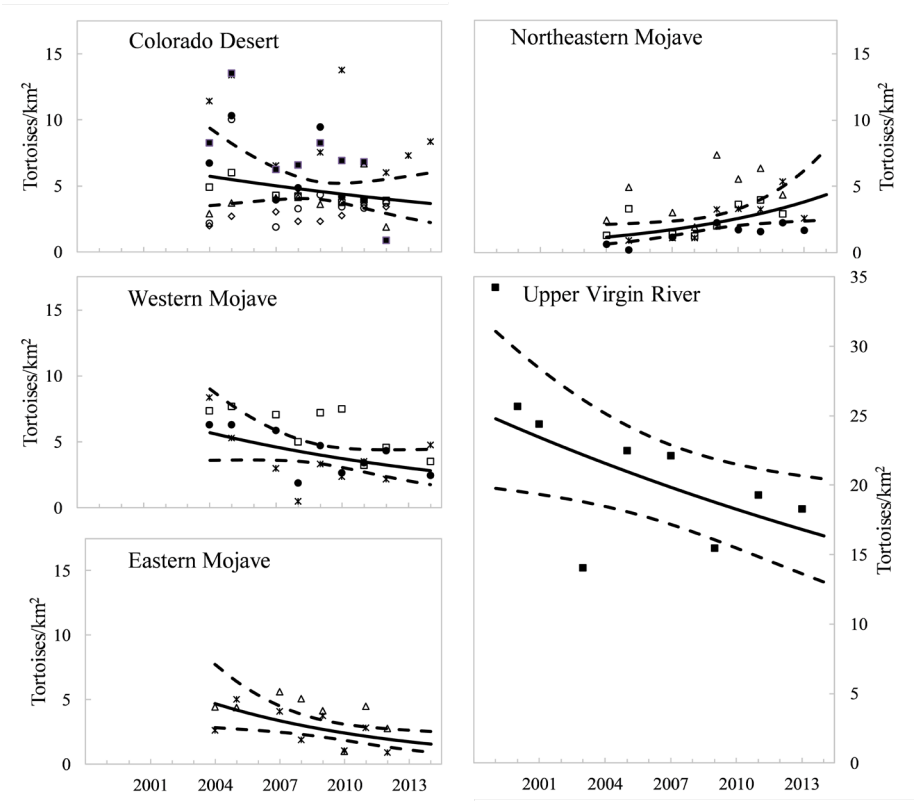


Figure 4. Trends in density (tortoises/km^2) of adult Mojave Desert Tortoises (*Gopherus agassizii*) in each recovery unit through 2014: since 1999 for Upper Virgin River Recovery Unit and for all others since 2004. Separate markers are used for annual density estimates for each tortoise conservation area within the recovery unit. The modeled change in density is the bold line and its 90% CI is shown with the dashed line, reflecting the Type I error specified in U.S. Fish and Wildlife Service (2011).

variance. Visual inspection of residual plots did not reveal any obvious deviations from homoscedasticity or normality.

Densities of adult *G. agassizii* were declining, on average, in every recovery unit except the Northeastern Mojave (Table 4, Fig. 4). Average density of adult tortoises increased in the Northeastern Mojave Recovery Unit at 13.1%/y (SE = 4.3%) since 2004, with especially large rates of increase (> 13%/y) estimated in BD and GB. Adult densities in the other four recovery units have declined at different annual rates: Colorado Desert (-4.5%, SE = 2.8%), Upper Virgin River (-3.2%, SE = 2.0%), Eastern Mojave (-11.2%, SE = 5.0%), and Western Mojave (-7.1%, SE = 3.3%). Based on analysis of covariance, three of the four recovery units with more than one TCA could be characterized by common regression slopes (Eastern Mojave: $F_{1,12} = 0.305$, $P = 0.591$; Western Mojave: $F_{2,21} = 0.094$, $P = 0.910$; Northeastern Mojave: $F_{3,24} = 1.206$, $P = 0.317$; Colorado Desert: $F_{6,43} = 2.391$, $P = 0.044$), but intercepts indicate different initial densities in two of the recovery units (Eastern Mojave: $F_{1,13} = 2.560$, $P = 0.134$; Western Mojave: $F_{2,23} = 3.326$, $P = 0.054$; Northeastern Mojave: $F_{3,27} = 11.073$, $P < 0.001$; Colorado Desert: $F_{6,49} = 5.090$, $P < 0.001$). The estimates we report above and in Table 4 are therefore total regression results for the Colorado Desert and Northeastern Mojave recovery units to characterize this greater within-recovery unit variation in slopes and/or intercepts, but common regression results for the other recovery units. Slopes differed between recovery units ($F_{4,119} = 9.422$, $P < 0.001$).

We applied estimated recovery unit densities based on TCAs to all potential habitat in each recovery unit, developing a high-end estimate of abundance for each recovery unit in 2004 and 2014 (Table 5). Despite the increasing population trend of adults in the Northeastern Mojave, its small area and low starting density resulted in a relatively small overall increase in the number of adult tortoises by 2014. In contrast, the much larger areas of the Eastern and Western Mojave and Colorado Desert recovery units, plus the higher estimated initial densities in these areas, explain much of the estimated total loss of adults since 2004. We estimate there were 124,050 fewer adult tortoises (SE = 36,062) range-wide in 2014 compared to the 336,393 tortoises (SE = 51,596) present in 2004.

Changes in representation of juvenile size class.— The full model of spatial and temporal effects describing the proportion of juveniles among observed tortoises

Table 3. Model selection table for all models fit to log-transformed annual densities of adult Mojave Desert Tortoises (*Gopherus agassizii*) through 2014 for all Tortoise Conservation Areas (TCAs), starting in 1999 for Red Cliffs Desert Reserve and in 2004 for the remaining 16 TCAs. Model weights (*w*) express the relative support for each model given the data and are based on relative scores for the second order Akaike's Information Criterion (AIC_c).

Model	Log likelihood	AIC_c	ΔAIC_c	*w*
TCA + Year + TCA×Year	-42.2	186.0	0.0	0.9996
TCA + Year	-76.7	203.2	17.2	0.0002
TCA	-78.4	203.9	17.9	0.0001
TCA + Year + Year^2	-76.0	204.7	18.7	0.0001
TCA + Year + Year^2 + TCA×Year + TCA×Year^2	-25.6	229.2	43.2	0.0000
Year + Year^2	-150.0	312.7	126.7	0.0000
Year	-155.3	321.1	135.1	0.0000
Random effects only	-160.3	329.0	143.0	0.0000

reduced the unexplained variance by 30.6% compared to the model of an overall average proportion, accounting for intra-year correlated proportions. Although the model with only Recovery Unit as a fixed effect had the lowest AIC, there was considerable support for models other than the top-ranking one (Table 6). The next five ranked models added Year or Year^2 effects and were within five AIC units of the best model; the cumulative weight of the top six models was > 0.95. As expected based on the ranked models, model-averaged parameter estimates indicated that the odds of finding a juvenile tortoise differed primarily between recovery units, with a weaker pattern of change over time (Table 7). This analysis approach does not allow us to estimate the true proportion of juveniles in the population, and indeed the higher proportion of juveniles found in the Upper Virgin River Recovery Unit is undoubtedly a product of the three-pass search technique used there in contrast to two-passes elsewhere. Of the four recovery units in which we used two-pass surveys, the probability of encountering a juvenile was consistently lowest in the Western Mojave Recovery Unit. The model-averaged Year parameter estimate indicated the average pattern over all years (1999 through 2014) because we standardized the input variable Year (mean = 2007.0, SD = 4.1). The model-averaged Year parameter for each recovery unit is close to zero, indicating similar proportions at the beginning and end of the survey period, with slightly fewer juveniles in the Northeastern and Western Mojave recovery units, and slightly more elsewhere. However, the negative sign of the Recovery Unit X Year^2 parameter estimates indicated that between the beginning and end of the survey period, there were increased odds of encountering juveniles (Schielzeth 2010); the proportion of juveniles was increasing when surveys began in 1999 but peaked in 2007 and have been declining in all recovery units since then.

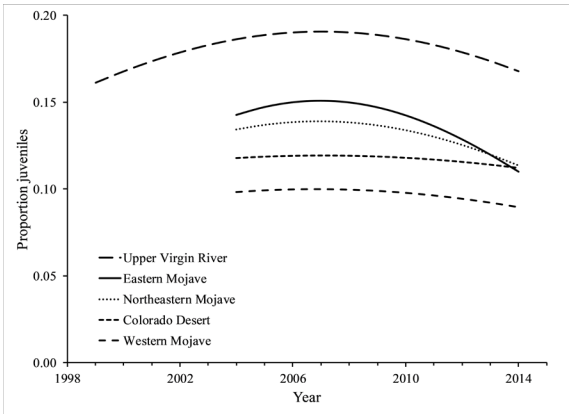


Figure 5. Relative proportion of juvenile Mojave Desert Tortoises (*Gopherus agassizii*) in each recovery unit through 2014: since 1999 for Upper Virgin River Recovery Unit and for all others since 2004.

The linear and quadratic time effects indicate that in all recovery units the odds of encountering a juvenile have declined since 2007 (Table 7, Fig. 5), which is most of the period of surveys for four of the five recovery units. The magnitude of the Recovery Unit X Year^2 effects indicates this trend was strongest in the Eastern and Northeastern Mojave recovery units, so that in 2014 there were 23% fewer (Eastern Mojave) and 15% fewer (Northeastern Mojave) juveniles compared to 2004. In 2007, the year when the proportion of juveniles was estimated to be highest in all recovery units, $P(\text{juvenile}_{2007\text{UpperVirginRiver}}) = 0.189$, CV = 0.057 and, in contrast, $P(\text{juvenile}_{2007\text{Western Mojave}}) = 0.099$, CV = 0.067. The probability that an encountered tortoise was a juvenile was also consistently low in the Colorado Desert ($P[\text{juvenile}_{2007\text{Colorado Desert}}] = 0.119$, CV = 0.131) and lower than in the remaining two recovery units ($P[\text{juvenile}_{2007\text{Eastern Mojave}}] = 0.149$, CV = 0.187; $P[\text{juvenile}_{2007\text{Northeastern Mojave}}] = 0.140$, CV = 0.085).

Discussion

Our analyses provide the first estimates of regional and range-wide population trends for *G. agassizii*. Overall this threatened species is experiencing large, ongoing population declines, and adult tortoise numbers have decreased by over 50% in some recovery units since 2004. Although TCAs within the same recovery unit had very different initial densities, trends were more similar within recovery units than between them. Only one of the five recovery units (Northeastern Mojave) exhibited population increases across all TCAs; this recovery unit also had the lowest densities at the start of our study period in 2004.

Maximum annual population growth rate projected in the eastern Mojave Desert during optimum forage conditions on a 2.59-km^2 study plot was 2% (Turner et al. 1987, unpubl. report), while Nussear and Tracy (2007) simulated annual population growth rates as

Table 4. Parameter estimates and standard errors (SEs) from the best-fitting model describing $\log_e$ transformed density/km^2 of adult Mojave Desert Tortoises (*Gopherus agassizii*). The model applies for the period through 2014 for all recovery units, starting in 1999 in Upper Virgin River and in 2004 for the remaining four recovery units.

Recovery unit / Tortoise Conservation Area	Intercept (SE)	Slope (SE)
Western Mojave	-3.174(0.102)	-0.071(0.033)
Fremont-Kramer (FK)	-3.195(0.103)	-0.068(0.030)
Ord-Rodman (OR)	-2.801(0.104)	-0.082(0.031)
Superior-Cronese (SC)	-3.149(0.092)	-0.093(0.029)
Colorado Desert	-3.051(0.078)	-0.045(0.028)
Chocolate Mtn Aerial Gunnery Range (AG)	-2.395(0.115)	-0.033(0.033)
Chuckwalla (CK)	-3.093(0.119)	-0.041(0.042)
Chemehuevi (CM)	-2.966(0.131)	-0.108(0.047)
Fenner (FE)	-2.574(0.127)	-0.073(0.048)
Joshua Tree (JT)	-3.553(0.132)	0.062(0.044)
Pinto Mountains (PT)	-3.144(0.149)	-0.083(0.058)
Piute Valley (PV)	-3.193(0.120)	0.044(0.049)
Northeastern Mojave	-3.870(0.119)	0.131(0.043)
Beaver Dam Slope (BD)	-3.975(0.143)	0.222(0.052)
Coyote Springs Valley (CS)	-3.750(0.100)	0.102(0.041)
Gold Butte-Pakoon (GB)	-4.365(0.148)	0.144(0.048)
Mormon Mesa (MM)	-3.148(0.101)	0.082(0.041)
Eastern Mojave	-3.544(0.132)	-0.112(0.050)
Eldorado Valley (EV)	-3.589(0.131)	-0.092(0.051)
Ivanpah (IV)	-3.273(0.126)	-0.074(0.048)
Upper Virgin River	-1.654(0.093)	-0.032(0.021)
Red Cliffs Desert Reserve (RC)	-1.654(0.093)	-0.032(0.021)

high as 5%. We describe regional population increases in some TCAs much larger than this, possibly indicating that optimal environmental conditions alone do not explain these increases. Several unpaved roads in these TCAs have been closed by the BLM and legal protections since the early 1990s may have reduced the number of tortoises purposely killed or removed from the wild. Nonetheless, the 3.7-fold increase in adults since 2004 that is described here would be unexpected even under much more active management. The large variance associated with these estimates of population trend probably factors into the magnitude of the estimate. Large variances that describe the best estimates of trends in adult density indicate that more modest increases are almost as strongly supported by the data.

Encounter rates make the largest contribution to variance in the annual TCA density estimates, reflecting the non-random pattern of tortoises on the landscape. High between-transect variability in encounter rate means that within-year encounter rate variance will be high, as will between-year variance unless the same transects are surveyed each year. This is the case only in RC, the only TCA where encounter rate variance was never the primary contributor to the density variance (more about variance considerations below).

Based on the rapid increase in the number of adults, juveniles in the Northeastern Mojave Recovery Unit must also be increasing in absolute terms despite the -0.021 change in their relative number since 2004. Locally focused demographic studies are required to describe the roles of increasing adult survivorship and/or recruitment into adult size classes; these studies could also further our understanding of the survivorship of the more cryptic juveniles (USFWS 2011). Population trends of the future (over more than a generation) will provide a measure of reproduction and juvenile survivorship since 2004 in the Northeastern Mojave TCAs.

Declining adult densities through 2014 have left the Western Mojave adult numbers at 49% and in the Eastern Mojave at 33% of their 2004 levels. Such steep declines in the density of adults are only sustainable if there were suitably large improvements in reproduction and juvenile growth and survival. However, the proportion of juveniles has not increased anywhere since 2007, and in these two recovery units the proportion of juveniles in 2014 has declined to 91% and 77% of their representation in 2004, respectively. This may be a continuation of ongoing population declines for at least part of the Western Mojave (Berry et al. 2013).

Reductions in the number of juvenile tortoises may reflect reduced reproduction and/or increased mortality of smaller tortoises. Drought indices for the deserts of the southwestern United States have increased in recent decades (USFWS 2006, Guida et al. 2014), with speculation that female tortoises consequently reduce annual reproductive effort (Henen 1997, 2002) or that hatchlings may be at increased risk of emerging to find too little moisture and related forage (Morafka 1994; Nagy and Medica 1986; Nagy et al. 1997; Wilson et al. 2001). Many other sources of mortality to smaller desert tortoises have been identified (Darst et al. 2013), but recent attention has focused especially on increased predation risk in the Western Mojave, Eastern Mojave, and Colorado Desert recovery units due to prey-switching during droughts by Coyotes (*Canus latrans*; Esque et al. 2010) and especially by increasing abundance of Common Ravens (*Corvus corax*), which typically prey on smaller tortoises rather than on adults (Boarman and Berry 1995; Kristan and Boarman 2003).

Ultimately, trends in adult and juvenile densities reflect the impact of numerous unquantified threats to *G. agassizii* populations over the period of the study (Tracy et al., *op. cit*.; Darst et al. 2013). With few exceptions, the multitude of threats, acting over the long lives of these animals, prevents more rapid and direct identification of specific agents responsible for *G. agassizii* population

Table 5. Estimated change in abundance of adult Mojave Desert Tortoises (*Gopherus agassizii*) in each recovery unit between 2004 and 2014, including standard error (SE) of abundance estimates. Abundance estimates are based on recovery unit densities calculated from the model in Table 4 and applied to all areas of the associated recovery unit meeting criteria as modeled habitat, whether inside or outside TCAs.

Recovery Unit	Modeled Habitat (km^2)	2004 Abundance (SE)	2014 Abundance (SE)	Δ Abundance (SE)
Western Mojave	23,139	131,540 (35,415)	64,871 (17,465)	-66,668 (17,949)
Colorado Desert	18,024	103,675 (30,366)	66,097 (19,359)	-37,578 (11,006)
Northeastern Mojave	10,664	12,610 (4,304)	46,701 (15,940)	34,091 (11,636)
Eastern Mojave	16,061	75,342 (21,589)	24,664 (7,067)	-50,679 (14,522)
Upper Virgin River	613	13,226 (1,115)	10,010 (1,234)	-3,216 (340)
Total	68,501	336,393 (51,596)	212,343 (31,391)	-124,050 (36,062)

increases or declines. Local conditions in each TCA also determine whether the same threat will act with similar severity. For instance, although wildfires in 2005 in RC were associated with high tortoise mortality (McLuckie et al. 2014), similarly large fires that year in GB are believed to have impacted areas of poor tortoise habitat quality due to earlier overgrazing. These areas supported lower densities of tortoises at the time of the wildfire, so the impact of the fires was much less in GB than in RC (Tuma et al. 2016).

Techniques appropriate for describing survivorship and reproduction have characterized tortoise population dynamics in a handful of small, unrepresentative areas, while surveys in larger, more typical low-density areas are difficult to associate with specific local human activities. The trends we describe are consistent with published observations within some TCAs. As mentioned above in the Upper Virgin River Recovery Unit, RC experienced catastrophic wildfire as well as a drought-related die-off of tortoises during the period of this study (McLuckie et al. 2014). The vulnerability of this smaller recovery unit in the face of such large-scale impacts remains of paramount concern. In the Western Mojave Recovery Unit, decreasing population trends in the decades before 2004 were described based on multiple widespread but local mark-recapture plots (Doak et al. 1994; Berry and Medica 1995; Tracy et al., *op. cit.*); other evidence of population declines came from comparison of the frequency of live and dead tortoise sightings in the Western Mojave TCAs (Tracy et al., *op. cit.*). During the period covered by our study, Esque et al. (2010) also noted increased rates of predation by coyotes in the Western Mojave and linked this to decreases in their mammal prey base following drought.

In other parts of the desert, earlier research on local plots sometimes described population trajectories that differ from declines reported by us, such as static adult tortoise numbers on 2.59- km^2 plots in the IV TCA in the Eastern Mojave Recovery Unit, and in PV and FE in the Colorado Desert Recovery Unit (Berry and Medica 1995). The data in these cases were for earlier decades and describe patterns on single local plots that were not

Table 6. Model selection table for mixed model logistic regression describing the proportion of observations that were juvenile Mojave Desert Tortoises (*Gopherus agassizii*) from 2004 through 2014 for all recovery units (starting in 1999 for Upper Virgin River Recovery Unit). Year was also used as a categorical variable to capture the random effects of annual conditions. Model weights (*w*) express the relative support for each model given the data and are based on relative scores for Akaike's Information Criterion (AIC). Models with ΔAIC < 5 are shown (these model weights cumulatively account for > 0.95 of model support) as well as the top model for describing patterns in adult densities (Table 3) and the null model.

Model	Log likel.	AIC	ΔAIC	*w*
RU	-1967.8	3947.5	0.0	0.324
RU + Year2	-1966.8	3947.6	0.1	0.309
RU + Year	-1967.7	3949.5	2.0	0.119
RU + Year + Year2	-1966.8	3949.6	2.1	0.114
RU + Year2 + RU×Year2	-1964.1	3950.2	2.7	0.084
RU + Year + Year2 + RU×Year2	-1964.0	3951.9	4.4	0.036
RU + Year + RU×Year	-1965.9	3953.8	6.3	0.014
Random factors only	-1982.0	3968.1	20.6	0.000

Table 7. Parameter estimates (standard errors) for changes in the relative proportion of juveniles observed on surveys for adult Mojave Desert Tortoises (*Gopherus agassizii*) from 2004 through 2014 in four of the five recovery units and since 1999 in Upper Virgin River Recovery Unit. Estimates are model-averaged with shrinkage across the top six models in Table 6. For interpreting inflection points, the input variable Year was standardized based on mean = 2007.0 and standard deviation = 4.1.

Recovery Unit	Intercept	Year	Year^2
Colorado Desert	-1.999 (0.133)	0.003 (0.088)	-0.097 (0.380)
Eastern Mojave	-1.729 (0.206)	0.003 (0.106)	-0.484 (1.262)
Northeastern Mojave	-1.822 (0.107)	-0.001 (0.095)	-0.307 (0.534)
Upper Virgin River	-1.445 (0.066)	0.003 (0.003)	-0.212 (0.045)
Western Mojave	-2.198 (0.071)	-0.005 (0.105)	-0.154 (0.330)

selected to be representative of the larger TCA (Corn 1994; Anderson et al. 2001; Tracy et al., *op. cit*.). For instance, ongoing and long-term declines on a 2.59-km^2 plot in the JT TCA of the Colorado Desert Recovery Unit (Lovich et al. 2014) may reflect drought impacts they describe, in addition to consequences from the unimproved road that bisects the plot, and predator impacts reported elsewhere in a low relief site (Berry et al. 2013). These characteristics of the plot differ from large areas of the TCA, which are in more rugged terrain and where we characterize populations as increasing.

Throughout our assessment, we describe tortoise status based on adult densities, which is useful for comparison of areas of different sizes. However, if the area available to tortoises is decreasing, then trends in tortoise density no longer capture the magnitude of decreases in abundance. Some of the area of potential habitat (68,501 km^2) has certainly been modified in a way that decreases the number of tortoises present. We used area estimates that removed impervious surfaces created by development as cities in the desert expanded. However, we did not address degradation and loss of habitat from recent expansion of military operations (753.4 km^2 so far on Fort Irwin and the Marine Corps Air Ground Command Center), from intense large scale fires such as those that burned 576.2 km^2 in critical habitat alone in 2005, or from development of utility-scale solar facilities in the desert that have been permitted on 194 km^2 to date (USFWS 2016). The impact of the many smaller land use conversions (habitat loss) have not been compiled, but this and the small scale of habitat restoration projects (habitat gain) have been dwarfed by the scale of habitat conversion from military exercises, renewable energy facilities, and catastrophic fire. Due to loss and degradation of potential habitat, the recovery unit abundance estimates in Table 5 are maximum estimates. Habitat loss would also disrupt the prevailing population structure of this widely distributed species with geographically limited dispersal (isolation by distance; Murphy et al. 2007; Hagerty and Tracy 2010). Demographic connection with nearby local populations has enabled repopulation of at least one area after a local die-off of tortoises (Germano and Joyner 1988). We therefore anticipate an additional impact of this habitat loss is decreasing resilience of local tortoise populations by reducing demographic connections to neighboring populations (Fahrig 2007). Military and commercial operations and infrastructure projects that reduce tortoise habitat in the desert are anticipated to continue.

The high variability of population estimates and the serious consequences of hypothesis testing that fails to detect a true population decline are ongoing topics in conservation biology (Johnson 1989; Taylor and Gerrodette 1993; Taylor et al. 2007; Gerrodette 2011). Conventional hypothesis testing involves comparison of observed trend estimates to a null model of static population size; this unnecessarily restricts the scope and usefulness of monitoring programs to acquiring enough information to rule out no-action (Wade 2000; Gerrodette 2011). Instead, we used an information-theoretic approach in which the data are applied to each competing model; we drew conclusions based on the relative support for each model given the data (Burnham and Anderson 2002). In this case, regional trend models best described the data in hand. Our current analysis strongly concludes that there are similar population trends within recovery units, with different trends between recovery units.

The range-wide scope of our analysis also uses the power of replication in space to underline regional trends rather than attempting to describe one local trend in isolation (see Freilich et al. 2005; Inman et al. 2009). We would have reached less definitive conclusions if the monitoring effort had continued exclusively in a few dozen 2.59-km^2 study plots that had been initiated in the 1970s or if fewer TCAs had been surveyed, perhaps in a less coordinated effort. Instead, the current range-wide distance sampling program provides fairly coarse but clear summaries of patterns in tortoise density and abundance, definitive because they sample regionally and range-wide.

Although our results demonstrate the power of this monitoring program to detect large positive and negative trends over a 10–15-y period, large SEs for density trends we found reflect two important sources of imprecision in the population growth estimates. First, long-term monitoring programs spread over a large area are describing multiple underlying local phenomena. This can be seen in the consistent but TCA-specific within-recovery-unit trends. The same phenomenon is expected within TCAs. For example, each end of a valley may be experiencing different population dynamics, or lowland habitat may offer different population growth potential from upland habitat. It is also to be expected that there is some variation in the degree of population growth supported by year-to-year environmental conditions. These sources of variability in TCA- or recovery-unit-level population dynamics are reflected in the SE of our population trend estimates. By modeling intra-year covariation in TCA density estimates, we accounted for some of the process variation due to annual conditions.

Sampling error of the density estimate is a composite of the errors from the encounter rate estimates as well as from both correction factors that are applied. Estimation of P_a consistently contributes about 10% to the variance in the annual density estimates (e.g., McLuckie et al. 2002), and many more observations are needed to develop a detection curve than to estimate encounter rate. Detection curves based on 60 observations might be minimally acceptable (Buckland et al. 2001), whereas

encounter rate estimates based on the same number of detections would be robust. This issue underlies the simulations by Freilich et al. (2005), which led them to reject distance sampling as a viable method for such sparsely distributed animals. The current monitoring program always applied much greater survey effort to estimate TCA-specific encounter rates than anticipated by Freilich et al. (2005); also, to avoid poor detection estimates, we pooled detection distances across all TCAs completed by a given team of surveyors. A certain amount of precision is also lost to the annual density estimates by correcting for G_0. However, this quantity can vary considerably between years, so failure to correct population estimates adequately would add bias to annual density estimates (Freilich et al. 2000).

Encounter rate estimation is consistently the largest variance component in all TCA density estimates (e.g., McLuckie et al. 2002). Most encounter rate variance is inherent to the distribution of tortoises on the landscape (Krzysik 2002), reflecting topographic and vegetation differences between transects with additional sampling variance reflecting relative survey effort. The planned and sustained effort in RC has resulted in much larger sample sizes than in other TCAs and more precision for annual population density estimates (CV = SE/density consistently between 0.12 and 0.15), contributing to lower between-year sampling error. Sampling error is also reduced because we survey the same transects in RC each year. The declining trend in abundance was therefore discernible even though RC was only monitored every other year, an approach that has not been pursued in the rest of the range where survey effort has fluctuated at a generally suboptimal level based on inconsistent funding.

Turtles and tortoises world-wide are as threatened with extinction as any other vertebrate lineage (Stanford et al. 2018). The crisis in turtle survival stems from ongoing direct exploitation that targets turtles for consumption or captivity as well as from indirect or untargeted harm such as mortality on roadways or non-lethal degradation of the habitat they need to survive. Most extinct turtle taxa in the past hundreds of years were extirpated from constrained areas (mostly giant tortoises endemic to islands), whereas the turtle species that are currently most endangered are primarily threatened by habitat alteration and collection for the pet trade or food market (Stanford et al. 2018). *Gopherus agassizii* is one of six North American species of *Gopherus*, part of all of which have protected status under U.S. or Mexican regulations or both. *Gopherus flavomarginatus* is listed among the top 25 threatened freshwater and terrestrial turtle species (Stanford et al. 2018), and populations have been decimated by habitat loss and ongoing collection for consumption. The remaining *Gopherus* species are widespread, which is not characteristic of turtles that have faced the first waves of extinction and local extirpation of the modern era. Population losses have nonetheless been documented in these *Gopherus* species (Bury et al. 1988; McCoy et al. 2006; Allison and McCoy 2014), and *G. agassizii* is now included in the list of the top 50 turtle and tortoise species at greatest risk (Stanford et al. 2018). Unlike earlier groups of turtle and tortoise species at risk of extinction, declines in *Gopherus* may instead reflect compounding impacts of threats that are not acutely lethal to individuals or populations (USFWS 2011). In common with other turtles and tortoises, their life history puts *G. agassizii* at greater risk from even slightly elevated adult mortality (Congdon et al. 1993; Doak et al. 1994) and recovery from population declines will require more than enhancing adult survivorship (Spencer et al. 2017). Currently, 60.8% of turtle species are designated Threatened on the International Union for Conservation of Nature (IUCN) Red List (IUCN 2017), including all *Gopherus* species except *G. berlandieri*. Although populations comprising *G. morafkai* and *G. evgoodei* were classified as conspecifics of *G. agassizii* at the time of the most recent IUCN status assessment, they are now recognized as distinct species, and are considered Vulnerable by the Tortoise and Freshwater Turtle Specialist Group, which officially consults to update the IUCN Red List (Rhodin et al. 2017).

The negative population trends in most of the TCAs for Mojave Desert Tortoises indicate that this species is on the path to extinction under current conditions. This may reflect inadequate recovery action implementation, slow response by tortoises and their habitat to implemented actions, or new and ongoing human activities in the desert that have not been mitigated appropriately. It may also be a result of stochastic or directional climatic events that impact large expanses of tortoise habitat (e.g., drought, fire, climate change) and are largely beyond the realm of local land management activities. Our results are a call to action to remove ongoing threats to tortoises from TCAs, and possibly to contemplate the role of human activities outside TCAs and their impact on tortoise populations inside them.

Long-term monitoring is an essential component of evidence-based management (Lindenmayer and Likens 2010). It determines whether the composite management efforts over ecologically meaningful time periods have been effective. For G. agassizii, the reinvigoration of the interagency management oversight group tasked with implementing recovery activities based on their predicted effectiveness has the potential to translate results from this monitoring program into decisions about maintaining or altering contemporary management activities. Monitoring of declining populations should be deeply integrated in conservation and recovery programs. Recovery plans under the U.S.

Endangered Species Act always stipulate population thresholds that would trigger removal of federal protection, but adaptive-management triggers based on monitoring results that show population declines are absent from most recovery planning (Lindenmayer et al. 2013) and have not yet been integrated into the management for *G. agassizii*.

Although these surveys were designed to provide a 25-y description of population growth, it is clear that this single purpose would be an underutilization of the program that can certainly address interim management questions (Nichols and Williams 2006). For long-lived *G. agassizii*, monitoring of the reproductive portion of the population also captures the effects of management on the population segment that must be the basis for recovery. Population recovery will necessitate accelerated, prioritized recovery activities (Darst et al. 2013). Targeted, local effectiveness monitoring (Lyons et al. 2008; Lindenmayer et al. 2011), where possible, would complement our larger population monitoring program. Both types of monitoring will be needed to characterize the effectiveness of recovery activities where the list of threats is so large and varied.

Acknowledgments.—This monitoring program was developed and adapted around recommendations provided by David Anderson and Kenneth Burnham in 1996. P. Steven Corn, Clarence Everly, Richard Fridell, Jill Heaton, Ronald Marlow, Philip Medica, Kenneth Nussear, and C. Richard Tracy contributed to the early development of the program. Over the years, hundreds of surveyors collected field data, led over multiple years by Terry Christopher, Imogen Daly, Nathan Gregory, Deborah Harstad, and Peter Woodman. Melissa Brenneman, Rohit Patil, Clarence Everly, and Jill Heaton contributed to database development, quality control, and data management protocols. Reviews by Roy Averill-Murray, Catherine Darst, Kimberleigh Field, Katherine Ralls, J. Michael Reed, and Robert Steidl improved this manuscript considerably. Funding for various years of this study was provided by Arizona Strip Field Office, BLM; California Desert District, BLM; Clark County Desert Conservation Program; Edwards Air Force Base; Parashant National Monument, National Park Service; Joshua Tree National Park; Marine Corps Air Station, Yuma; Mojave National Preserve; National Training Center, Ft. Irwin; Southern Nevada Field Office, BLM; Washington County Habitat Conservation Plan; Utah Division of Wildlife Resources; and State of Utah Endangered Species Mitigation Fund. These and other government land managers provided access to surveyed areas. We conducted these minimal tortoise handling activities as well as all transmitter attachment, maintenance, and removal procedures in compliance with U.S. Fish and Wildlife Service recovery permits TE-108507 and TE-038224, which set out terms and conditions that were also requirements for our associated state permits. The findings and conclusions in this article are those of the authors and do not necessarily represent the views of the U.S. Fish and Wildlife Service.

Literature Cited

Allison, L.J., and E.D. McCoy. 2014. North American tortoise abundance. Pp. 118–126 *In* Biology and Conservation of North American Tortoises. Rostal, D.C., E.D. McCoy, and H.R. Mushinsky (Eds.). Johns Hopkins University Press, Baltimore, Maryland, USA.

Anderson, D.R., K.P. Burnham, B.C. Lubow, L. Thomas, P.S. Corn, P.A. Medica, and R.W. Marlow. 2001. Field trials of line transect methods applied to estimation of desert tortoise abundance. Journal of Wildlife Management 65:583–597.

Barton, K. 2015. MuMIn: Multi-model Inference. R package version 1.15.1. R Foundation for Statistical Computing, Vienna, Austria. http://CRAN.R-project.org/package=MuMIn.

Bates D., M. Maechler, B. Bolker, and S. Walker. 2015. lme4: Linear Mixed-effects Models using Eigen and S4. R package version 1.1–8. R Foundation for Statistical Computing, Vienna, Austria. http://CRAN.R-project.org/package=lme4.

Berry, K.H., and P.A. Medica. 1995. Desert Tortoises in the Mojave and Colorado deserts. Pp. 135–137 *In* Our Living Resources: A Report to the Nation on the Distribution, Abundance, and Health of U.S. Plants, Animals, and Ecosystems. LaRoe, E.T., G.S. Farris, C.E. Puckett, P.D. Doran, and M.J. Mac (Eds.). U.S. Department of the Interior, National Biological Service, Washington, D.C., USA.

Berry, K.H., J.L. Yee, A.A. Coble, W.M. Perry, and T.A. Shields. 2013. Multiple factors affect a population of Agassiz's Desert Tortoise (*Gopherus agassizii*) in the northwestern Mojave Desert. Herpetological Monographs 27:87–109.

Boarman, W.I., and K.H. Berry. 1995. Common Ravens in the southwestern United States, 1968–92. Pages 73–75 *In* Our Living Resources: A Report to the Nation on the Distribution, Abundance, and Health of U.S. Plants, Animals, and Ecosystems. LaRoe, E.T., G.S. Farris, C.E. Puckett, P.D. Doran, and M.J. Mac (Eds.). U.S. Department of the Interior, National Biological Service, Washington, D.C., USA.

Boarman, W.I., T. Goodlett, G. Goodlett, and P. Hamilton. 1998. Review of radio transmitter attachment techniques for turtle research and recommendations for improvement. Herpetological Review 29:26–33.

Buckland, S.T., D.R. Anderson, K.P. Burnham, J.L. Laake, D.L. Borchers, and L. Thomas. 2001.

Introduction to Distance Sampling: Estimating Abundance of Biological Populations. Oxford University Press, Oxford, UK.

Burnham, K.P., and D.R. Anderson. 2002. Model Selection and Multimodel Inference: A Practical Information-theoretic Approach. 2nd Edition. Springer, New York, New York, USA.

Bury, R.B., T.C. Esque, L.A. DeFalco, and P.A. Medica. 1994. Distribution, habitat use, and protection of the desert tortoise in the Eastern Mojave Desert. Pp. 57–72 *In* Biology of North American Tortoises. Bury, R.B., and D.J. Germano (Eds). National Biological Survey, Fish and Wildlife Research 13, Washington, D.C., USA.

Bury, R.B., D.J. Morafka, and C.J. McCoy. 1988. Distribution, abundance and status of the Bolsón Tortoise. Pp. 5–30 *In* The Ecogeography of the Mexican Bolsón Tortoise (*Gopherus flavomarginatus*): Derivation of its Endangered Status and Recommendations for its Conservation. Morafka, D.J. and C.J. McCoy (Eds). Annuals of the Carnegie Museum 57.

Congdon, J.D., A.E. Dunham, and R.C. van Loeben Sels. 1993. Delayed sexual maturity and demographics of Blanding's Turtles (*Emydoidea blandingii*): implications for conservation and management of long-lived organisms. Conservation Biology 7:826–833.

Corn, P.S. 1994. Recent trends of Desert Tortoise populations in the Mojave Desert. Pp. 85–93 *In* Biology of North American Tortoises. Bury, R.B., and D.J. Germano (Eds). National Biological Survey, Fish and Wildlife Research 13, Washington, D.C., USA.

Darst C.R., P.J. Murphy, N.W. Strout, S.P. Campbell, K.J. Field, L. Allison, and R.C. Averill-Murray. 2013. A strategy for prioritizing threats and recovery actions for at-risk species. Environmental Management 51:786–800.

Doak, D., P. Karieva, and B. Klepetka.1994. Modeling population viability for the Desert Tortoise in the Western Mojave. Ecological Applications 4:446–460.

Esque, T.C., K.E. Nussear, K.K. Drake, A.D. Walde, K.H. Berry, R.C. Averill-Murray, A.P. Woodman, W.I. Boarman, P.A. Medica, J. Mack, and J.S. Heaton. 2010. Effects of subsidized predators, resource variability, and human population density on desert tortoise populations in the Mojave Desert, USA. Endangered Species Research 12:167–177.

Fahrig, L. 2007. Non-optimal animal movement in human-altered landscapes. Functional Ecology 21:1003–1015.

Freilich, J.E., K.P. Burnham, C.M. Collins, and C.A. Garry. 2000. Factors affecting population assessments of Desert Tortoises. Conservation Biology 14:1479–1489.

Freilich, J.E., R.J. Camp, J.J. Duda, and A.E. Karl. 2005. Problems with sampling Desert Tortoises: a simulation analysis based on field data. Journal of Wildlife Management 69:45–56.

Fry, J., G. Xian, S. Jin, J. Dewitz, C. Homer, L. Yang, C. Barnes, N. Herold, and J. Wickham. 2011. Completion of the 2006 National Land Cover Database for the conterminous United States. Photogrammetric Engineering and Remote Sensing 77:858–864.

Germano, D.J. 1994. Comparative life histories of North American tortoises. Pp. 175–185 *In* Biology of North American Tortoises. Bury, R.B., and D.J. Germano (Eds.). National Biological Survey, Fish and Wildlife Research 13, Washington, D.C., USA.

Germano, D.J., R.B. Bury, T.C. Esque, T.H. Fritts, and P.A. Medica. 1994. Range and habitat of the Desert Tortoise. Pp. 57–72 *In* Biology of North American Tortoises. Bury, R.B., and D.J. Germano (Eds.). National Biological Survey, Fish and Wildlife Research 13, Washington, D.C., USA.

Germano, D.J., and M.A. Joyner. 1988. Changes in a Desert Tortoise (*Gopherus agassizii*) population after a period of high mortality. Pp. 190–198 *In* Management of Amphibians, Reptiles, and Small Mammals in North America: Proceedings of the Symposium. Szaro, R.C., K.E. Severson, and D.R. Patton (Technical Coordinators). U.S. Department of Agriculture, Forest Service General Technical Report RM-166, Fort Collins, Colorado, USA.

Gerrodette, T. 2011. Inference without significance: measuring support for hypotheses rather than rejecting them. Marine Ecology 32:404–418.

Guida, R. J, S. R. Abella, W. J. Smith, Jr., H. Stephen, and C. L. Roberts. 2014. Climatic change and desert vegetation distribution: assessing thirty years of change in Southern Nevada's Mojave Desert. The Professional Geographer 66:311–322.

Hagerty, B.E., and C.R. Tracy. 2010. Defining population structure for the Mojave Desert Tortoise. Conservation Genetics 11:1795–1807.

Henen, B.T. 1997. Seasonal and annual energy budgets of female Desert Tortoises (*Gopherus agassizii*). Ecology 78:283–296.

Henen, B.T. 2002. Reproductive effort and reproductive nutrition of female Desert Tortoises: essential field methods. Integrative and Comparative Biology 42:43–50.

Inman, R.D, K.E. Nussear, and C.R. Tracy. 2009. Detecting trends in Desert Tortoise population growth: elusive behavior inflates variance in estimates of population density. Endangered Species Research 10:295–304.

International Union for Conservation of Nature (IUCN). 2017. IUCN Red List of Threatened Species. Version 2017–3. http://www.iucnredlist.org.

Johnson, D.H. 1989. An empirical Bayes approach to analyzing recurring animal surveys. Ecology 70:945–952.

Keene, O.N. 1995. The log transformation is special. Statistics in Medicine 14:811–819.

Kristan, W.B., and W.I. Boarman. 2003. Spatial pattern of risk of Common Raven predation on Desert Tortoises. Ecology 84:2432–2443.

Krzysik, A.J. 2002. A landscape sampling protocol for estimating distribution and density patterns of Desert Tortoises at multiple spatial scales. Chelonian Conservation and Biology 4:366–379.

Lindenmayer, D.B., and G.E. Likens. 2010. The science and application of ecological monitoring. Biological Conservation 143:1317–1328.

Lindenmayer, D.B., G.E. Likens, A. Haywood, and L. Miezis. 2011. Adaptive monitoring in the real world: proof of concept. Trends in Ecology and Evolution 26:641–646.

Lindenmayer, D.B., M.P. Piggott, and B.A. Wintle. 2013. Counting the books while the library burns: why conservation monitoring programs need a plan for action. Frontiers in Ecology and the Environment 11:549–555.

Liu, C., P.M. Berry, T.P. Dawson, and R.G. Pearson. 2005. Selecting thresholds of occurrence in the prediction of species distributions. Ecography 28:385–393.

Lovich, J.E., C.B. Yackulic, J. Freilich, M. Agha, M. Austin, K.P. Meyer, T.R. Arundel, J. Hansen, M.S. Vamstad, and S.A. Root. 2014. Climatic variation and tortoise survival: has a desert species met its match? Biological Conservation 169:214–224.

Luckenbach, R.A. 1982. Ecology and management of the Desert Tortoise (*Gopherus agassizii*) in California. Pp. 1–37 *In* North America Tortoises: Conservation and Ecology. Bury, R.B. (Ed.). National Biological Survey, U.S. Fish and Wildlife Service, Wildlife Research Report 12, Washington, D.C., USA.

Lyons, J.E., M.C. Runge, H.P. Laskowski, and W.L. Kendall. 2008. Monitoring in the context of structured decision-making and adaptive management. Journal of Wildlife Management 72:1683–1692.

Marques, T.A., L. Thomas, S.G. Fancy, and S.T. Buckland. 2007. Improving estimates of bird density using multiple-covariate distance sampling. Auk 124:1229–1243.

Mazerolle, M.J. 2015. AICcmodavg: Model Selection and Multimodel Inference based on (Q)AIC(c). R package version 2.0-3. R Foundation for Statistical Computing, Vienna, Austria. http://CRAN.R-project.org/package=AICcmodavg.

McCoy, E.D., H.R. Mushinsky, and J. Lindzey. 2006. Declines of the Gopher Tortoise on protected lands. Biological Conservation 128:120–127.

McLuckie, A.M., D.L. Harstad, J.W. Marr, and R.A. Fridell. 2002. Regional Desert Tortoise monitoring in the Upper Virgin River Recovery Unit, Washington County, Utah. Chelonian Conservation and Biology 4:380–386.

McLuckie, A.M., E.T. Woodhouse, and R.A. Fridell. 2014. Regional Desert Tortoise monitoring in the Red Cliffs Desert Reserve, 2013. Utah Division of Wildlife Resources, Publication number 14-15. Salt Lake City, Utah, USA.

Morafka, D.J. 1994. Neonates: missing links in the life history of North American tortoises. Fish and Wildlife Service Research 13:161–173.

Murphy R.W., K.H. Berry, T. Edwards, A.E. Leviton, A. Lathrop, J.D. Riedle. 2011. The dazed and confused identity of Agassiz's land tortoise, *Gopherus agassizii* (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation. ZooKeys 113:39–71.

Murphy, R.W., K.H. Berry, T. Edwards, and A.M. McLuckie. 2007. A genetic assessment of the recovery units for the Mojave population of the Desert Tortoise, *Gopherus agassizii*. Chelonian Conservation and Biology 6:229–251.

Nagelkerke, N.J.D. 1991. A note on a general definition of the coefficient of determination. Biometrika 78:691–692.

Nagy, K.A., and P.A. Medica. 1986. Physiological ecology of Desert Tortoises. Herpetologica 42:73–92.

Nagy, K. A., D. J. Morafka, and R. A. Yates. 1997. Young Desert Tortoise survival: energy, water, and food requirements in the field. Chelonian Conservation and Biology 2:396–404.

Nichols, J.D., and B.K. Williams. 2006. Monitoring for conservation. Trends in Ecology and Evolution 21:668–673.

Nussear, K.E., and C.R. Tracy. 2007. Can modeling improve estimation of Desert Tortoise population densities? Ecological Applications 17:579–586.

Nussear, K.E., T.C. Esque, R.D. Inman, L. Gass, K.A. Thomas, C.S.A. Wallace, J.B. Blainey, D.M. Miller, and R.H. Webb. 2009. Modeling habitat of the Desert Tortoise (*Gopherus agassizii*) in the Mojave and parts of the Sonoran deserts of California, Nevada, Utah, and Arizona. Open-file Report 2009–1102, U.S. Geological Survey, Reston, Virginia, USA.

Pekár, S., and M. Brabec 2016. Marginal models via GLS: a convenient yet neglected tool for the analysis of correlated data in the behavioural sciences. Ethology 122:621–631.

Pinheiro, J., D. Bates, S. DebRoy, D. Sarkar, and R Core Team. 2017. nlme: Linear and Nonlinear Mixed Effects Models. R package version 3.1-131. R Foundation for Statistical Computing, Vienna, Austria. http://CRAN.R-project.org/package=nlme.

R Core Team. 2017. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. http://www.R-project.org.

Rhodin, A.G.J., J.B. Iverson, R. Bour, U. Fritz, A. Georges, H.B. Shaffer, and P.P. van Dijk (Turtle Taxonomy Working Group). 2017. Turtles of the world: annotated checklist and atlas of taxonomy, synonymy, distribution, and conservation status. Pp. 1–292 *In* Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the International Union for Conservation of Nature (SSC Tortoise and Freshwater Turtle Specialist Group). Rhodin, A.G.J., J.B. Iverson, P.P. van Dijk, R.A. Saumure, K.A. Buhlmann, P.C.H. Pritchard, and R.A. Mittermeier (Eds.). Chelonian Research Monographs 7, Lunenburg, Massachusetts, USA.

Schielzeth, H. 2010. Simple means to improve the interpretability of regression coefficients. Methods in Ecology and Evolution 1:103–113.

Spencer, R.-J., J.U. Van Dyke, and M.B. Thompson. 2017. Critically evaluating best management practices for preventing freshwater turtle extinctions. Conservation Biology 31:1340–1349.

Stanford, C.B., A.G.J. Rhodin, P.P. van Dijk, B. D. Horne, T. Blanck, E.V. Goode, R. Hudson, R. A. Mittermeier, A. Currylow, C. Eisemberg, et al. (Turtle Conservation Coalition). 2018. Turtles in Trouble: The World's 25+ Most Endangered Tortoises and Freshwater Turtles–2018. International Union for Conservation of Nature Tortoise and Freshwater Turtle Specialist Group, Turtle Conservancy, Turtle Survival Alliance, Turtle Conservation Fund, Conservation International, Chelonian Research Foundation, Wildlife Conservation Society, and Global Wildlife Conservation, Ojai, California, USA.

Taylor, B.L., and T. Gerrodette. 1993. The uses of statistical power in conservation biology: the Vaquita and Northern Spotted Owl. Conservation Biology 7:489–500.

Taylor, B.L., M. Martinez, T. Gerrodette, J. Barlow, and Y.N. Hrovat. 2007. Lessons from monitoring trends in abundance of marine mammals. Marine Mammal Science 23:157–175.

Thomas, L., S.T. Buckland, E.A. Rexstad, J.L. Laake, S. Strindberg, S.L. Hedley, J.R.B. Bishop, T.A. Marques, and K.P. Burnham. 2010. Distance software: design and analysis of distance sampling surveys for estimating population size. Journal of Applied Ecology 47:5–14.

Tuma, M.W., C. Millington, N. Schumaker, and P. Burnett. 2016. Modeling Agassizi's Desert Tortoise population response to anthropogenic stressors. Journal of Wildlife Management 80:414–429.

U.S. Fish and Wildlife Service. 1990. Endangered and threatened wildlife and plants; determination of threatened status for the Mojave population of the desert tortoise. Federal Register 55:12178–12191.

U.S. Fish and Wildlife Service. 1994. Desert Tortoise (Mojave Population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon, USA.

U.S. Fish and Wildlife Service 2006. Range-wide Monitoring of the Mojave Population of the Desert Tortoise: 2001–2005 Summary Report. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada, USA. 85 pp.

U.S. Fish and Wildlife Service. 2011. Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, California and Nevada Region, Sacramento, California, USA.

U.S. Fish and Wildlife Service. 2016. Biological Opinion on the Proposed Land Use Plan Amendment under the Desert Renewable Energy Plan. Memorandum to Deputy State Director, Bureau of Land Management, Sacramento, California. Dated August 16. From Field Supervisor, Carlsbad Fish and Wildlife Office. Carlsbad, California. 203 pp.

Wade, P.R. 2000. Bayesian methods in conservation biology. Conservation Biology 14:1308–1316.

White, G.C., D.R. Anderson, K.P. Burnham, and D.L. Otis. 1982. Capture-recapture and removal methods for sampling closed populations. Publication LA-87-87-NERP. Los Alamos National Laboratory, Los Alamos, New Mexico, USA.

Wilson, D.S., K.A. Nagy, C.R. Tracy, D.J. Morafka, and R.A. Yates. 2001. Water balance in neonate and juvenile desert tortoises, *Gopherus agassizii*. Herpetological Monographs 15:158–170.

Zar, J.H. 1996. Biostatistical Analysis. 3rd Edition. Prentice-Hall, Upper Saddle River, New Jersey, USA.

Zuur, A.R., E.N. Ieno, N.J. Walker, A.A. Saveliev, G.M. Smith. 2009. Mixed Effects Models and Extensions in Ecology with R. Springer, New York, New York, USA.

Linda J. Allison is an Ecologist with the Desert Tortoise Recovery Office of the U.S. Fish and Wildlife Service in Reno, Nevada, USA. One of her roles is coordination of a four-state line distance sampling effort to describe Mojave Desert Tortoise status and trends. Linda has degrees in Biology with an emphasis in ecology and evolution from the University of California, Berkeley, USA (B.S.), and from Arizona State University, Tempe, USA (M.S.). (Photographed by Rebecca Palush).

Ann M. McLuckie received her M.S. from University of Arizona, Tucson, USA, studying the genetics, morphology, and ecology of the Desert Tortoise in the Black Mountains in Mojave County, Arizona. Since 1997, she has worked as a Wildlife Biologist with the Utah Division of Wildlife Resources, USA, designing and implementing a Desert Tortoise monitoring program for the Red Cliffs Desert Reserve and Red Cliffs National Conservation Area, USA. (Photographed by Brian Bock).

Appendix A. Annual proportion visible, G_0 (standard error), at each focal site where we monitored transmittered adult Mojave Desert Tortoises (*Gopherus agassizii*). Sites are listed in order from the western-most to the eastern-most and their locations are indicated in Fig. 1. Red Cliffs was also surveyed earlier: 1999 (0.63, SE = 0.185), 2000 (0.86, SE = 0. 144), 2001 (0.86, SE = 0.167), 2003 (0.87, SE = 0. 135).

Site	2004	2005	2007	2008	2009	2010	2011	2012	2013	2014
Superior-Cronese	0.95 (0.081)	0.92 (0.094)	0.96 (0.050)	0.75 (0.197)	0.90 (0.120)	0.98 (0.056)	0.94 (0.073)	0.94 (0.073)		0.91 (0.101)
Ord-Rodman	0.98 (0.035)	0.92 (0.083)	0.64 (0.213)	0.74 (0.130)	0.96 (0.054)	0.94 (0.072)	0.95 (0.062)	0.79 (0.156)		0.99 (0.030)
Twentynine Palms	0.98 (0.028)	0.90 (0.110)	0.97 (0.047)	0.74 (0.113)						
Chuckwalla	0.70 (0.183)	0.74 (0.153)	0.87 (0.060)	0.55 (0.105)	0.73 (0.175)	0.84 (0.125)	0.85 (0.108)	0.82 (0.075)	0.84 (0.058)	0.59 (0.087)
Ivanpah	0.95 (0.071)	0.87 (0.102)	0.94 (0.091)	0.79 (0.107)	0.79 (0.120)	0.88 (0.157)	0.87 (0.149)	0.54 (0.098)		
Jean	0.86 (0.142)									
Indian Springs			0.79 (0.140)	0.83 (0.153)	0.88 (0.118)	0.86 (0.130)	0.79 (0.093)	0.98 (0.049)		
Piute Valley 1	0.84 (0.148)	0.91 (0.118)	0.81 (0.178)	0.73 (0.127)		0.79 (0.218)	0.86 (0.141)	0.65 (0.148)		
Chemehuevi	0.88 (0.104)	0.65 (0.174)	0.62 (0.118)	0.80 (0.120)	0.84 (0.130)	0.81 (0.144)	0.80 (0.162)	0.35 (0.077)		
Piute Valley 2	0.80 (0.191)	0.87 (0.166)								
Halfway Wash					0.64 (0.167)	0.77 (0.200)	0.55 (0.152)	0.54 (0.116)	0.68 (0.136)	
Gold Butte						0.76 (0.141)	0.65 (0.155)	0.52 (0.118)	0.68 (0.123)	
Red Cliffs		0.86 (0.140)	0.53 (0.247)		0.68 (0.131)		0.74 (0.134)		0.66 (0.180)	

Appendix B. Detection statistics for field teams surveying separate Tortoise Conservation Areas (TCAs) each year. Teams walked *L* total km over *k* transects and detected n adult Mojave Desert Tortoises, which was P_a proportion of those available within *w* meters of the transect centerline. The coefficient of variation (CV) for P_a is also listed. Separate detection curves were built for each team each year, except in Red Cliffs Desert Reserve (RC), for which we report on the single composite detection curve. Other TCAs are abbreviated as Chocolate Mountains Aerial Gunnery Range (AG), Beaver Dam Slope (BD), Chuckwalla (CK), Chemehuevi (CM), Coyote Springs Valley (CS), Eldorado Valley (EV), Fenner (FE), Fremont-Kramer (FK), Gold Butte-Pakoon (GB), Ivanpah (IV), Joshua Tree (JT), Mormon Mesa (MM), Ord-Rodman (OR), Pinto Mountains (PT), Piute Valley (PV), and Superior-Cronese (SC).

Year	TCAs	*k*	*L*	*w*	n	P_a	CV(P_a)
1999 to 2013	RC	1,417	2,778	20	1,141	0.64	0.02
2004	AG, CK, CM, FE, IV, JT, PT	316	3,509	15	292	0.57	0.03
2004	FK, OR, SC	138	1,534	15	134	0.42	0.19
2004	BD, CS, EV, GB, MM, PV	175	1,723	22	57	0.47	0.10
2005	AG, CK, CM, FE, FK, IV, JT, OR, PT, SC	451	5,414	13	394	0.47	0.06
2005	BD, CS, EV, GB, MM, PV	267	2,852	18	108	0.40	0.10
2007	BD, CS, EV, GB, MM, PV	282	2,723	13	67	0.57	0.10
2007	AG, CK, CM, FE, FK, IV, JT, OR, PT, SC	271	3,174	16	155	0.39	0.09
2008	BD, CS, EV, MM, PM	566	5,705	18	127	0.41	0.10
2008	AG, CK, CM, FE, FK, IV, JT, OR, PT, SC	118	1,354	14	42	0.47	0.33
2009	BD, CS, EV, GB, MM, PV	568	5,525	15	109	0.25	0.23
2009	AG, CM, FE, FK, IV, JT, OR, PT, SC	225	2,492	14	103	0.35	0.10
2010	BD, CS, GB, MM	425	4,265	16	164	0.41	0.08
2010	CM, EV, FE, IV, PV	368	2,465	14	109	0.59	0.06
2010	FK, OR, SC	187	2,144	12	91	0.58	0.07
2010	AG, CK, JT, PT	140	1,431	8	85	0.67	0.10
2011	BD, CS, GB, MM	380	3,984	20	166	0.43	0.10
2011	CM, EV, FE, IV, PV	312	2,548	20	133	0.32	0.19
2011	CK, FK, JT, OR, PT, SC	160	1,802	16	100	0.53	0.08
2012	BD, CS, GB, MM	369	4,184	21	151	0.38	0.12
2012	CM, EV, FE, IV, PV	201	1,695	15	28	0.43	0.26
2012	AG, CK, FK, JT, OR, PT, SC	162	1,776	14	73	0.40	0.15
2013	AG, BD, GB	173	2,019	16	68	0.45	0.20
2014	AG, FK, OR, SC	230	2,649	10	118	0.61	0.06

RANGE-WIDE MONITORING OF THE MOJAVE DESERT TORTOISE (*GOPHERUS AGASSIZII*): 2019 ANNUAL REPORTING

PREPARED BY LINDA ALLISON
DESERT TORTOISE MONITORING COORDINATOR
U.S. FISH AND WILDLIFE SERVICE

FEBRUARY 2020

Recommended Citation: U.S. Fish and Wildlife Service. 2020. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2019 Annual Reporting DRAFT. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

TABLE OF CONTENTS

Executive Summary 1
Introduction 2
Methods 2
Study areas and transect locations 2
Distance sampling transect completion 5
Proportion of tortoises available for detection by line distance sampling, G_0 6
Field observer training 7
Telemetry training 7
Distance sampling training 8
Data management, quality assurance, and quality control 12
Tortoise encounter rate and development of detection functions 14
Proportion of available tortoises detected on the transect centerline, *g(0)* 15
Estimates of tortoise density 16
Results 17
Field observer training 17
Proportion of tortoises detected at distances from the transect centerline 17
Quality assurance and quality control 21
Transect completion 22
Proportion of tortoises available for detection by line distance sampling, G_0 27
Tortoise encounter rates and detection functions 27
Proportion of available tortoises detected on the transect centerline, *g(0)* 29
Estimates of tortoise density 30
Discussion 32
Literature Cited 34

LIST OF TABLES

Table 1. Training schedule for 2019 for a) Kiva transect crew, b) GBI transect crews, and c) GBI telemetry trainees. 8
Table 2. Proportion of tortoise models detected in 2019 by crews within 1-, 2-, or 5-m of the transect centerline. Values that scored below the target of 0.90 at 1- and 2-m are highlighted. Crews 1-12 surveyed for Kiva Biological; the remaining crews surveyed for Great Basin Institute. 18
Table 3. Diagnostics for individual crews after training in 2019. 19
Table 4. Number and completion of transects in each stratum in 2019. 22
Table 5. Availability of tortoises (G_0) when transects were walked in 2019 in the same or in neighboring strata. 27
Table 6. Stratum-level encounters and densities in 2019 for tortoises of MCL ≥ 180 mm. 31

LIST OF FIGURES

Figure 1. Long-term monitoring strata (n=17) corresponding to tortoise conservation areas (USFWS, 2011) in each recovery unit. 4
Figure 2. Data flow from collection through final products. 13
Figure 3. Relationship between single-observer detections (by the leader, *p*) and dual-observer (team) detections, *g(0)*. 16
Figure 4. Process for developing density estimates in 2019. For estimate (one per column), the full set of data was factored as indicated by divisions within the columns. 17
Figure 5. Detection curves for each of the 2019 Kiva crews during training. Each curve is based on a 16 km trial with approximately 100 detections. 20
Figure 6. Detection curves for each of the 2019 GBI crews during training. Each curve is based on a 16 km trial with approximately 100 detections. 21
Figure 7. Distribution of distance sampling transects and live tortoise observations in 2019 in Chocolate Mountain Aerial Gunnery Range, Joshua Tree, Pinto Mountains, and Chuckwalla in the southern part of the Colorado Desert Recovery Unit. 23
Figure 8. Distribution of distance sampling transects and live tortoise observations in 2019 in the Ivanpah Valley and Eldorado Valley strata of the Eastern Mojave Recovery Unit and in the Fenner stratum of the Colorado Desert Recovery Unit. 24
Figure 9. Distribution of transects and live tortoise observations in 2019 in the Ord-Rodman, Fremont-Kramer, and Superior-Cronese strata of the Western Mojave Recovery Unit. 25
Figure 10. Distribution of transects and live tortoise observations in 2019 in the Coyote Springs Valley and Beaver Dam Slope strata of the Northeastern Mojave Recovery Unit. 26
Figure 11. Observed detections (histogram) and the resulting detection function (smooth curve) for live tortoises with MCL ≥ 180mm found by Kiva in 2019. 28

Figure 12. Observed detections (histogram) and the resulting detection function (smooth curve) for live tortoises with MCL ≥ 180mm found by GBI in 2019. 29
Figure 13. Detection pattern for the leader (*p*) and by the team (*g(0)*) based on all observations out to a given distance (*x*) from the centerline in 2019. Note convergence of *g(0)* on 1.0 as *x* goes to 0. 30

ACKNOWLEDGEMENTS

Funding was provided to this collaborative project in 2019 by Arizona State BLM; the BLM California Desert District; the National Training Center, Ft. Irwin; the Clark County Desert Conservation Program; the Marine Corps Air Station, Yuma; and the Marine Corps Air Ground Command Center, Twentynine Palms.

The original design for this project and considerations for optimizing it based on new information and experience were first set out in Anderson and Burnham (1996) and Anderson et al. (2001).

Personnel from Kiva Biological Consulting (California) led by M. Bassett and K. Hayes, and from the Great Basin Institute (Nevada and the Beaver Dam Slope of Utah and Arizona) led by T. Christopher and M. Spangler conducted the field surveys. The survey in Chocolate Mountains Aerial Gunnery Range was conducted by Vernadero Group Incorporated. The field monitors from these teams who did the hard work of collecting and verifying the data were:

K. Anderson, R. Arney, M. Bassett, C. Benson, C. Boulden, V. Chaidez, T. Chizinski, S. Clegg, J. Curiak, R. DePond, A. d'Epremesnil, M. Dipane, A. Drummer, C. Farchaus, S. Hanner, K. Hayes, L. Henzler, T. Hobbs, N. Holmes, K. Hotchkiss, S. Jones, A. Kalyn, T. Kneppers, J. Knight, K. Koller, A. LaBarre, C. Lillard, K. Lund, L. McDiffitt, S. Nelson, D. Nilsson, B. O'Brien, K. Patronik, A. Pawlicki, J. Perez-Jimenez, M. Ress, K. Richardson, B. Role, B. Scavone, B. Semone, E. Smith, T. Sparrow, S. Till, S. Treu, C. Veety, A. Wilson, T. Winquist, C. Wooster.

B. Sparks (GBI) provided specialized training instruction for field crews. R. Patil (GBI) updated the electronic data-collection forms and procedures. M. Spangler (GBI) ran first-level quality assurance/quality control of data submitted by both field groups. M. Brenneman (Topoworks) provided independent review and post-processing of data and developed the final databases.

EXECUTIVE SUMMARY

The recovery program for Mojave desert tortoises (*Gopherus agassizii*) throughout their range in the Mojave and Colorado deserts (USFWS, 2011) requires range-wide, long-term monitoring to determine whether recovery goals are met. Specifically, will population trends within recovery units increase for a period of 25 years? In 1999, the Desert Tortoise Management Oversight Group endorsed the use of line distance sampling (Buckland et al., 2001) for estimating range-wide desert tortoise density. From 2001 to 2005 and 2007 to 2019, the USFWS has coordinated the distance sampling monitoring program for desert tortoises in 4 of the 5 recovery units. (The Upper Virgin River Recovery Unit is monitored by Utah Division of Wildlife Resources (UDWR; McLuckie et al., 2018) and will not be further addressed herein.)

This report describes quality assurance steps and final results for the 2019 monitoring effort. During the first years of the project, survey effort was directed annually at all 16 long-term monitoring strata. After agency funding was severely curtailed in 2012, the decision was made to survey only in well-funded strata to generate robust estimates rather than attempting to cover more strata in a less satisfactory manner, and this approach continued again in 2019, when crews completed 793 transects (8559.4 km) in 12 strata between 9 March and 15 May. In the course of these surveys, they reported 471 live tortoises, 400 of which were at least 180 mm midline carapace length (MCL) and used to generate density estimates.

In 2019, we surveyed 12 of the 16 strata outside Upper Virgin River. Chuckwalla, Pinto Mountains, and Superior-Cronese were the 3 strata with estimated densities less than 2.0 adult tortoises/km^2. Although the southern portion of the Chocolate Mountain Aerial Gunnery Range had densities similar to those in other strata (3.0 adults/km^2), the northern portion had much higher densities (14.2 adults/km^2), a pattern that was also seen in past years of these surveys. Other strata surveyed in 2019 (and the estimated density of adults/km^2) were Beaver Dam Slope (2.0), Coyote Springs Valley (3.2), Eldorado Valley (2.3), Fenner (2.8), Fremont-Kramer (2.7), Ivanpah Valley (2.6), JoshuaTree (3.1), and Ord-Rodman (2.5). Over all strata, the encounter rate averaged 22.8 km for each adult tortoise that was observed.

These surveys are reported annually, corresponding to the reporting requirements for annual funding. However, the survey effort is not planned specifically for precise and accurate annual density estimates; it is directed at accurately describing population trends by using multiple years of density estimates in each monitored stratum. Based on these population trends, we can provide an estimate of the density in any one year that is more accurate than the density estimate based only on the data from that one year, such as the estimates in this report. The most accurate existing density estimates for each stratum are therefore those based on trend estimates through 2014 (USFWS 2015); an updated analysis with more recent years of data is anticipated in conjunction with the 2020 report.

RANGE-WIDE MONITORING OF THE MOJAVE DESERT TORTOISE 2019

INTRODUCTION

The Mojave Desert population of the desert tortoise was listed as threatened under the Endangered Species Act in 1990. This group of desert tortoises north and west of the Colorado River are now recognized as the species *Gopherus agassizii*, separate from *G. morafkai* south and east of the Colorado River (Murphy et al., 2011). The revised recovery plan (USFWS, 2011) designates five recovery units to which decisions about continued listing status should be applied. The recovery plan specifies that consideration of delisting should only proceed when populations in each recovery unit have increased for at least one tortoise generation (25 years), as determined through a rigorous program of long-term monitoring. This report describes implementation of monitoring and presents the analysis of desert tortoise density in 2019. A more thorough description of the background of the monitoring program is provided in USFWS (2015), and use of annual density estimates to describe population trends from 2004-2014, is provided in Allison and McLuckie (2018).

METHODS

Study areas and transect locations

Long-term monitoring strata (Figure 1) will be used over the life of the project to describe population trends in areas where tortoise recovery will be evaluated. These areas are called "tortoise conservation areas" (TCAs) in the recovery plan to describe designated critical habitat as well as contiguous areas with potential tortoise habitat and compatible management. The area associated with each critical habitat unit (CHU) is generally treated as one monitoring stratum, although the portion of Mormon Mesa CHU that is associated with Coyote Springs Valley is treated as a separate stratum. Chuckwalla CHU is also treated as dual monitoring strata, with potentially unequal sampling effort in the areas managed by the Department of Defense (Chocolate Mountain Aerial Gunnery Range, CMAGR) and by the Bureau of Land Management (BLM). New recovery units were established under the revised recovery plan (USFWS, 2011), which led to separating the Piute and Eldorado Valleys into 2 distinct strata which are in different recovery units. Fenner Valley is in the same recovery unit but is a distinct stratum from Piute Valley to simplify reporting by state. The Joshua Tree stratum does not encompass all suitable habitat for desert tortoises in Joshua Tree National Park (JTNP). The national park designation and current boundaries just post-date the designation of CHUs, so some of the Pinto Mountains and Chuckwalla CHUs (and monitoring strata) are in the current JTNP.

In 2019, surveys were conducted in California in AG, CK, FE, FK, IV, JT, OR, PT, and SC strata; and in BD, CS, and EV in Nevada, Utah, and Arizona. The optimal number of transects in

a monitoring stratum was determined by evaluating how these samples would contribute to the precision of the annual density estimate for a given stratum (Anderson and Burnham, 1996; Buckland et al., 2001). Power to detect an increasing population size is a function of 1) the magnitude of the increasing trend, 2) the "background noise" against which the trend operates, and 3) the length of time the trend is followed (even a small annual population increase will result in a noticeably larger population size if the increase continues for many years).

Anderson and Burnham (1996) recommended that transect number and length be chosen to target precision reflected in a coefficient of variation (CV) of 10-15% for the estimate of density in each recovery unit. The CV describes the standard deviation (a measure of variability) as a proportion of the mean and is often converted to a percentage. The target CV is achieved based on the number of tortoises that might be encountered there (some strata have higher densities than others). Operationally for this species, this typically entails surveying sufficient kilometers to encounter approximately 30 tortoises in each stratum.

The actual number of transects assigned in each stratum was a function of the optimal numbers described above, as well as on available funding. Transects were selected from among a set of potential transects laid out systematically across strata, with a random origin that was established in 2007 for the lattice of transects. Systematic placement provides more even coverage of the entire stratum, something that may not occur when strictly random placement of transects is used. Once the number of transects to survey in each stratum was determined, these were selected using randomization procedures; since 2013 R software has been used to implement the Generalized Random Tesselated Stratified (GRTS) spatially balanced survey design procedure (R Core Team, 2018; Kincaid and Olsen, 2017). The US Environmental Protection Agency developed GRTS as a means to generate a spatially balanced, random sample (Stevens and Olsen, 2004). Each year GRTS was used to select planned transects with these qualities and to select a set of alternative transects that would contribute to the final sample having the same spatially representative and random properties if any planned transects were replaced due to field logistics. Because the same set of potential transects has been used since 2007, some transects are repeated between years but others may not have been selected in the past.

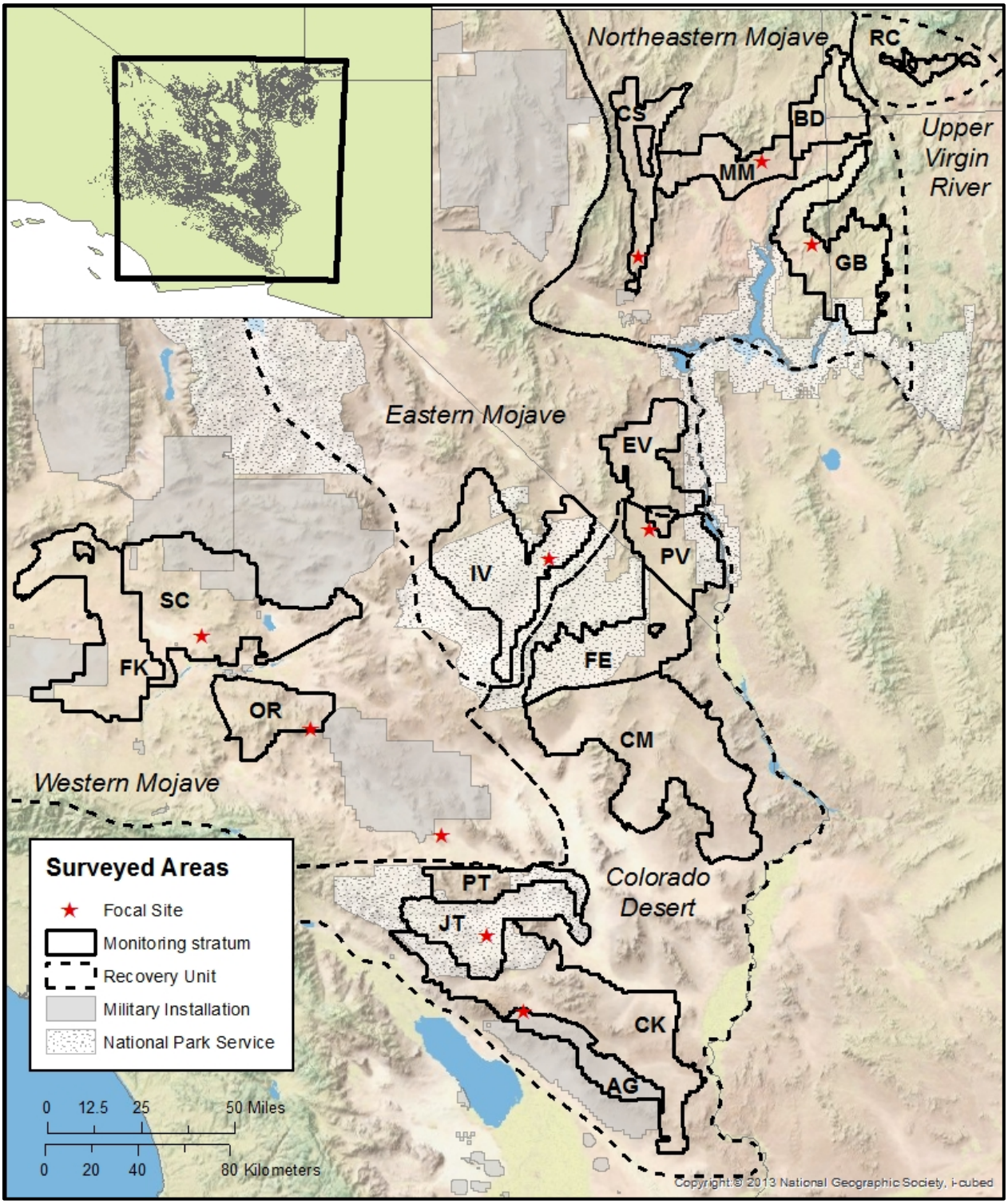


Figure 1. Long-term monitoring strata (n=17) corresponding to tortoise conservation areas (USFWS, 2011) in each recovery unit.
Stratum abbreviations are given in Table 6. Potential habitat (Nussear et al., 2009) is overlain on the southwestern United States in the extent indicator.

Distance sampling transect completion

One adaptation that tortoises have for living in the desert is to restrict surface activity to fairly narrow windows of time during the year. In general, tortoises emerge from deep within shelters (burrows) from mid-March through mid-May and then again (less predictably) in the fall. These periods coincide with flowering of their preferred food plants (in spring) and with annual mating cycles (in fall). The annual range-wide monitoring effort is scheduled to match the spring activity period for tortoises.

During this season, not all tortoises are above ground or visible in burrows. To encounter as many tortoises as possible, monitoring is scheduled for early in the day and to be completed before the hottest time of day. Because tortoises are located visually, monitoring is restricted to daylight hours. Based on past experience, we expect tortoises to become most active after 8am during March (it is usually too cool before this time), but to emerge earlier and earlier until their optimal activity period includes sunrise by the beginning of May. In May, we also expect daytime temperatures to limit tortoise above-ground activity as the morning progresses to afternoon.

Field crews completed transects during this optimal period each day. Start times were decided a week in advance, so crews arrived at transects at similar times on a given morning. However, completion times will be more variable, as a consequence of terrain, number of tortoises encountered, etc. Under normal conditions, each team walked one 12-km square transect each day. Teams were comprised of two field personnel who switched lead and follow positions at each corner of each transect, so they each spent an equal amount of time in the leader and follower positions. The leader walked on the designated compass bearing while pulling a 25 m length of durable cord; the walked path is also the transect centerline and was indicated by the location of the cord. The length of cord also spaced the two observers, guiding the path of the follower; when the cord was placed on the ground after a tortoise or carcass was detected, it facilitated measurement of the local transect bearing. The walked length of each transect was calculated as the straight-line distance between GPS point coordinates that were recorded at approximate 500 m intervals (waypoints) along the transect and/or whenever the transect bearing changed. Leader and follower each scanned for tortoises independently without leaving the centerline, and the role of the crew member finding each tortoise was recorded in the data. Although the leader saw most of the tortoises, the role of the follower was to see any remaining tortoises near the centerline, crucial to unbiased estimation of tortoise densities.

Distance sampling requires that distance from the transect centerline to tortoises is measured accurately. When a tortoise was observed, crews 1) used a compass to determine the local transect bearing based on the orientation of the 25 m centerline, 2) used a compass to determine the bearing from the point of observation to the tortoise, and 3) used a measuring tape to determine the distance from the observer to the tortoise. These data are sufficient to calculate the

perpendicular distance from the observed tortoise to the local transect line. If the tortoise was outside of a burrow, it was handled enough to measure midline carapace length (MCL), to determine its sex, assess its body condition (USFWS, 2012a), and to apply a small numbered tag to one scute. If a tortoise could not be measured because it was in a burrow, because temperatures precluded handling, or for any other reason, crews attempted to establish by other means whether the animal was at least 180 mm MCL, the criterion for including animals in density estimates.

Because transects are 3 km on one side, it is not unusual for that path to cross through varied terrain or even be blocked by an obstacle such as an interstate highway. In the first years of this program, smaller transects in inconvenient locations were shifted or replaced, but this compromised the representative nature of the sample. Since 2007, the basic rules for modifying transects involve 1) reflecting transects to avoid obstacles associated with human infrastructure or jurisdictions (large roads, private inholdings, administrative boundaries, etc.), or 2) shortening transects in rugged terrain (USFWS, 2012b). Substrate and access to transects can also make it difficult to complete transects during the optimal period of times, so 3) transects could be shortened to enable completion before 4pm each day.

If it was anticipated that fewer than 6 km could be walked due to difficult terrain, the transect was replaced with a transect from the alternate list that were also selected using the GRTS procedure. It was assumed that the proportion of the area that was unwalkable was the same as the proportion of total planned kilometers (12 X number of planned transects) that were unwalkable. Specifics of how transect paths were to be modified for rugged terrain (shortened) or for administrative boundaries (reflected) can be found online in the current version of the handbook (USFWS, 2017a).

Proportion of tortoises available for detection by line distance sampling, G_0

Basing density estimates only on the tortoises that are visible will result in density estimates that are consistently underestimated (biased low). Instead, we use telemetry to estimate the proportion of tortoises available for sampling, G_0 ("gee-sub-zero"), which was incorporated in estimate of adult tortoise density to correct this bias.

We used telemetry to locate radio-equipped tortoises that were visible as well as those that were otherwise undetectable in deep burrows or well-hidden in dense vegetation. To quantify the proportion that were available for detection (visible), telemetry technicians used a VHF radio receiver and directional antenna to locate 9-16 radio-equipped G_0 tortoises in each of 6 of the full set of focal sites throughout the Mojave and Colorado deserts (Fig. 1).

Each time a transmittered tortoise was located, the observer determined whether the tortoise was visible (*yes* or *no*). Through careful coordination, observers at telemetry sites monitored visibility during the same daily time period when field crews were walking transects in the same region of

the desert. Observers completed a survey circuit of all focal animals as many times as possible during the allotted time, recording visibility each time. Bootstrapped estimates of G_0 started by selecting one visibility record at random for each tortoise on each day it was located. The average visibility of all tortoise observations at a site on a given day was calculated and used to estimate the mean and variance of G_0 at that site. One thousand bootstrap samples were generated in Microsoft Excel to estimate G_0 and its standard error.

Field observer training

Training for careful data collection and consistency between crews is fundamental part of quality assurance for this project. This training includes instruction as well as required practice time on skills such as tortoise handling, walking practice transects, and developing detection and distance-measuring techniques on a training course with tortoise models in measured locations. Chapters of the monitoring handbook are updated as needed and posted to the Desert Tortoise Recovery Office website (http://www.fws.gov/nevada/desert_tortoise/reports).

Kiva Biological (Kiva) supplied crews for monitoring in California strata. Great Basin Institute (GBI) supplied crews for monitoring in strata in Nevada, Utah, and Arizona. Fourteen of the 24 personnel for Kiva had previous transect experience with this monitoring program, as did five of 22 surveyors for GBI. The two teams were trained separately by the same USFWS instructor for consistency. To accommodate logistics on Chocolate Mountain Aerial Gunnery Range, California surveys started approximately one month earlier than those in Nevada, so it was not practical to overlap the training schedules (Table 1).

Telemetry training

The primary goals of G_0 training include correct use of telemetry equipment, understanding G_0 data collection fields, observation of as many radio-equipped tortoises as possible during the day, and covering a window of observation that overlaps the transect observation period for each sampling area on that day. Although all telemetry crews had some prior telemetry experience, performance on this project differs from others that do not require confirmation of the exact location of the tortoise. Unless the exact location is determined, visibility of the tortoise cannot be accurately recorded. Beyond instruction and testing on use of the equipment in desert terrain, several days of practice were compulsory to be able to troubleshoot locating the tortoise and confirming the location when it could not be seen. In addition, some instruction for telemetry and transect crews overlapped to help each group better understand the purpose their data serve and how separate data types are related to the final density estimate.

Distance sampling training

Transect walkers were given classroom instruction, skills training, field demonstrations, and practice transects to complete (Table 1). Ultimately each team was evaluated based on performance on a field arena outfitted with polystyrene tortoise models placed in measured locations (Anderson et al., 2001), as well as on performance meeting protocol requirements on full-day staged transects.

Polystyrene desert tortoise models were set out on the training course each year using placement instructions (vegetation or open placement, tape-measured distance along training line, and tape-measured distance perpendicular from training line). This course was used to determine whether 1) individual teams are able to detect all models on the transect centerline, 2) whether their survey techniques yield useful detection functions, and 3) whether they can accurately report the distance of each model from the transect centerline. For each purpose, many opportunities must be provided, so the course is populated at a very high density of models (410/km^2).

Crews were sent on transects and training lines as paired, independent observers. That is, the follower was 25 m behind the leader, with the opportunity to detect models not found by the leader. If the leader detected 80% of all tortoises that are found, the assumption was that the follower detected 80% of the tortoises that were missed by the leader. In this example, the pair together would detect 0.80 + (0.80 X (1 – 0.80)) = 0.96 of all tortoises on the centerline. These data on models were used to evaluate and correct crew performance before the field season, but were not used in any way to estimate densities of live tortoises once range-wide field surveys began.

Table 1. Training schedule for 2019 for a) Kiva transect crew, b) GBI transect crews, and c) GBI telemetry trainees.

1a. Training schedule for 2019 for Kiva transect crews

Date	Activity	Location	Instructors
Saturday, 2 March	Transect methods overview	GBI Field Station	Allison
	Phones – Training database	GBI Field Station	Spangler
	Review protocol and goals on training lines	GBI Field Station	Allison
	Compass work	GBI Field Station	Allison

Date	Activity	Location	Instructors
	How to collect data in the styrotort arena and estimate 2-, 5-, and 15-m distances	GBI Field Station	Hayes/ Bassett
	Practice epoxy for tag attachment	GBI Field Station	Woodman
3 March	Training Lines I (8km)	BLM Desert Tortoise Mgmt Area (DTMA)	Allison
4 March	Review training line I results	GBI Field Station	Allison / Spangler
	Standard protocol and nonstandard transects, start point and reflection exercise	GBI Field Station	Allison
	Phones – Transect database	GBI Field Station	Allison
	GPS and compass use for tortoise monitoring	GBI Field Station	Allison
	Tortoise handling	GBI Field Station	Bassett/ Hayes
	Tortoise visibility examples	GBI Field Station	Allison
5 March	Training Lines II (8km)	BLM DTMA	Allison
6 March	Full transects (12km)	Large Scale Translocation Study Area (LSTS)	Hayes/ Bassett
7 March	Review training line II results	GBI Field Station	Allison / Spangler
	Review LSTS practice transect results	GBI Field Station	Allison / Spangler
	Wrap up discussion	GBI Field Station	Allison

Table 1b. Training schedule for GBI transect crews.

Date	Activity	Location	Instructors
Monday, 18 March	Transect methods overview	GBI Field Station	Allison
	Compass work	GBI Field Station	Christopher
	Training line protocol and objectives	GBI Field Station	Allison
19 March	Training Lines I (8km)	BLM DTMA	Allison
20 March	Review training line I results	GBI Field Station	Allison / Spangler
	Monitoring on Public Lands	GBI Field Station	Allison
	Standard protocol and nonstandard transects, start point and reflection exercise	GBI Field Station	Allison
	GPS and compass use	GBI Field Station	Allison
	Tortoise visibility examples	GBI Field Station	Allison
21 March	Tortoise handling	GBI Field Station	Dr. Johnson
22 March	Full 12km transect with interruption for terrain	Large Scale Translocation Site	Christopher
25 March	Search image for tortoises	River Mtns, NV	Christopher/Sparks
26 March	Training Lines II (16km)	BLM DTMA	Christopher
27 March	Training Lines II (continued)	BLM DTMA	Christopher
28 March	Review LSTS I	GBI Field Station	Allison

Date	Activity	Location	Instructors
	Read a bearing from a map	GBI Field Station	Allison
	Plan reflected transects for LSTS 2	GBI Field Station	Allison
	Training line results – Trial II	GBI Field Station	Allison
	Handling 2	GBI Field Station	Christopher
29 March	Full transects (12km) reflected for highway	LSTS	Allison
1 April	Review LSTS transects	GBI Field Station	Allison
	Handling 3	GBI Field Station	Christopher
	Wrap up discussion	GBI Field Station	Allison

Table 2c. Training schedule for GBI telemetry technicians.

Date	Activity	Location	Instructors
5 March	Introduction to distance sampling	GBI Field Station	Allison
	Visibility descriptions	GBI Field Station	Allison
7 March	Introduction to tortoise telemetry	Boulder City Conservation Easement (BCCE)	Sparks
8 March	Telemetry practice	Halfway Wash	Sparks
9 March	Telemetry practice	BCCE	Sparks
14 March	Telemetry practice	Gold Butte focal site	Sparks
19 March	Telemetry practice	River Mountains, Nevada	Sparks
20 March	Telemetry practice	River Mountains, Nevada	Sparks
21 March			

Date	Activity	Location	Instructors
	Tortoise handling	GBI Field Station	Dr. Johnson
22 March	Telemetry practice	BCCE	Sparks
23 March	Telemetry practice	River Mountains, Nevada	Sparks
26 March	Surveyor search image for tortoises	River Mountains, Nevada	Christopher/Sparks
28 March	Handling 2	GBI Field Station	Christopher
29 March	Telemetry to derive start times	Piute-Mid focal site	Sparks
30 March	Telemetry to derive start times	Piute-Mid focal site	Sparks

Data management, quality assurance, and quality control

Two sets of data tables were maintained through the field season, organizing data collected on transects and at the G_0 focal sites. Collection data forms, paper datasheets, and databases were designed to minimize data entry errors and facilitate data verification and validation. Data were collected in both electronic and paper formats by the separate survey organizations, then combined into a single database by a single data manager provided by GBI. Data were submitted to the USFWS for evaluation at 7-14-day intervals over the course of surveys. Data were evaluated for completeness and correctness but also for consistency among crews and between field teams. Written review of the datasets was provided by USFWS to the field teams, who worked with the Phase I data manager to address and/or clarify any identified inconsistencies in the data and to ensure all crews applied the field protocols consistently.

Data quality assurance and quality control (data QA/QC, also known as verification and validation) was performed during the data collection (Phase I, described above), data integration, and data finalization phases. In each phase, processing steps were also implemented. For instance, in Phase I, datasheets were scanned and named to be easily associated with their electronic records. During the data integration phase (II), additional attribute fields were added to enable data from different UTM zones to be utilized simultaneously, and all fields were formatted for final processing. The third phase, data finalization (III), involved generation of final spatial and non-spatial data products used for analysis. Because processing steps can introduce errors, each phase of QA/QC included checks of collection but also of processing information. Figure 2 describes the overall data flow.

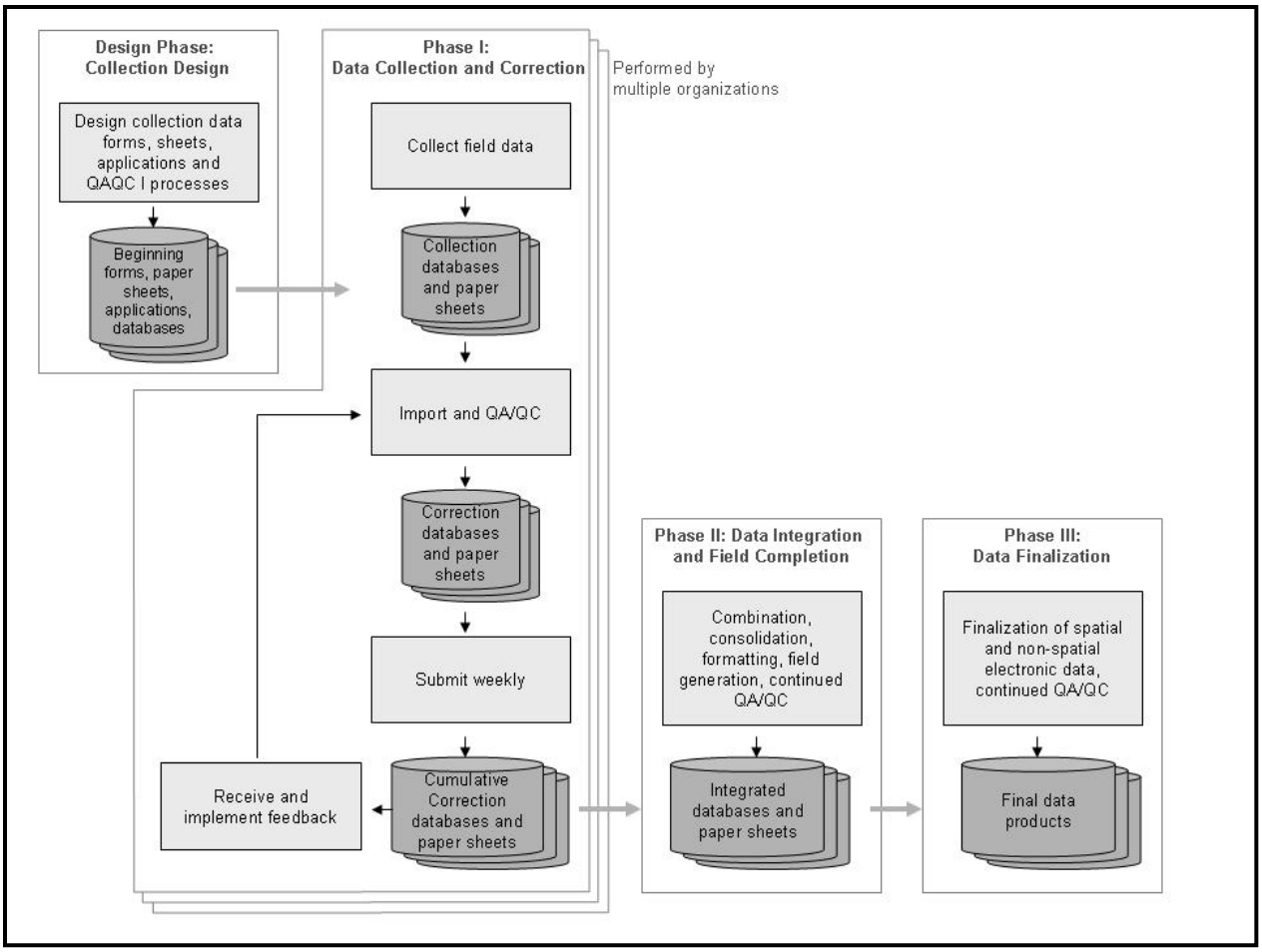


Figure 2. Data flow from collection through final products.

Tortoise encounter rate and development of detection functions

The number of tortoises seen in each stratum and their distances from the line were used to estimate the encounter rate (tortoises seen per kilometer walked) and the detection rate (proportion of available tortoises that are detected out to a certain distance from the transect centerline). Detection function estimation is "pooling robust" under most conditions (Buckland et al., 2001). This property holds as long as factors that cause variability in the curve shape are represented proportionately (Marques et al., 2007). Factors that can affect curve shape include vegetation that differentially obscures vision with distance and different detection protocols used by individual crews (pairs). I expected to develop one detection curve for each field team each year because each of the pairs on a team contributes the same number of transects to the effort, and because each team works in geographically different sites. The encounter rate is less sensitive to small sample sizes, so it was estimated for each stratum separately.

Program DISTANCE, Version 7, Release 3 (Thomas et al., 2010) was used to fit appropriate detection functions, to estimate the encounter rate of tortoises in each stratum, and to calculate the associated variances. Analysis was applied to all live tortoises at least 180 mm MCL. Transects were packaged into monitoring strata ("regions" in Program DISTANCE).

Observations were truncated to improve model fit as judged by the simplicity (reasonableness) of the resulting detection function estimate (Buckland et al., 2001:15-16) as well as fit diagnostics near the transect centerline**.** Any observations that were not used to estimate detection functions were also not used to estimate the encounter rate (tortoises detected per kilometer walked). In distance sampling applications for many other species, encounter rate can be estimated with relatively high precision, but tortoise encounter rates are low enough that truncation was applied conservatively to maximize the number of observations per stratum. Using truncated data, I considered the Akaike Information Criterion (AIC) to compare detection-function models (uniform, half normal, and hazard-rate) and key function/series expansions (none, cosine, simple polynomial, hermite polynomial) recommended in Buckland et al. (2001). To determine whether a single detection curve might be used for both survey teams, AIC was also used to compare separate models to a single one that included a factor for field team to modify the shape of the curve.

In April 2017, 366 tortoises that were at least 180 mm median carapace length ("adults") were marked and then translocated into Ord-Rodman TCA (OR) in the Lucerne Valley just south of the Ord Mountains. This translocation was done in conjunction with the base expansion at 29 Palms Marine Corps Air Gunnery Command Center (MCAGCC). Another 2 were translocated to OR in the fall of 2017, 38 more in the spring of 2018, and 19 more in the spring of 2019 before the surveys reported here. A second recipient site, Rodman-Sunshine Peak North, is just adjacent to OR and received 301 adult translocatees through spring 2018. For this report, encounter rates were calculated in OR with all encountered animals and then again separately to report on only

resident animals. The latter density captures the population status before translocations. From experience with previous translocations, it is expected that translocatees will be much more active than resident tortoises for the first 2 years, so analyses will separate residents from translocatees through 2021.

Proportion of available tortoises detected on the transect centerline, *g(0)*

Transects were conducted by two-person crews using the method adopted beginning in 2004 (USFWS, 2006). Transects were walked in a continuous fashion, with the lead crew member walking a straight line on a specified compass bearing, trailing about 25 m of line, and the second crew member following at the end of the line. This technique involves little lateral movement off the transect centerline, where attention is focused. Use of two observers allows estimation of the proportion of tortoises detected on the line; and thereby provides a test of the assumption that all tortoises on the transect centerline are recorded ($g(0) = 1$). The capture probability (p) for tortoises within increasing distances from the transect centerline was estimated as for a two-pass removal or double-observer estimator (White et al., 1982): p = (lead–follow)/lead, where lead = the number of tortoises first seen by the observer in the leading position and follow = the number of tortoises seen by the observer in the follower position. The corresponding proportion detected near the line by two observers was estimated by $g = 1 - q^2$, where $q = 1 - p$. Figure 4 graphs the relationship between the single-observer detection rate (p) and the corresponding dual-observer detection rate ($g(0)$; *"gee at zero"*). The actual proportion detected can be estimated, but to avoid the necessity of compensating for imperfect detection, during training field crews (pairs) are expected to detect 96% of all models within 1 m of the transect centerline. This corresponds to the leader being responsible for at least 80% of the team's detections near on the centerline in order to meet this standard and is the basis for one of the training metrics.

Few or no tortoises are located exactly on the line, and even examining a small interval (such as 1 m on each side of the transect line) results in few observations to precisely estimate $g(0)$. Instead, my test of the assumption involves examination of the lead and follow proportions starting with counts of tortoises in larger intervals from the line, moving to smaller intervals centered on the transect centerline. As the intervals get smaller the sample sizes also get smaller, but the estimates are more relevant to the area right at the transect centerline. The expectation is that the estimates should converge on $g(0) = 1.0$.

If the test does not indicate that all tortoises were seen on the transect centerline, the variance of p can be estimated as the binomial variance = $q(1 + q)/np$ (White et al., 1982), where n = the estimated number of tortoises within 1 m of the transect centerline, and the variance of $g(0)$ is estimated as twice the variance of p.

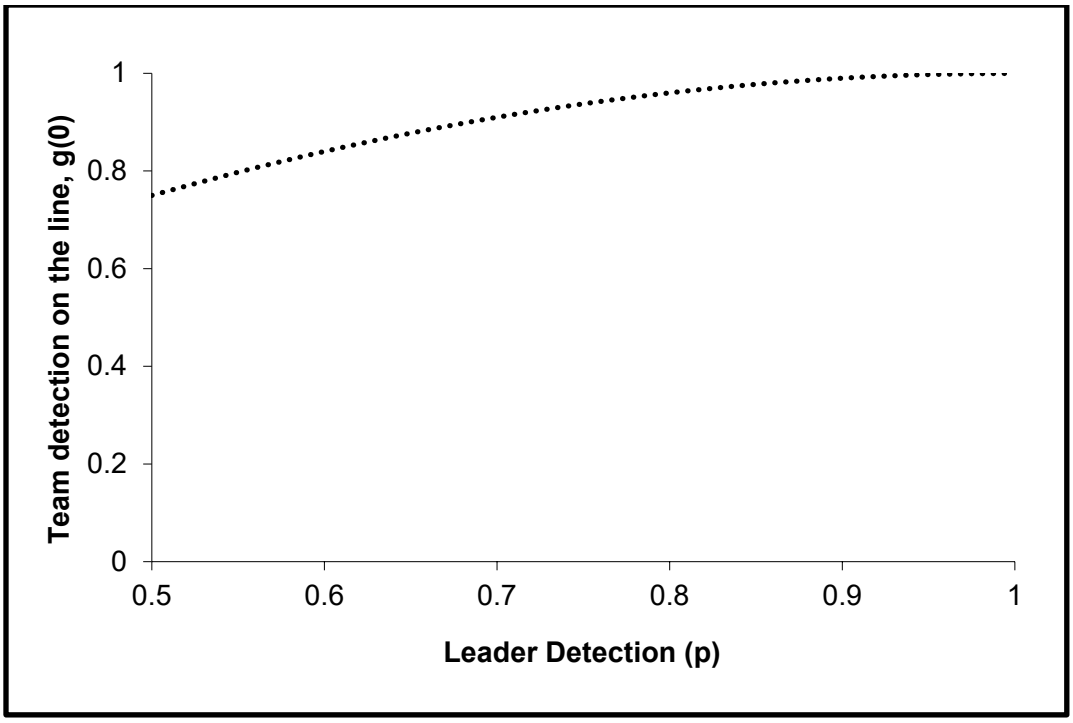


Figure 3. Relationship between single-observer detections (by the leader, *p*) and dual-observer (team) detections, *g(0)*.

Estimates of tortoise density

Each year, the density of tortoises is estimated at the level of the stratum. The calculation of these densities starts with estimates of the density of tortoises in each stratum from Program DISTANCE, as well as their variance estimates:

$$D = \frac{n}{2wLP_a G_0 g(0)},$$

where L is the total length of kilometers walked in each stratum and w is the distance to which observations are truncated, so $2wL$ is the area searched in each stratum. This is a known quantity (not estimated). P_a is the proportion of desert tortoises detected within w meters of the transect centerline and was estimated using distance assumptions in Program DISTANCE. The encounter rate (n/L) and its variance were estimated in Program DISTANCE for each stratum. Calculation of D required estimation of n/L, P_a, G_0, and $g(0)$, so the variance of D depended on the variance of these quantities as well.

Proportion of available tortoises was estimated for all strata near each G_0 site and the proportion of available tortoises detected on the transect centerline ($g(0)$) was estimated jointly for all strata. The detection function, which comes into the above equation as P_a, may be estimated jointly or separately for each team, depending on the number and quality of observations. In 2019, the two

teams had very different detection patterns, so separate curves were developed for each. A schematic of the process leading to density estimates is given in Figure 4. Each of the four left-hand columns represent one estimate that contributed to the final density estimates, and the rows in each column show the subsets of the data on which they are based. These estimates combined from left to right to generate stratum and recovery unit density estimates.

<table>
<tr><td></td><td>Tortoise encounter rate</td><td>Proportion that are visible, G_0</td><td>Detection rate, P_a</td><td>Proportion seen on the line, $g(0)$</td><td>Density</td></tr>
<tr><td>Recovery unit</td><td>Stratum</td><td>Neighboring G_0 sites</td><td>Data collection group</td><td>Overall</td><td>Stratum</td></tr>
<tr><td rowspan="3">West Mojave</td><td>FK</td><td rowspan="2">SC</td><td rowspan="8">Kiva</td><td rowspan="14">All data</td><td>FK</td></tr>
<tr><td>SC</td><td>SC</td></tr>
<tr><td>OR</td><td>OR</td><td>OR</td></tr>
<tr><td rowspan="5">Colorado Desert</td><td>AG</td><td rowspan="4">CK</td><td>AG</td></tr>
<tr><td>CK</td><td>CK</td></tr>
<tr><td>JT</td><td>JT</td></tr>
<tr><td>PT</td><td>PT</td></tr>
<tr><td rowspan="2">Eastern Mojave</td><td>FE</td><td rowspan="2">IV</td><td>FE</td></tr>
<tr><td>IV</td><td>IV</td></tr>
<tr><td>EV</td><td>PV</td><td rowspan="3">GBI</td><td>EV</td></tr>
<tr><td rowspan="2">Northeastern Mojave</td><td>CS</td><td rowspan="2">HW</td><td>CS</td></tr>
<tr><td>BD</td><td>BD</td></tr>
</table>

Figure 4. Process for developing density estimates in 2019. For estimate (one per column), the full set of data was factored as indicated by divisions within the columns.

RESULTS

Field observer training

Training in 2019 lasted from 2 March – 1 April (Table 1). Tests of field detection abilities occurred toward the end of each period, as indicated in the schedules.

Proportion of tortoises detected at distances from the transect centerline

Table 2 reports the proportion of models that were available and were detected over 16 km of transects by each team at 1-, 2-, and 5-m from the transect centerline. Teams were tested after a trial run on the detection lines or after returning crews walked practice transects to refresh the search pattern. The target for detection on the centerline is 100%, and nine of the 22 crews achieved this.

Table 2. Proportion of tortoise models detected in 2019 by crews within 1-, 2-, or 5-m of the transect centerline. Values that scored below the target of 0.90 at 1- and 2-m are highlighted. Crews 1-12 surveyed for Kiva Biological; the remaining crews surveyed for Great Basin Institute.

Crew Number	1m	2m	5m
1	1.00	0.96	0.94
2	1.00	1.00	0.94
3	1.00	1.00	0.94
4	0.93	0.96	0.93
5	0.86	0.92	0.92
6	0.92	0.96	0.92
7	0.93	0.96	0.90
8	0.86	0.89	0.88
9	1.00	0.96	0.90
10	0.93	0.89	0.88
11	0.93	0.92	0.92
12	1.00	0.96	0.93
13	1.00	1.00	0.88
14	1.00	0.96	0.87
15	0.93	0.96	0.91
16	0.93	0.96	0.87
17	0.87	0.92	0.91
18	1.00	0.96	0.90
19	0.81	0.84	0.80
20	0.87	0.92	0.90
21	1.00	1.00	0.90
22	0.87	0.92	0.91
Kiva	**0.948**	**0.949**	**0.917**
GBI	**0.926**	**0.947**	**0.885**
Overall	**0.938**	**0.948**	**0.902**

Table 3 gives the average [absolute] difference between the expected and measured perpendicular distances from the model to the walked line. All measurements for all models during the 2-day trial were used for this estimate and capture two different sources of inaccuracies: 1) using a compass and measuring tape to record distances to the models, plus 2) inaccurately following the trajectory of the transect. The latter source of error does not occur on monitoring transects, because the walked transect is the true transect. On training lines, measurement error increased if crew path diverged from the measured line used to place the models. The “Available Models Detected by Leader” column reports the proportion of all models

that were found first by the leader. During training, this number was used to identify crews in which the leader was not finding at least 80% of all detected. With an 80% detection rate for the leader, a 96% detection rate was expected for the team.

Table 3. Diagnostics for individual crews after training in 2019.

Team	Proportion available models within 2m of centerline by leader	Proportion available models within 2m of centerline by team	Measured versus exact distance (m)	Estimated abundance	95% CI Lower limit	95% CI Upper limit
1	0.85	0.96	0.70	381	321.0	452.2
2	0.93	1.00	0.83	418	373.9	466.8
3	0.96	1.00	0.72	410	298.3	563.6
4	0.88	0.96	0.94	424	367.1	489.2
5	0.88	0.92	0.88	427	393.6	462.6
6	0.96	0.96	0.78	364	319.8	414.1
7	0.88	0.96	0.80	436	321.9	590.2
8	0.82	0.89	0.77	383	306.2	479.8
9	0.89	0.96	0.74	416	347.4	498.6
10	0.89	0.89	0.85	457	375.0	557.9
11	0.92	0.92	0.71	399	348.6	456.5
12	0.84	0.96	0.98	400	288.8	553.9
13	0.89	1.00	0.86	374	308.7	453.1
14	0.92	0.96	1.02	411	305.2	554.3
15	0.92	0.96	0.69	487	391.6	606.6
16	0.85	0.96	1.00	348	298.4	405.9
17	0.73	0.92	0.82	414	329.3	521.6
18	0.96	0.96	0.79	432	367.0	509.1
19	0.80	0.84	0.70	339	261.9	437.8
20	0.88	0.92	0.79	352	312.6	395.3
21	1.00	1.00	0.92	360	311.9	415.4
22	0.81	0.92	0.78	419	313.5	560.4
Kiva	**0.892**	**0.949**	**0.808**	**424**	**376.6**	**476.2**
GBI	**0.879**	**0.947**	**0.896**	**398**	**360.9**	**438.5**
Overall	**0.886**	**0.948**	**0.821**	**402**	**330.1**	**492.9**

Although some individual metrics were below-target (gray cells in Tables 2 and 3), all teams performed well overall so after corrective instruction to fine tune search techniques of specific crews, no pairs were rebuilt. During training, detection curves were fit to each crew's set of tortoise model observations. In no case was the best-fitting model one without a "shoulder" describing detections near the centerline. The best-fitting detection curves for each team are

plotted in. Figure 5 and 6 and were used to generate density estimates in Table 3. Crews were not evaluated on their ability to match curves of teammates; however, such overlays were used to focus field personnel on an additional level of conformity they could work toward. Distance sampling and development of a single detection curve from many observers is robust to the effects of pooling across observations from crews with variable search patterns, when observers contribute proportionally to the overall pattern (Marques et al., 2007).

In 2019, 10 of the 24 Kiva surveyors were returnees to the project. Five of the 20 GBI surveyors had previous experience with this project, and a sixth one had surveyed for tortoises without using distance sampling. The statistics for the relatively inexperienced GBI team were comparable to those for the experienced Kiva surveyors by the end of training.

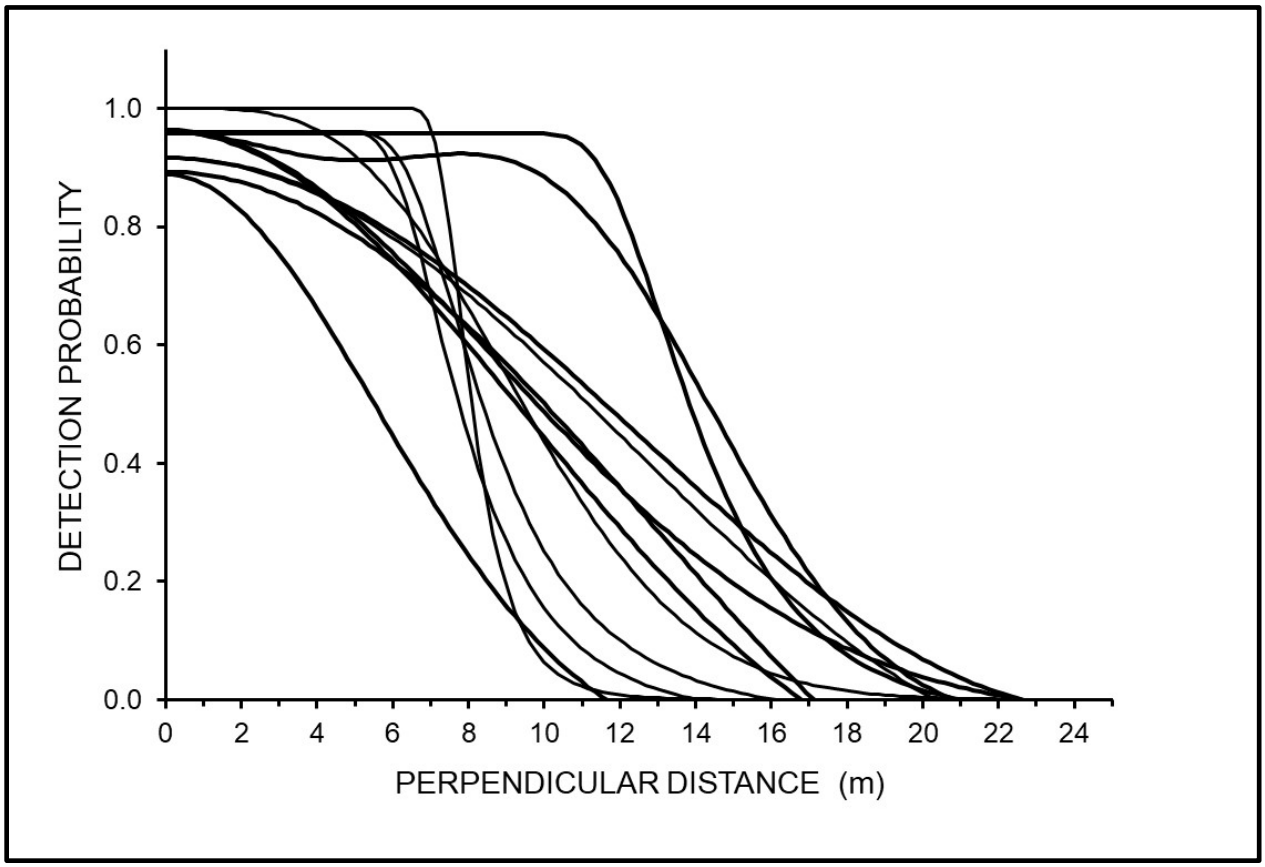


Figure 5. Detection curves for each of the 2019 Kiva crews during training. Each curve is based on a 16 km trial with approximately 100 detections.

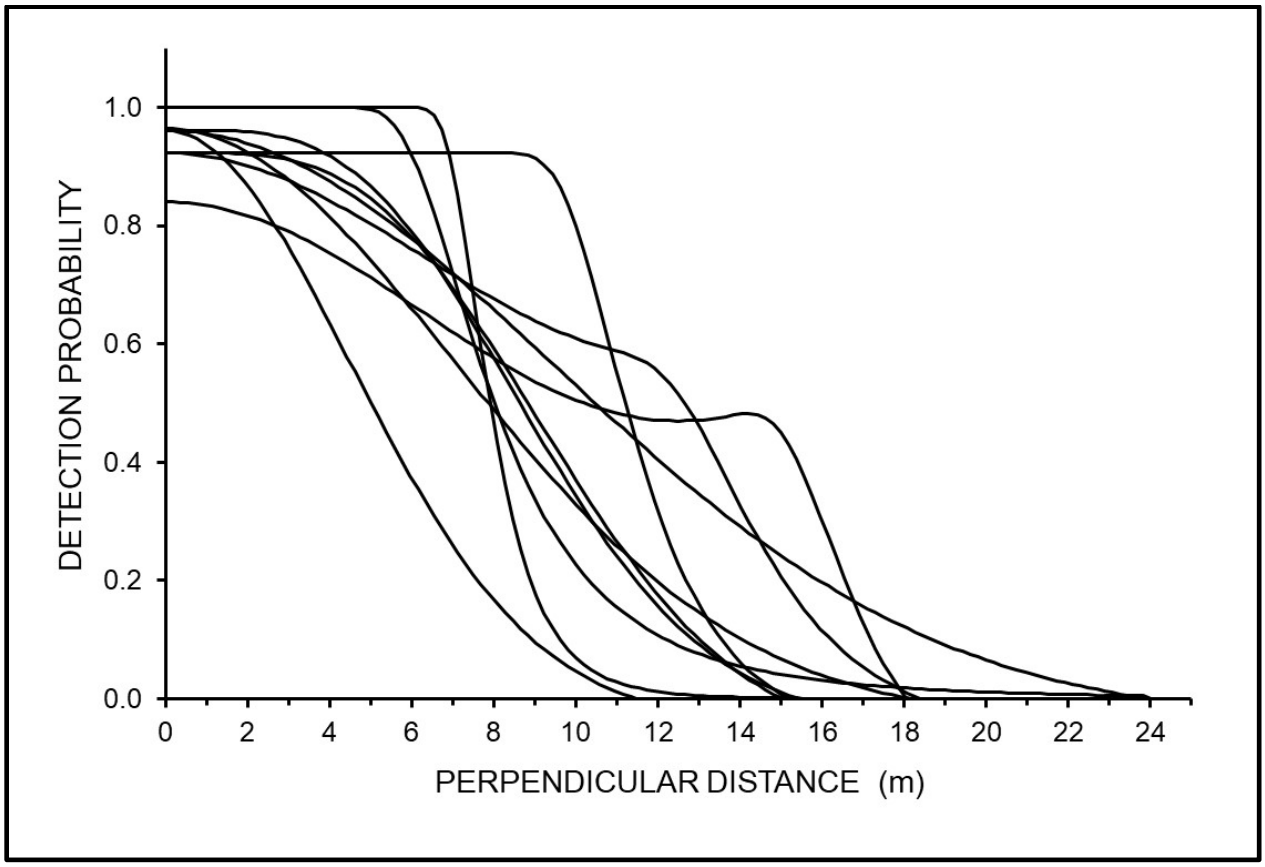


Figure 6. Detection curves for each of the 2019 GBI crews during training. Each curve is based on a 16 km trial with approximately 100 detections.

Quality assurance and quality control

There were 21,789 transect records and 2232 G_0 records associated with the monitoring effort in 2019. The first data specialist worked with the field teams to resolve 701 cases with fields that were inconsistent with constraints and expectations. After this phase of QA/QC had finished verifying and validating the information in these databases, Phase II provided independent review, repackaged tables into their final configuration, and added some spatial information. An additional 193 issues remained or were discovered in the third (final) phase of QA/QC. Only 117 were errors created by the field crews (sometimes faulty equipment or crews otherwise entering electronic data after the transect was completed, other times data entry error), of which all but 34 were corrected with recourse to paper datasheets. The remaining errors in 2019 indicated a failure to comply with protocols (e.g., first timestamps indicating the transect record was initiated the night before the survey), not because the data were erroneous.

Data for these and previous years can be requested from the author at Linda_Allison@fws.gov.

Transect completion

Table 4 reports the number of assigned and completed transects in each stratum in 2019. Table 4 also indicates the number of assigned transects that could be completed as standard square 12-km transects or by reflecting around property boundaries and infrastructure (column 4). An additional number (column 5) were shortened and represent more rugged terrain. Finally, some transects were considered unwalkable (column 6). Figures 7 to 10 show locations of transects and observations of live tortoises.

Table 4. Number and completion of transects in each stratum in 2019.

Stratum	Assigned transects	Assigned and alternate transects completed	Assigned, completed 12k	Assigned, completed shortened	Assigned, judged unwalkable*
BD	70	70	38	29	3
CS	72	72	35	29	8
EV	80	80	45	21	14
GBI	222	222	118	79	25
AG	35	35	18	14	3
CK	100	100	41	38	21
FE	40	40	37	3	0
FK	59	59	53	4	2
IV	74	74	62	12	0
JT	60	60	14	22	24
OR	56	56	28	14	14
PT	57	57	9	31	17
SC	90	90	55	19	16
Kiva	571	571	317	157	97
Total	793	793	435	236	122

*Assigned transects that were not walked were to be replaced by alternates. In addition to transects that were unwalkable due to terrain and counted in the far right column above, 7 were replaced due to time constraints of accessing through wilderness, and 1 was replaced after consulting with EOD crews on Chocolate Mountain AGR. Four walkable assigned transects in CS could not be accessed through a locked gate, 11 were not completed because China Lake NAWS could not provide escort, and 3 were replaced for logistical considerations pairing teams or complying with military installation requirements. Three were replaced inadvertently.

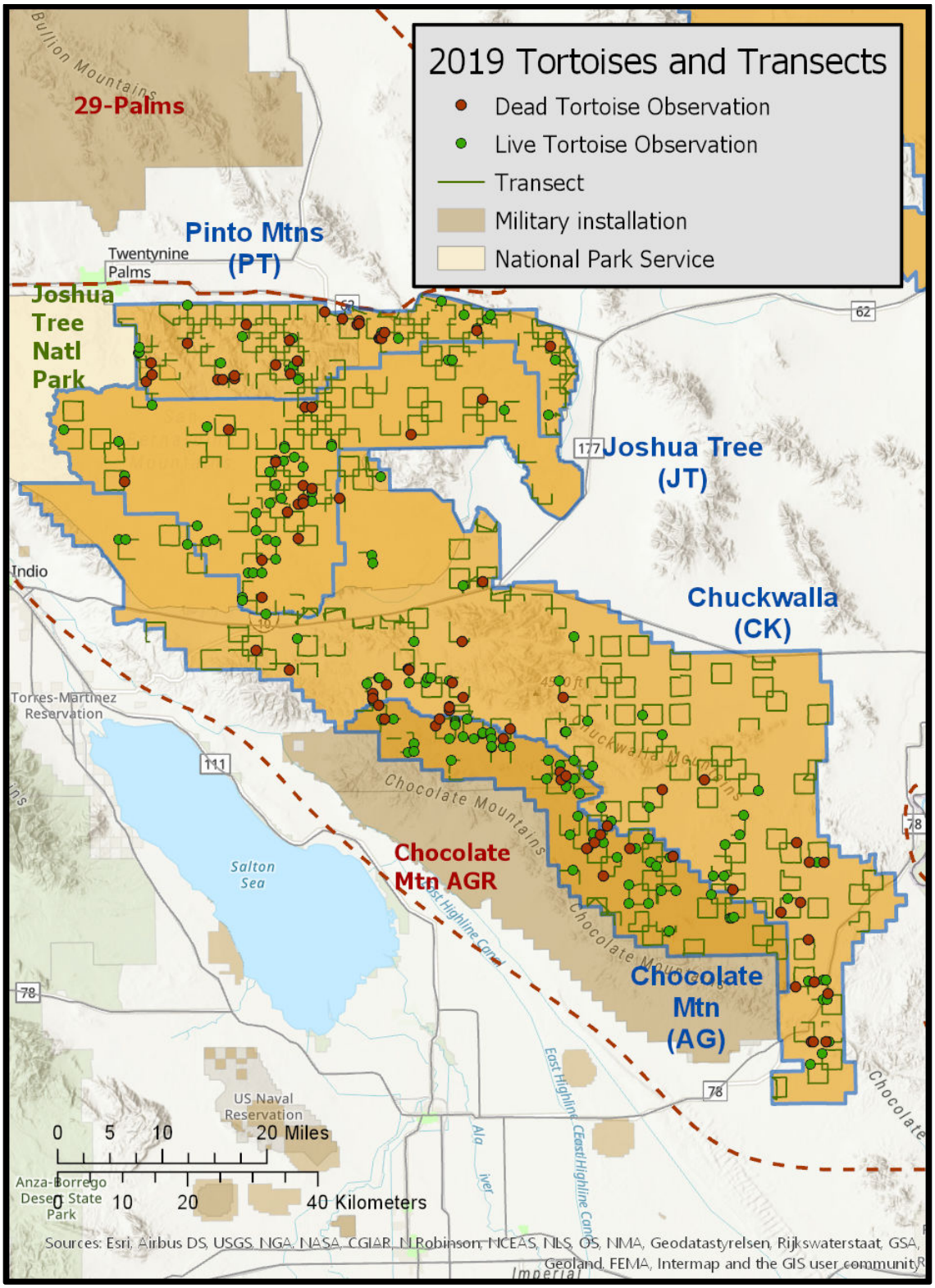


Figure 7. Distribution of distance sampling transects and live tortoise observations in 2019 in Chocolate Mountain Aerial Gunnery Range, Joshua Tree, Pinto Mountains, and Chuckwalla in the southern part of the Colorado Desert Recovery Unit.

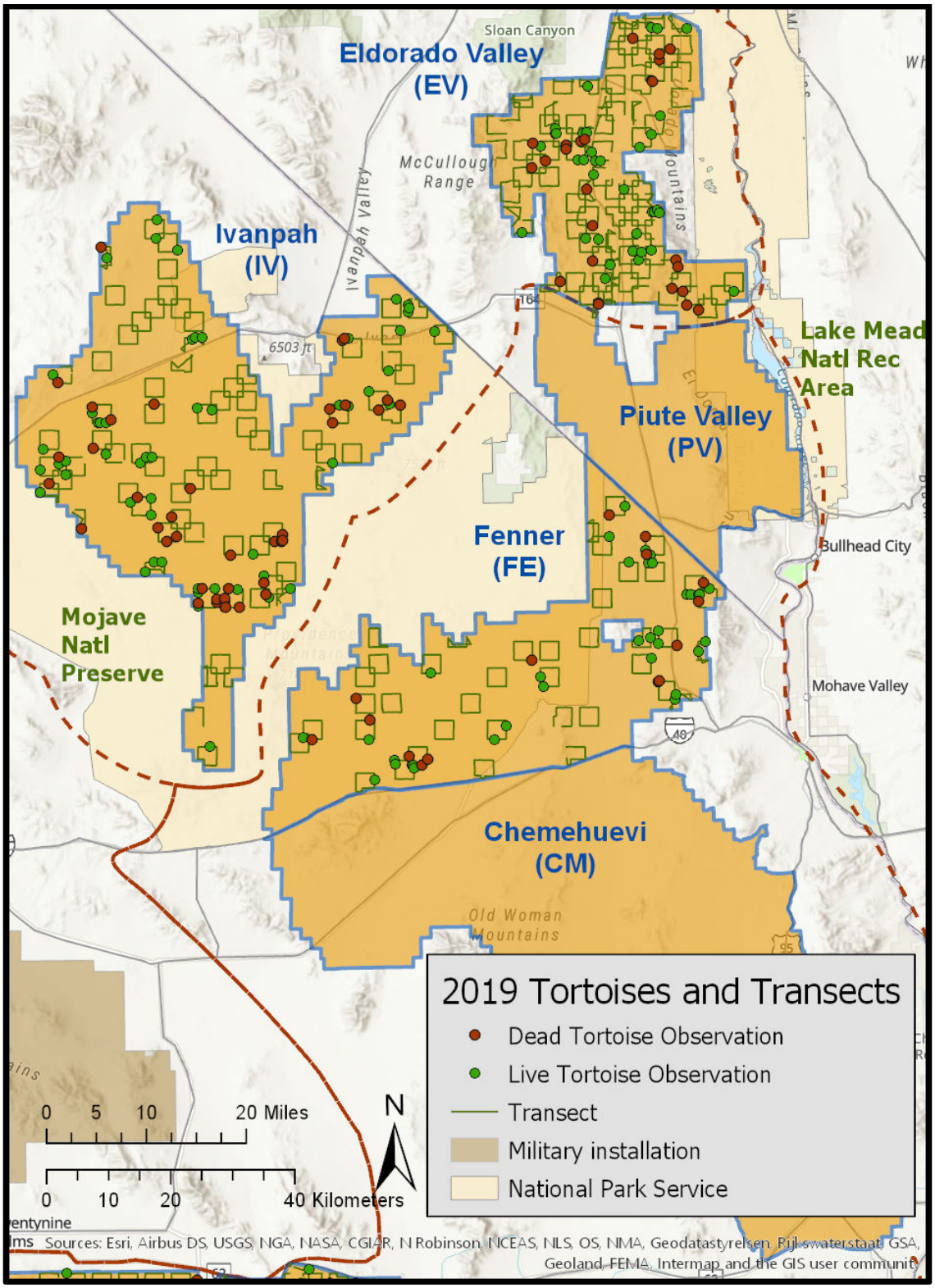


Figure 8. Distribution of distance sampling transects and live tortoise observations in 2019 in the Ivanpah Valley and Eldorado Valley strata of the Eastern Mojave Recovery Unit and in the Fenner stratum of the Colorado Desert Recovery Unit.

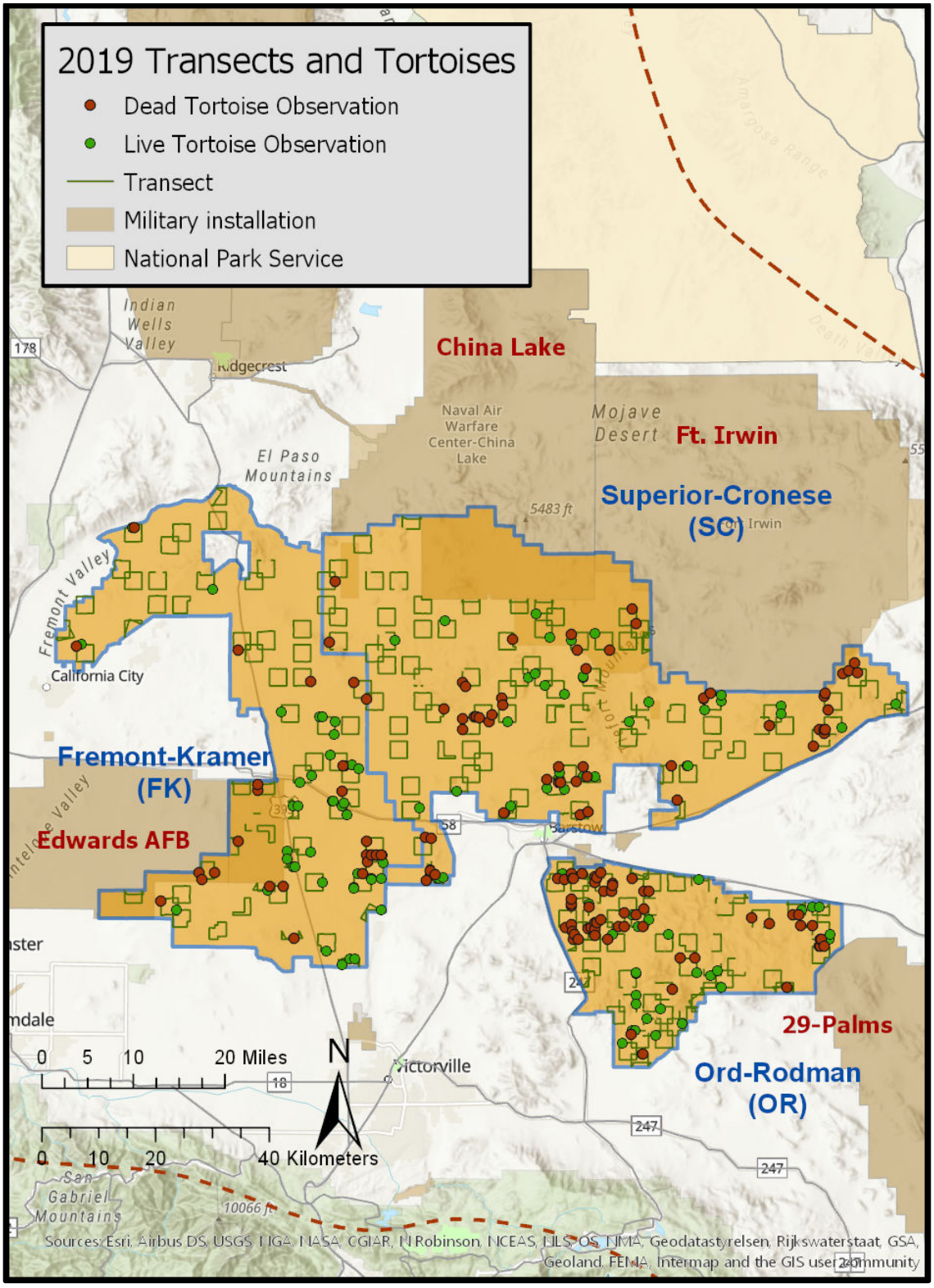


Figure 9. Distribution of transects and live tortoise observations in 2019 in the Ord-Rodman, Fremont-Kramer, and Superior-Cronese strata of the Western Mojave Recovery Unit.

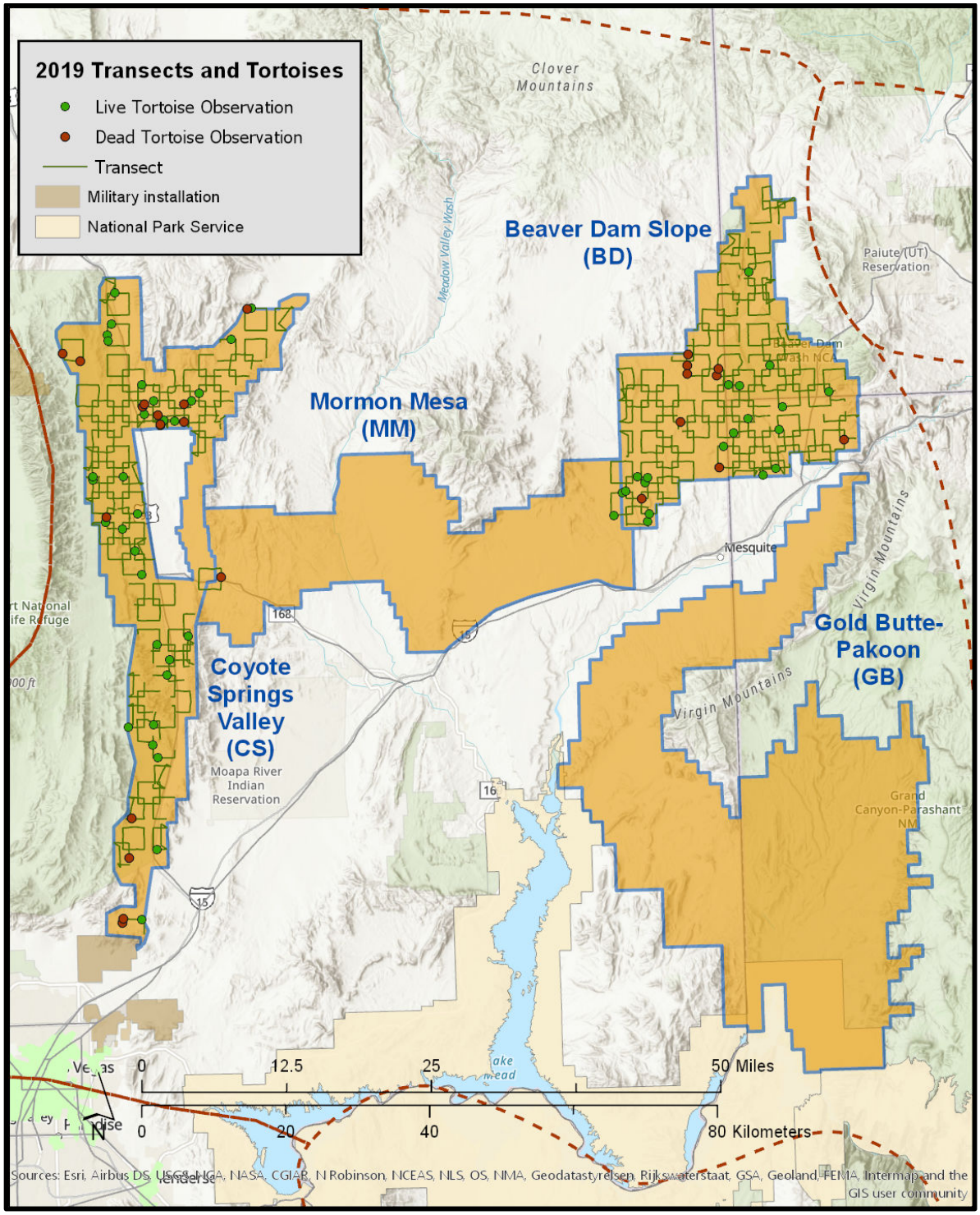


Figure 10. Distribution of transects and live tortoise observations in 2019 in the Coyote Springs Valley and Beaver Dam Slope strata of the Northeastern Mojave Recovery Unit.

Proportion of tortoises available for detection by line distance sampling, G_0

In general, telemetry sites and associated strata were completed sequentially, from south to north. This pattern corresponds to the expected timing of tortoise activity; peaking first in the south, later in the north. Unlike previous years, visibility was very high in all areas for extended periods of the spring in 2019 (Table 5). This is undoubtedly related to the widespread and long-lasting flowering period this year. Temperatures were relatively cool which resulted in extended blooming periods and an extended period before tortoises would experience heat stress. Only in the easternmost sites (Halfway Wash and Piute-Mid) were G_0 estimates below 0.94, yet the estimated visibility was still higher than average for these sites.

Table 5. Availability of tortoises (G_0) when transects were walked in 2019 in the same or in neighboring strata.

G_0 site	Stratum	Dates	Days	G_0 (Std Error)
Chuckwalla	Chocolate Mtn south	10-Mar - 13-Mar	4	0.94 (0.265)
Chuckwalla	Chocolate Mtn north	15-Mar - 17-Mar	3	0.97 (0.182)
Chuckwalla	Chuckwalla	09-Mar - 19-Mar	11	0.96 (0.209)
Chuckwalla	Joshua Tree	22-Mar - 27-Mar	6	1.00 (0.000)
Chuckwalla	Pinto Mountains	27-Mar - 31-Mar	5	0.97 (0.188)
Ord-Rodman	Ord-Rodman	12-Apr - 15-Apr	4	1.00 (0.000)
Superior-Cronese	Fremont-Kramer	07-Apr - 10-Apr	4	1.00 (0.000)
Superior-Cronese	Superior-Cronese	18-Apr - 27-Apr	10	1.00 (0.000)
Ivanpah	Fenner	03-Apr - 06-Apr	4	0.97 (0.176)
Ivanpah	Ivanpah	28-Apr - 03-May	6	0.97 (0.190)
Piute-Mid	Eldorado Valley	02-Apr - 16-Apr	15	0.83 (0.394)
Halfway Wash	Coyote Springs Valley	17-Apr - 30-Apr	14	0.75 (0.459)
Halfway Wash	Beaver Dam Slope	30-Apr - 15-May	16	0.82 (0.405)

Tortoise encounter rates and detection functions

All survey pairs worked together from the beginning to the end of the season. Each Kiva crew surveyed a median 48 transects (no fewer than 45) and overall they detected 321 tortoises larger than 180 mm MCL ("adults"). GBI surveyors walked a median 23 transects each excluding one team that ended surveys after 12 transects due to injury. GBI teams reported 79 adult tortoises. Because GBI did not have a large number of observations on which to base their detection curve, a single detection curve was tested against separate curves for each group, but at several truncation distances, separate curves for each team were most strongly supported. Kiva's detection pattern best fit a uniform curve with second-order cosine adjustment and using all observations up to 24 m from the centerline. GBI best fit a hazard rate curve and also using observations as far as 20 m from the centerline. Figure 11 and 12 are histograms of the observed number of tortoises seen at increasing distance from the transect centerline. Truncation distance for Kiva removed 6% of the most distant observations resulted in good fit overall and near the

centerline. All but one stratum surveyed by Kiva had at least 25 observations (n=16 for Pinto Mountains). Truncation distance for GBI removed only 5 of the observations and also had a simple shape (no adjustments). All three strata surveyed by GBI retained at least 20 observations within the 20 m truncation distance. The detection rate for Kiva crews within 24 m of the transect centerline was 40.5% (Kiva; CV=0.041) and for GBI crews it was 38.1% (CV=0.149).

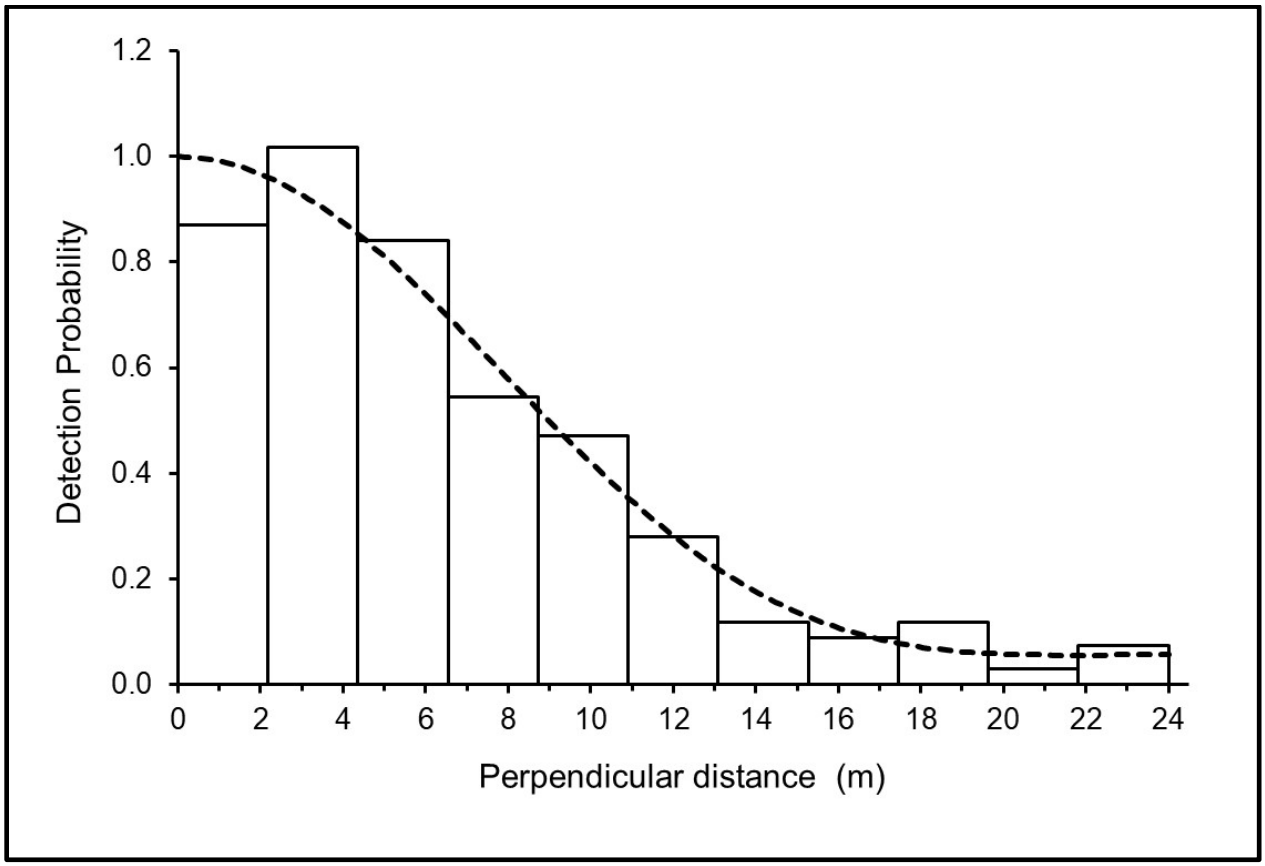


Figure 11. Observed detections (histogram) and the resulting detection function (smooth curve) for live tortoises with MCL ≥ 180mm found by Kiva in 2019.
This curve uses only the n=302 observations found within 24 m of the line.

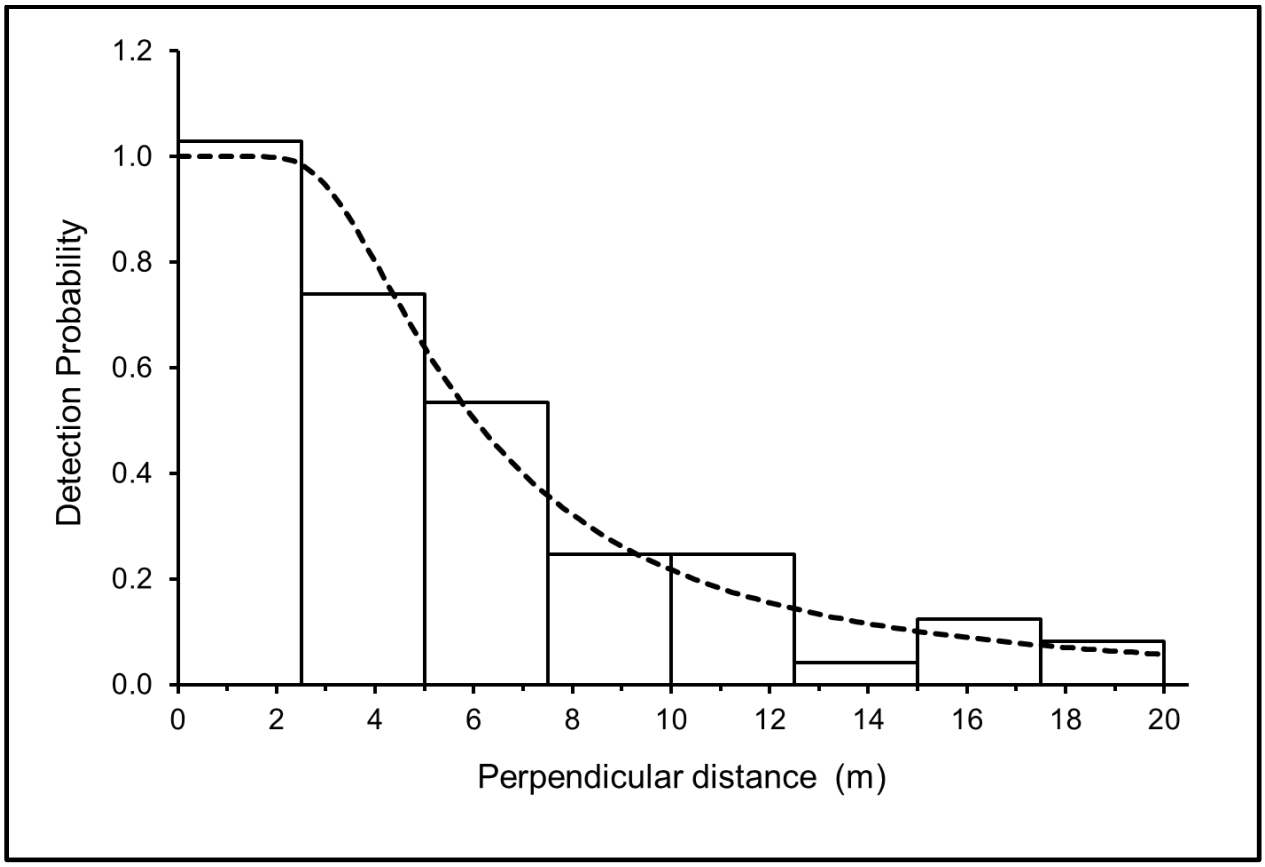


Figure 12. Observed detections (histogram) and the resulting detection function (smooth curve) for live tortoises with MCL ≥ 180mm found by GBI in 2019.
This curve uses only the n=74 observations found within 20 m of the line.

Proportion of available tortoises detected on the transect centerline, *g(0)*

Because they are cryptic, even tortoises that are visible (not covered by dense vegetation or out of sight in a burrow) and close to the surveyor may not be detected. In 2019, for 112 detections of tortoises within 5 m of the transect centerline, 94 were found by the observer in the lead position and 18 by the follower, so that the probability of detection by single observer, $p = 0.808$, and the proportion detected using the dual observer method, *g(0 to 5 m)* = 0.963 (SE = 0.071). Figure 13 shows that *g(0)* was converging on 1.0 in 2019 although this pattern weakens within a meter of the line, where estimates are based on a diminishing number of observations. The curves since dual observers were first used in 2004 have all supported the premise that complete detection on the transect line was achieved for years in which the dual-observer method was used (USFWS 2009, 2012b, 2012c, 2013, 2014, 2015, 2016, 2018, 2019). Previous years of data and the pattern in Fig. 13 indicate the assumption of perfect detection on the centerline was met; consequently, no adjustment was made to the final density estimate.

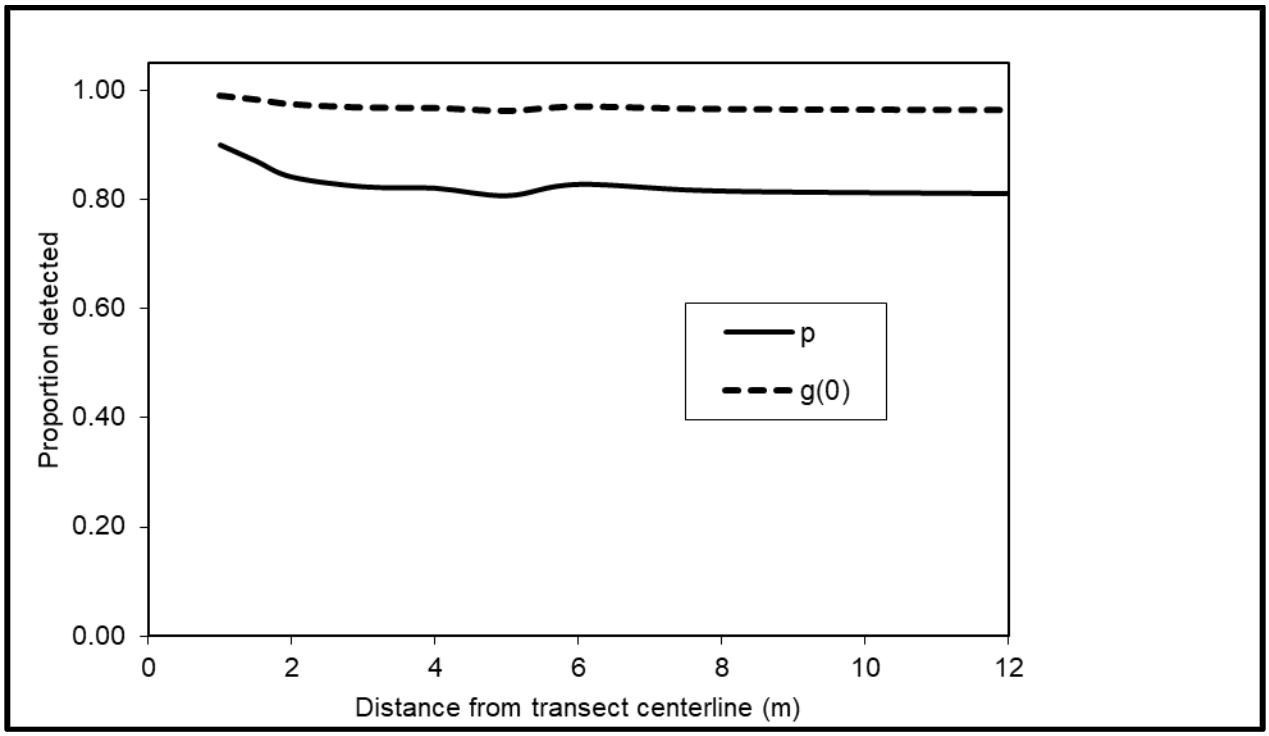


Figure 13. Detection pattern for the leader (*p*) and by the team (*g(0)*) based on all observations out to a given distance (*x*) from the centerline in 2019. Note convergence of *g(0)* on 1.0 as *x* goes to 0.

Estimates of tortoise density

Density estimates were generated separately for each monitoring stratum, and for OR they were generated based only on resident tortoises and then again after including marked animals that had been translocated (Table 6). The reported densities for OR represent an increase of 366 (SE=77.3) tortoises, an estimate which may not stabilize until a couple years after the last translocations in spring 2019 when the movements of these animals should settle into more typical home ranges (Nussear et al. 2012, Farnsworth et al. 2015).

Table 6. Stratum-level encounters and densities in 2019 for tortoises of MCL ≥ 180 mm.
Coefficients of variation expressed as percentages.

Recovery Unit/ Stratum		Area (km2)	# Transects	Transect length (km)	Begin date	End date	*n* (torts observed)	CV*(n)*	Density (/km2)	CV(Density)
Western Mojave		**6873**	**205**	**2308**	**16-Mar**	**26-Apr**	**103**			
Fremont-Kramer	FK	2417	59	692	9-Apr	9-Apr	36	23.7	2.7	24.00
Ord-Rodman	OR	1124	56	601	16-Mar	16-Mar	29	19.9	2.5	20.33
OR – residents only	ORr	1124	75	601	16-Mar	16-Mar	24	21.6	2.1	21.96
Superior-Cronese	SC	3332	90	1016	26-Apr	26-Apr	38	23.3	1.9	23.65
Colorado Desert		**8422**	**292**	**2946**	**9-Mar**	**20-Apr**	**157**			
Chocolate Mtn north	AGN	351	14	126	12-Mar	14-Mar	34	15.7	14.2	24.73
Chocolate Mtn south	AGS	403	21	237	9-Mar	11-Mar	13	32.4	3.0	43.04
Chocolate Mtn	AG	755	35	363	9-Mar	14-Mar	47	19.6	7.0	29.51
Chuckwalla	CK	3509	100	1032	22-Mar	7-Apr	34	18.5	1.8	28.83
Fenner	FE	1841	40	473	9-Apr	16-Apr	25	22.7	2.8	29.27
Joshua Tree	JT	1567	60	578	16-Mar	20-Apr	35	19.7	3.1	20.15
Pinto Mountains	PT	751	57	500	16-Mar	20-Apr	16	24.9	1.7	31.81
Eastern Mojave		**3720**	**154**	**1755**	**16-Apr**	**30-Apr**	**68**			
Eldorado Valley	EV	1153	80	890	17-Apr	26-Apr	26	21.6	2.3	54.35
Ivanpah Valley	IV	2567	74	866	16-Apr	30-Apr	42	14.8	2.6	24.92
Northeastern Mojave		**1853**	**142**	**1549**	**3-Apr**	**9-May**	**48**			
Beaver Dam Slope	BD	828	70	780	26-Apr	9-May	20	25.7	2.0	57.54
Coyote Springs	CS	1025	72	769	3-Apr	17-Apr	28	20.7	3.2	65.99

DISCUSSION

Surveyors in 2019 had a spectacular experience – there had been heavy winter precipitation throughout the desert so that the spring flowering period was dramatic and widespread. Also, temperatures were cooler than average through the spring, probably prolonging the blooming period for most annual plants. This long period of food availability and moderate temperatures also probably explains the large number of tortoises seen on transects. However, this did not cause our density estimates to increase dramatically because at the same time, a larger proportion of tortoises was aboveground at telemetry sites, so the correction factor for tortoises that were below ground was minimal compared to other years.

Base expansion of 29 Palms MCAGCC affected many tortoises, and starting in 2017, 727 adult tortoises were translocated to two areas either inside (n=426) or at the boundary of the Ord-Rodman critical habitat unit (n=301) before the surveys reported here. Although this expansion negatively impacts tortoises and their habitat (USFWS 2017b) elsewhere, augmenting the resident population in OR with reproductive adults may result in local population growth by increasing the number of juveniles produced each year. In conjunction with fencing, law enforcement, and other mitigation that is implemented in OR, population augmentation is a strategy that may accelerate the process of stabilizing this population (USFWS 2011). Other monitoring is in place to assess the success of the translocations measured by survivorship, for instance, but the ongoing range-wide monitoring program reported here will provide a composite view of the success of the suite of recovery activities that are now occurring in OR. This year, the program estimated an increase of 366 adult tortoises due to translocations (Table 6). While this estimate is lower than the 727 that were actually translocated in and nearby, we do not have a specific prediction for the number of translocatees that would settle inside or outside the boundaries of the surveyed critical habitat unit. Instead, these surveys will document whether there is an overall increase in the number of tortoises over time. The northwestern part of Ord-Rodman did not receive translocatees. In Figure 9, the relatively high number of dead tortoises found there this year is striking. At least four of the tortoises had died in the last 1-2 years and were found along a barbed-wire fence on the east end of Stoddard Valley.

Although these surveys do not search for tortoises directly on MCAGCC, areas of other installations such as Chocolate Mountains AGR and NAWS China Lake are in critical habitat and are surveyed. In 2019, access protocols for China Lake had changed, necessitating 2 separate visits for each surveyor seeking security clearance. This represents 2 days fewer transects but can be accommodated. However, the base also requires escorts on the transects and did not have sufficient escorts to ensure any would be available if we completed the process for security clearances. We did not sent surveyors for the clearance process and transects were not completed on China Lake.

Access to Chocolate Mountain is limited to those times when it is closed to military training, and this period has shifted steadily earlier in the year. Although tortoises may be active earlier than in past decades, the shift in the military training schedule has moved at a faster rate that is not based on tortoise activity and may necessitate renegotiating the surveys; surveying for tortoises too early and before they have emerged from their winter burrows would compromise density estimation. Separate from scheduling needs on the military installations, one priority for the next years will be to determine whether there is a pattern of tortoise activity moving earlier in the season in any parts of the range. This will inform the optimal timing of surveys but of course more importantly would reflect a response to the changing climate in the Mojave and Colorado deserts. To describe annual tortoise activity patterns, we could use the currently transmittered tortoises for observation, but would have to expand the monitoring period beyond the transect surveys to capture changes over the season.

In 2018, annual density estimates were used to describe population trends between 2004 and 2014 in each of the monitoring strata (Allison and McLuckie 2018). These trend estimates will be updated based on more recent information only after there have been at least three new annual density estimates for each monitoring stratum; probably about every six years. The next evaluation of population trends may be possible after the 2020 field season depending on sufficient funding to cover the last strata for a third time.

LITERATURE CITED

Allison, L.J. and A. McLuckie. 2018. Population trends in Mojave Desert Tortoises (*Gopherus agassizii*). Herpetological Conservation and Biology 13(2):433-452.

Anderson, D.R., and K.P. Burnham. 1996. A monitoring program for the desert tortoise. Report to the Desert Tortoise Management Oversight Group.

Anderson, D.R., K.P. Burnham, B.C. Lubow, L. Thomas, P.S. Corn, P.A. Medica, and R.W. Marlow. 2001. Field trials of line transect methods applied to estimation of desert tortoise abundance. Journal of Wildlife Management 65:583-597.

Buckland, S.T., D.R. Anderson, K.P. Burnham, J.L. Laake, D.L. Borchers, and L. Thomas. 2001. Introduction to Distance Sampling: Estimating Abundance of Biological Populations. Oxford Univ. Press, Oxford. 432 pp.

Darst C.R., P.J. Murphy, N.W. Strout, S.P. Campbell, K.J. Field, L.Allison, and R.C. Averill-Murray. 2013. A strategy for prioritizing threats and recovery actions for at-risk species. Environmental Management 51:786–800.

Farnsworth, M.L.; B.G. Dickson; L.J. Zachmann; E.E. Hegeman; A.R. Cangelosi; T.G. Jackson, Jr.; and A.F. Scheib. 2015. Short-term space-use patterns of translocated Mojave Desert Tortoise in southern California.

Kincaid, T.M. and A.R. Olsen. 2017. spsurvey: Spatial Survey Design and Analysis. R package version 3.4. URL: https://CRAN.R-project.org/package=spsurvey.

Lindenmayer, D.B., G.E. Likens, A. Haywood, and L. Miezis. 2010. Adaptive monitoring in the real world: proof of concept. Trends in Ecology and Evolution 26:641–646.

Lyons, J.E., M.C. Runge, H.P. Laskowski, and W.L.Kendall. 2008. Monitoring in the context of structured decision-making and adaptive management. Journal of Wildlife Management 72:1683–1692.

Marques, T.A., L. Thomas, S.G. Fancy, and S. T. Buckland. 2007. Improving estimates of bird density using multiple-covariate distance sampling. The Auk 124(4) 1229-1243.

Murphy, R.W., K.H. Berry, T. Edwards, A.E. Leviton, A. Lathrop, J.D. Riedle, 2011. The dazed and confused identity of Agassiz's land tortoise, *Gopherus agassizii* (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation. ZooKeys 113: 33-71. doi: 10.3897/zookeys.113.1353.

Nichols, J.D., and B.K. Williams. 2006. Monitoring for conservation. Trends in Ecology and Evolution 21:668–673.

Nussear, K.E., T.C. Esque, R.D. Inman, L. Gass, K.A. Thomas, C.S.A. Wallace, J.B. Blainey, D.M. Miller, and R.H. Webb. 2009. Modeling habitat of the desert tortoise (*Gopherus agassizii*) in the Mojave and parts of the Sonoran deserts of California, Nevada, Utah, and Arizona. U.S. Geological Survey Open-file Report 2009-1102.

Nussear, K.E., C.R. Tracy, P.A. Medica, D.S. Wilson, R.W. Marlow, and P.S. Corn. 2012. Translocation as a conservation tool for Agassiz's Desert Tortoises: Survivorship, reproduction, and movements.

R Core Team. 2018. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL http://www.R-project.org/.

Stevens, D.L., Jr. and A.R. Olsen. 2004. Spatially-balanced sampling of natural resources. Journal of American Statistical Association 99(465): 262-278.

Thomas, L, S.T. Buckland, E.A. Rexstad, J.L. Laake, S. Strindberg, S.L. Hedley, J.R.B. Bishop, T.A. Marques, and K.P. Burnham. 2010. Distance software: design and analysis of distance sampling surveys for estimating population size. J. of Applied Ecology 47:5-14.

[USFWS] U.S. Fish and Wildlife Service. 2006. Range-wide Monitoring of the Mojave Population of the Desert Tortoise: 2001-2005 Summary Report. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2009. Range-wide Monitoring of the Mojave Population of the Desert Tortoise: 2007 Annual Report. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2011. Revised recovery plan for the Mojave Population of the desert tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. 222 pp.

[USFWS] U.S. Fish and Wildlife Service. 2012a. Health Assessment Procedures for the Mojave Desert Tortoise (Gopherus agassizii): A Handbook Pertinent to Translocation. Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. Accessible through: http://www.fws.gov/nevada/desert_tortoise/index.html

[USFWS] U.S. Fish and Wildlife Service. 2012b. Range-wide Monitoring of the Mojave Desert Tortoise: 2008 and 2009 Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2012c. Range-wide Monitoring of the Mojave Desert Tortoise: 2010 Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2013. Range-wide Monitoring of the Mojave Desert Tortoise: 2011 Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2014. Range-wide Monitoring of the Mojave Desert Tortoise: 2012 Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2015. Range-wide Monitoring of the Mojave Desert Tortoise (Gopherus agassizii): 2013 and 2014 Annual Reports. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2016. Range-wide Monitoring of the Mojave Desert Tortoise (Gopherus agassizii): 2015 and 2016 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2017a. Desert Tortoise Monitoring Handbook. Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. Version: 28 February 2017. http://www.fws.gov/nevada/desert_tortoise/reports.

[USFWS] U.S. Fish and Wildlife Service. 2017b. Biological Opinion for Land Acquisition and Airspace Establishment, Twentynine Palms, California (8-8-11-F-65R). Letter to Lt. Col T.B. Pochop, Marine Corps Air Ground Combat Center, Marine Air Ground Task Force Training Command, Natural Resources and Environmental Affairs Division, Twentynine Palms, California. Dated January 31. From G. Mendel Stewart, Field Supervisor, Carlsbad Fish and Wildlife Office, Carlsbad, California.

[USFWS] U.S. Fish and Wildlife Service. 2018. Range-wide Monitoring of the Mojave Desert Tortoise (Gopherus agassizii): 2017 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

[USFWS] U.S. Fish and Wildlife Service. 2019. Range-wide Monitoring of the Mojave Desert Tortoise (Gopherus agassizii): 2018 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

White, G.C., D.R. Anderson, K.P. Burnham, and D.L. Otis. 1982. Capture-recapture and removal methods for sampling closed populations. LA-87-87-NERP. Los Alamos National Laboratory, Los Alamos, NM. 235pp.

From:	Ed Larue
To:	Kessler, Dave (FAA); Guerrero, Joanie J; SNSA EIS
Cc:	pdonnelly@biologicaldiversity.org; mcpherson.ann@epa.gov; jraby@blm.gov; BLM_NV_NVSO_web_mail@blm.gov; blm_nv_sndo_web_mail@blm.gov; raymond_mcpadden@nps.gov; moja_superintendent@nps.gov; brian_croft@fws.gov
Subject:	Southern Nevada Supplemental Airport Resource Management Plan Amendment & Environmental Impact Statement – Public Scoping (DOI-BLM-NV-S010-2025-0035-RMP-EIS)
Date:	Friday, September 5, 2025 6:24:29 PM
Attachments:	Southern Nevada Supplemental Airport EIS-RMPA.9-5-2025.pdf

You don't often get email from ed.larue@verizon.net. Learn why this is important

Dear BLM and FAA,

Please find attached formal comments submitted by the Desert Tortoise Council for the above-referenced project.

Thank you for your consideration!

Ed LaRue
Ecosyatems Advisory Committee, Chair
Desert Tortoise Council

DESERT TORTOISE COUNCIL
3807 Sierra Highway #6-4514
Acton, CA 93510
www.deserttortoise.org
eac@deserttortoise.org

Via email only

September 5, 2025

David B. Kessler
Project Manager, SNSA EIS
Federal Aviation Administration
Western-Pacific Region
777 South Aviation Boulevard
El Segundo, California 90245
dave.kessler@faa.gov

Joanie Guerrero
Realty Specialist
Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, NV 8130
jjguerrero@blm.gov

Landrum and Brown Aviation Consultants
4445 Lake Forest Drive, Suite 700
Cincinnati, OH 45242
SNSAEIS@landrumbrown.com

RE: Southern Nevada Supplemental Airport Resource Management Plan Amendment & Environmental Impact Statement – Public Scoping (DOI-BLM-NV-S010-2025-0035-RMP-EIS)

Dear Mr. Kessler and Ms. Guerro,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and northern Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

Both our physical and email addresses are provided above in our letterhead for your use when providing future correspondence to us. When given a choice, we prefer to receive emails for future correspondence, as mail delivered via the U.S. Postal Service may take several days to be delivered. Email is an "environmentally friendlier way" of receiving correspondence and documents rather than "snail mail."

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats occupied by the Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments include relevant information from the recent scientific literature on the tortoise/tortoise habitat, other relevant information, and recommendations intended to enhance protection of this species and its habitat during activities that may be authorized by the Bureau of Land Management (BLM), which we recommend be included and analyzed in the environmental documents associated with this proposed action. Please accept, carefully review, and include in the relevant environmental documents and the project file the following comments from the Council for the proposed action.

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), "… based on population reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (sensu stricto) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses have been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (sensu stricto) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units."

This status, in part, prompted the DTC and Desert Tortoise Preserve Committee (DTPC) to join Defenders of Wildlife (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission (Commission) in March 2020 to elevate the listing of the Mojave desert tortoise from Threatened to Endangered in California under the California Endangered Species Act (CESA). In its status review, California Department of Fish and Wildlife (CDFW 2024a) stated: "At its public meeting on October 14, 2020, the Commission considered the petition, and based in part on the Department's [CDFW] petition evaluation and recommendation, found sufficient information exists to indicate the petitioned action may be warranted and accepted the petition for consideration. The Commission's decision initiated this status review to inform the Commission's decision on whether the change in status is warranted."

Importantly, in their April 2024 meeting (CDFW 2024b), the Commission voted unanimously to accept the CDFW's petition evaluation and recommendation to uplist the tortoise from threatened to endangered under CESA based on the scientific data provided on the species' status, declining trend, numerous threats, and lack of effective recovery implementation and land management. On July 15, 2025, the tortoise was officially uplisted to endangered status under CESA (Commission 2025).

Description of the Proposed Action

The proposed action is the construction and operation of a supplemental airport in Clark County, Nevada. The Clark County Department of Aviation is proposing the development and operation of the Southern Nevada Supplemental Airport (SNSA). The Federal Aviation Administration (FAA) and BLM are Joint Lead Agencies (JLA) for preparation of an Environmental Impact Statement (EIS) to comply with the National Environmental Policy Act (NEPA). BLM will evaluate the need for a Resource Management Plan Amendment (RMPA) for this proposed action, resulting in the preparation of a combined EIS/RMPA. The RMPA to modify the Visual Resource Management (VRM) class is being considered for the BLM to evaluate the Ivanpah Transportation and Utilities Corridor. This 2,640-foot-wide corridor between the Las Vegas Valley and the proposed Ivanpah Airport was established for the placement, on a nonexclusive basis, of utilities and transportation when Congress passed the Clark County Conservation of Public Land and Natural Resources Act of 2002.

According to the information provided by the FAA during a public scoping meeting on July 29, 2025, the proposed airport is not a replacement for the existing Harry Reid International Airport in Las Vegas. The location of the proposed supplemental airport is along the east side of Interstate 15 between Jean and Primm, Nevada and south of the current Las Vegas city boundary. It would be located on 6,000 acres or about double the area occupied currently by Harry Reid International Airport with an additional 17,000 acres to be conveyed to Clark County (Figure 1).

On May 19, 2025, the JLA published a Notice of Intent to prepare the EIS that initiated the public scoping process and public comment period for the proposed action.

Issues to Be Analyzed in the EIS/RMPA

The purpose of scoping is to allow the public to participate in an "early and open process for determining the scope of issues to be addressed, and for identifying the significant issues related to a proposed action" [40 Code of Federal Regulations (CFR) 1501.7]. For purposes of our letter, we request that the FAA and BLM prepare an EIS/RMPA that:

1. Discusses how each proposed alternative complies within the management structure of the current land management plan for the area, including management of adjacent/nearby lands.

2. Provide maps of Areas of Critical Environmental Concern (ACECs), and other areas identified for special management [e.g., Ivanpah ACEC, Large-Scale Translocation Site (LSTS), etc. Tortoise Connectivity Pathways identified in Averill-Murray et al. (2021) in the Ivanpah Valley and other nearby locations] and how each alternative would impact the successful function of these special management areas.

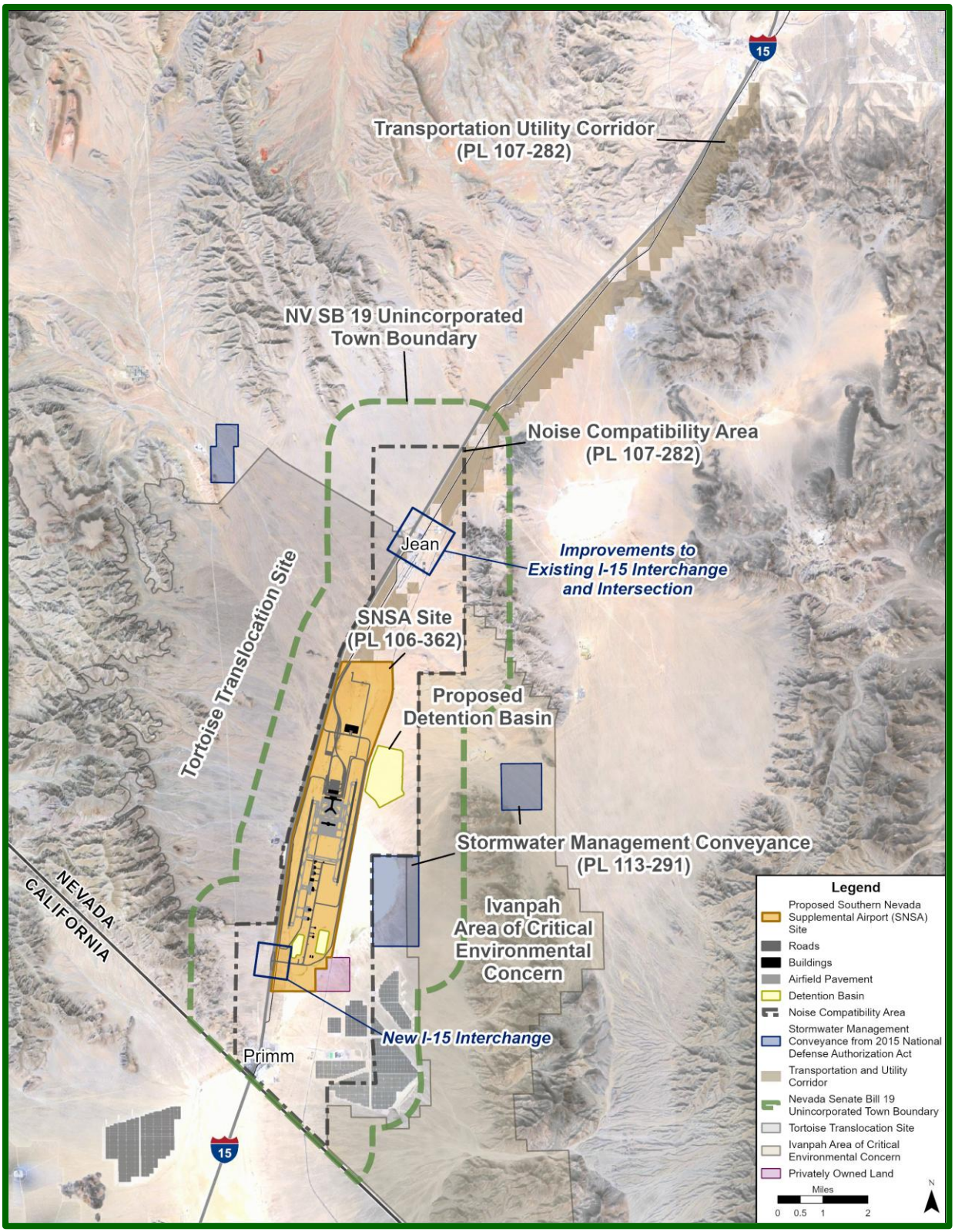


Figure 1. Proposed location, related facilities, and development associated with the SNSA, Clark County, Nevada.

3. Provide maps of all areas identified by CDFW and Mojave National Preserve (Preserve) (because the location of the proposed action is near the California-Nevada border and the Preserve), Nevada Department of Wildlife (NDOW), BLM, and U.S. Fish and Wildlife Service (USFWS) as managed for the tortoise and other special status species, including mitigation lands for previous projects.

4. Provide (a) maps with the locations of existing and proposed development projects in the Ivanpah Valley and adjacent areas, and (b) an analysis of their direct, indirect, cumulative, interactive, synergistic, and connected action impacts for the tortoise and other special status species and their habitats.

5. Provide maps that identify the ownership of the lands associated with the proposed alternatives and ownership of surrounding lands.

6. Provide maps with existing and proposed developments/surface disturbance activities on the project site and adjacent lands surrounding the project area.

Compliance with Relevant Federal Laws, Regulations, and Policies

The Council requests that the EIS/RMPA clearly describe and analyze how the various action alternatives for the proposed SNSA fully comply with all applicable federal laws, regulations, and policies including those listed below with respect to the tortoise and tortoise habitat. The descriptions and analyses should include linkage habitat needed for population connectivity with tortoises to the northwest, west, south, and southeast of Northern Ivanpah Valley.

Southern Nevada Public Land Management Act of 1998: This law requires Clark County to use the funds from an account to "acquire environmentally sensitive land in the State of Nevada with priority given to lands located within Clark County." Please explain in the EIS/RMPA how the Airport Environs Overlay District Land Transfer section of this law and any gross proceeds from the sale, lease, or other such conveyance of lands in this overlay area would be used to help mitigate the adverse impacts to the tortoise including the loss, degradation, and/or fragmentation of tortoise populations and tortoise habitat in the Northern Ivanpah Valley.

Ivanpah Valley Airport Public Lands Transfer Act of 2000: The requirements of this law should be explained with respect to what the conditions are for lands to be transferred to Clark County, the amount and location of the acreage, and the specified conditions of the transfer. In addition, the EIS/RMPA should address the type of airport that would be constructed and used – commercial passenger, private passenger, cargo, combination(s), etc., and the associated support services, planned development (e.g., NV SB 19), and other development that would likely occur.

This law requires that the funds Clark County pays to acquire the lands from the United States for the proposed action "may be expended only for the acquisition of private inholdings in the Mojave National Preserve and for the protection and management of the petroglyph resources in Clark County, Nevada." Please explain how this requirement has been or will be implemented with respect to land acquisition in the Preserve, and, with respect to the tortoise, compare the direct and indirect functions and values of the habitat destroyed, degraded, and/or fragmented from the

construction and use of the airport and associated services with the indirect and direct impacts of the functions and values of the lands acquired in the Preserve. Please explain whether the acquisition of lands in the Preserve will occur prior to surface disturbance of the lands for the proposed airport (i.e., will there be a temporal loss of habitat because development would occur prior to acquisition of habitat in the Preserve?).

This law requires the development of an air space management plan and that it "restrict aircraft arrivals and departures over the Mojave Desert Preserve in California." Please include in this airspace management plan the direct and indirect impacts of air space to the tortoise and other special status species in Nevada and California for the area of influence from the construction and use of the proposed airport and associated services and development.

In addition, in this law Congress directed that any actions conducted in accordance with NEPA "shall specifically address any impacts on the purposes for which the Mojave National Preserve was created."

The purposes for which the Preserve was created (NPS 2002) include:

- an extensive variety of habitats, species, and landforms unique to the Mojave Desert;
- outstanding scenic resources, rich in visual diversity containing a varied landscape of sand dunes, mountain ranges, dry lakebeds, lava flows, cinder cones, Joshua tree forests, and far-reaching vistas; and
- a naturally quiet desert environment with very dark night skies that offers visitors and researchers opportunities for natural quiet, solitude and star gazing with few human-caused noise or light glare sources.

Also, the Preserve has two designated wilderness areas near the California-Nevada border and the SNSA proposed site. The Clark Mountains are located southwest of the SNSA site and the New York Mountains to the southeast.

Please include an analysis of these purposes and others in the EIS/RMPA and analyze how the construction and use of the SNSA and associated development would directly and indirectly impact the purposes for establishing the Preserve, designated wilderness, and the effective mitigation and monitoring that would be implemented to fully offset these impacts.

This law also requires that Clark County retain ownership of Jean Airport, located at Jean, Nevada, and "maintain and operate such airport for general aviation purposes." Because of the proximity of the Jean Airport to proposed location of the SNSA, the EIS/RMPA should include an analysis of whether the SNSA would be able to operate safely while maintaining and operating the existing airport for general aviation purposes. The EIS/RMPA should also analyze whether the construction and use of the SNSA and associated services and development (e.g., NV SB 19 unincorporated town that is planned to surround Jean Airport and the Town of Jean) (Figure 1) would affect the functions of this existing airport in the future (i.e., cumulative impacts and impacts of connected actions).

Clark County Conservation of Public Land and Natural Resources Act of 2002: Congress authorized the "establishment of a 2,640-foot-wide corridor [Figure 1] between the Las Vegas valley and the proposed Ivanpah Airport for the placement, on a nonexclusive basis, of utilities and transportation." The EIS/RMPA should describe development alternatives within this corridor so that it results in the least amount of impacts to the tortoise and tortoise habitat and identify mitigation and monitoring to determine the effectiveness of the mitigation.

Under this law Congress authorized the transfer of all rights, title, and interest of the United States in and to the land identified as Ivanpah Airport noise compatibility area (Figure 1) and compliance with section 47504 of title 49, U.S. Code on noise compatibility. This area should be displayed on a map and included in the EIS/RMPA. The measures that would be implemented in the noise compatibility area should be described and analyzed including where each measure would be implemented and the expected results with respect to the tortoise/tortoise habitat in the area affected by the noise emanating from airport use and associated services. The standard list of measures that may be implemented include:

(A) establishing a preferential runway system;
(B) restricting the use of the airport by a type or class of aircraft because of the noise characteristics of the aircraft;
(C) constructing barriers and acoustical shielding and soundproofing public buildings;
(D) using flight procedures to control the operation of aircraft to reduce exposure of individuals to noise in the area surrounding the airport; and
(E) acquiring land, air rights, easements, development rights, and other interests to ensure that the property will be used in ways compatible with airport operations.

In addition, to comply with the conditions of transfer of the land, the EIS/RMPA should demonstrate how the management of this land complies with the Federal Endangered Species Act (FESA) for the tortoise. We refer the BLM and FAA to documents prepared by the USFWS at the request of the BLM to identify areas to exclude solar development (albeit any development) in southern Nevada so the future survival and recovery of the tortoise would not be jeopardized (USFWS 2023a, 2023b, 2023c, 2024). Please include this information in the EIS/RMPA and analyze how the placement of measures (A) through (E) and any other proposed measures would impact the tortoise and other special status species or impact the use of habitat by these species.

Federal Land Policy and Management Act of 1976: With the passage of the Federal Land Policy and Management Act (FLPMA), Congress directed BLM to manage public lands "for multiple uses that consider the long-term needs of future generations for renewable and non-renewable resources" and "to take any action necessary to prevent unnecessary or undue degradation of the lands."

In developing the proposed action and other action alternatives, the EIS/RMPA should clearly describe and analyze how each alternative fully meets the regulatory requirements and most important, the statutory requirements under FLPMA for the identified resource issues of the tortoise and tortoise habitat, including population connectivity and linkage habitats for the long-term survival and conservation of the tortoise in the Eastern Mojave Recovery Unit and rangewide. This is especially crucial for the tortoises in this recovery unit, because tortoises in this recovery unit are located geographically in the center of the distribution of the tortoise. The Eastern Mojave Recovery Unit connects to the two tortoise recovery units to the east and the two to the west and southwest (USFWS 2011). Thus, this recovery unit plays a crucial role in maintaining gene flow across the range of the tortoise.

As the primary land management entity in the range of the Mojave desert tortoise, the BLM's implementation of a conservation strategy for the Mojave desert tortoise through implementation of its RMPs in the Eastern Mojave Recovery Unit has resulted in a substantial decline in tortoise numbers and densities. Of the five tortoise recovery units, the tortoise population in the Eastern Mojave Recovery Unit has experienced the greatest amount of decline in population density and numbers (greater than 60%) (Allison and McLuckie 2018; USFWS 2015, 2016, 2020, 2022). A greater than 60% decline in 10 years is substantial. The data indicate that tortoise densities are less than that needed for population viability (USFWS 1994). Allison and McLuckie (2018) reported that "the negative population trends in most of the TCAs [Tortoise Conservation Areas] for Mojave Desert Tortoises indicate that this species is on the path to extinction under current conditions." The population trends have not improved since the analysis by Allison and McLuckie (2018) was conducted.

Data reported in USFWS (2011), Tuma et al. (2016), Averill Murray et al. (2021), and a recent federal court decision in 2024 (21-7171 - Center For Biological Diversity et al. v. United States Bureau of Land Management et al.) indicate that BLM is not demonstrating that it is taking "any action necessary to prevent unnecessary or undue degradation of the lands" for the tortoise and tortoise habitat. The ongoing reduction in tortoise abundance, density, and recruitment has been attributed to the loss, degradation, and fragmentation of habitat needed by the tortoise due, in part, to activities authorized by BLM, particularly solar development in southern Nevada.

These data demonstrate that BLM is not complying with this mandate of FLPMA with respect to managing for tortoise populations and tortoise habitat for current and future generations of Americans.

Please analyze in the EIS/RMPA how these requirements in FLPMA would be accomplished for each action alternative with respect to the tortoise and tortoise habitat.

Federal Endangered Species Act: In section 2(b) of the FESA (or Act), Congress stated that the "purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species." In section 2(b) of the Act, Congress further declared that "it is policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act."

In Section 7(a)(1) of the FESA, Congress stated that ***all federal agencies*** [emphasis added] "shall … utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act." In Section 3 of the FESA, "conserve," "conserving," and "conservation" mean "to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition…" Consequently, these sections of FESA apply to the FAA and the BLM with respect to the federally threatened Mojave desert tortoise.

When analyzing the proposed action and action alternatives in the EIS/RMPA, the FAA and BLM should demonstrate how each agency is contributing effectively to the conservation and recovery of the tortoise, and how the implementation of mitigation for the action alternatives and proposed action will contribute to the conservation and recovery of the tortoise. Please describe and analyze in the EIS/RMPA how the alternatives carried forward for analysis would comply with these mandates from Congress in FESA.

Department of the Interior (DOI) Regulations for Implementing NEPA, 43 CFR Part 46*:* These regulations require the DOI agency (e.g., BLM) maintain the scientific quality and integrity of the NEPA document. The Council requests that in the EIS/RMPA, BLM use the most recent available information from scientific journals and reports in the analysis of impacts to the tortoise and tortoise habitat including linkage habitats needed for population connectivity.

BLM's NEPA Handbook H 1790-1: The BLM NEPA Handbook has numerous requirements of BLM when preparing an EIS. They include:

- rigorously exploring and objectively evaluating all reasonable alternatives, and for alternatives that were eliminated from detailed study, briefly discuss the reasons for their having been eliminated (see "**Alternatives to the Proposed Action"** below);
- including reasonable alternatives not within the jurisdiction of the lead agency (see "**Alternatives to the Proposed Action"** below);
- for joint lead agencies, reaching consensus and identify the agencies' preferred alternative; if consensus cannot be reached, having each agency clearly identify their preferred alternative and explain the basis for their preference and why consensus could not be reached;
- identifying past and ongoing actions that contribute to existing conditions;
- providing relevant reasonably foreseeable development scenarios for cumulative effects analysis;
- analyzing connected actions and cumulative effects actions (e.g., disposal of BLM lands in addition to those needs for airport construction and operations such as landfills, land disposal for the creation of a new town, etc.);
- quantifying the effects analysis;
- analyzing long-term impacts and the effect of foreclosing future options;
- identifying all relevant, reasonable mitigation measures that could improve the project even if they are outside the jurisdiction of the agency;
- analyzing and comparing the effectiveness of mitigation measures proposed and the effects if the project were to proceed without mitigation;
- assessing any residual direct, indirect, or cumulative effects that will remain after application of the mitigation measures;
- to ensure compliance with decisions, describing the monitoring that would be implemented to ensure that actions taken comply with the terms, conditions, and mitigation measures identified in the decision; and
- develop and implement a monitoring program that incorporates monitoring schedules, approaches, and standards.

BLM should implement these and other requirements described in the BLM NEPA Handbook with respect to the tortoise and its habitat needs.

BLM's Resource Management Planning Regulations (43 CFR Part 1600) and the 1998 Las Vegas RMP: In 43 CFR 1610.4-9, BLM is directed under Monitoring and Evaluation as follows: "The proposed [resource management] plan shall establish intervals and standards, as appropriate, for monitoring and evaluation of the plan. Such intervals and standards shall be based on the sensitivity of the resource to the decisions involved and shall provide for evaluation to determine whether mitigation measures are satisfactory . . . or whether there is new data of significance to the plan."

Please explain in the EIS/RMPA (1) the intervals and standards of monitoring for the 1998 Las Vegas Resource Management Plan for the tortoise and tortoise habitat; (2) the results of BLM's implementation of this monitoring; (3) BLM's evaluation of these results to determine whether mitigation measures are resulting in a satisfactory outcome; and (4) whether there are new data of significance to this RMP especially with respect to the tortoise/tortoise habitat.

In 43 CFR 1610.5-5, "A resource management plan may be changed through amendment. An amendment shall be initiated by the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions and decisions of the approved plan."

Since the Las Vegas RMP was finalized in 1998 there has been an abundance of data collected, analyzed, and published on the tortoise and its habitat in southern Nevada that demonstrate new data of significance to the RMP. For example, the data clearly show the tortoise has and is experiencing substantial declines and that habitat is no longer supporting viable populations of tortoises in the Eastern Mojave Recovery Unit.

In 2015, USFWS released a scientific report on the substantial declines in tortoise abundance and densities throughout most of the range of the tortoise. This included the Eastern Mojave Recovery Unit. In 2018, Allison and McLuckie published a scientific paper on the demographics of the tortoise that analyzed data beginning in 2004 that documented substantial tortoise declines in abundance, densities, ***and recruitment*** [emphasis added] throughout most of the range and especially in the Eastern Mojave Recovery Unit. Since the 2015 report and 2018 publication, the status of the tortoise has not improved (USFWS 2020, 2022). When this information was released, BLM should have initiated action shortly thereafter to revise or amend the Las Vegas RMP, if BLM were complying with its regulations in 43 CFR 1610.5-5 on amending resource management plans.

In addition, Averill-Murray et al. (2021) released a scientific publication on the importance of and locations of remaining linkage habitats needed for population connectivity and survival of the tortoise. These data are significant changes affecting the management needs for the survival and recovery of the tortoise. BLM should include these data on the tortoise and its habitat when revising or amending the Las Vegas RMP.

The Council has repeatedly provided to BLM in comment letters on proposed projects information on the substantially declining demographic status of the tortoise in southern Nevada, and requested that the decades-old Las Vegas RMP be revised to reverse the changing status and trend of the tortoise and implement new management actions to facilitate its survival and recovery. These letters included (among others):

- March 3, 2022 Proposed Implementation Plan for Management of Gold Butte National Monument
- December 1, 2022 Gold Butte National Monument Implementation Plan
- January 13, 2023 Copper Rays Solar Project (DOI-BLM-NV-S030-2022-0009-EIS)
- May 10, 2023 Muddy Mountains Travel Management Plan (DOI-BLM-NV-S010-2023-0040-EA)
- September 12, 2023 GridLiance West Core Upgrades Project – Scoping (DOI-BLM-NV-S030-2023-0008-RMP-EIS)
- February 17, 2024 Dry Lake East Energy Center Solar Project Environmental Assessment (DOI-BLM-NV-S010-2023-0027-EA
- August 16, 2024 Muddy Mountains Special Recreation Management Area Travel Management Plan and Environmental Assessment (DOI-BLM-NV-S010-2024-0087-EA)
- November 27, 2024 Variance for Larrea Solar, Mosey Solar, and Rock Valley Solar Projects, Clark County & Nye Counties, NV
- December 5, 2024 Bonanza Solar Project Draft Environmental Impact Statement/ Resource Management Plan Amendments (DOI-BLM-NV-S000-2022-0002-EIS)
- February 13, 2025 – Purple Sage Energy Center Draft Environmental Impact Statement and Draft Resource Management Plan Amendment (DOI-BLM-NV-S010-2022-0094-EIS)
- May 8, 2025 – Carey to Pabco 69kV Transmission Line Rebuild (DOI-BLM-NV-S010-2025-0028-EA).

On the current BLM NEPA ePlanning website for this proposed action, BLM posted "Preliminary Planning Criteria for the Southern Nevada Supplemental Airport Resource Management Plan Amendment (RMPA)." BLM stated that the following preliminary planning criteria will help guide the planning process and may be modified, and/or other criteria may be identified during the public scoping process.

> "Criteria (*sic*) 1: Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM policies.
>
> Criteria (*sic*) 2: Existing valid Las Vegas Resource Management Plan decisions will not change, and any new plan decisions will not conflict with existing valid plan decisions.
>
> Criteria (*sic*) 3: Any resource management plan amendments will recognize valid existing rights."

To comply with Criterion 1, the Council reiterates its request that during the current RMP amendment process, BLM should revise the Las Vegas RMP for the management of the tortoise and its habitat, so it incorporates all relevant information from scientific reports and journal articles on the tortoise/tortoise habitat, analyzes what is needed for the long-term survival of the species, and incorporates and implements effective management actions and monitoring for the tortoise. BLM should not continue to follow an RMP that is 27 years old with outdated information, analysis, management, and monitoring on the tortoise/tortoise habitat, especially with respect to the survival and recovery of the tortoise.

Please see related comments below under "**BLM Special Status Species Management – Manual 6840**," "**Using Science in NEPA Documents and Decisionmaking**," and "**Importance of Ivanpah Valley in Nevada for Survival and Recovery of the Mojave Desert Tortoise**."

In 43 CFR 1601.05(i), the definition of "multiple use" includes ". . . harmonious and coordinated management of the various resources without permanent impairment of the productivity of the lands and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output."

BLM should analyze in the EIS/RMPA how the alternatives in the EIS/RMPA will comply with this regulation with respect to the tortoise and its habitat needs.

BLM Special Status Species Management – Manual 6840: For Wildlife, Migratory Birds, and Other Special Status Wildlife and for Threatened and Endangered Species, BLM should demonstrate in the EIS/RMPA how the proposed action and alternatives would comply with BLM's Special Status Species Management – Manual 6840 released in 2024. This policy established an agency-wide emphasis on proactive, landscape- and ecosystem-level, scientifically informed conservation and recovery of special status species and their habitats. It directs BLM to:

- Comply with FESA Section 7(a)(2) consultation regulations and ***incorporate proactive recovery efforts*** (emphasis added) into proposed actions;
- promote healthy species populations and biodiversity through landscape- and ecosystem-level management; and
- use science and adaptive management to advance conservation and recovery.

For each alternative, we request that the EIS/RMPA describe (1) the proactive conservation efforts they are requiring that contribute to the recovery of the tortoise; (2) the mitigation needed to replace the functions and values that would destroy and degrade habitats from implementation of the proposed action and alternatives, (3) the mitigation that will be implemented to replace the loss, degradation, and fragmentation of tortoise habitat, including the temporal loss of habitat; (4) how BLM and FAA are promoting healthy populations of tortoises in the Eastern Mojave Recovery Unit including enhancing connectivity; and (5) how BLM and FAA are using science to advance the conservation and recovery of the tortoise in this recovery unit.

Using Science in NEPA Documents and Decisionmaking: In NEPA, Congress declared that federal agencies shall "[u]tilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences . . . in planning and in decisionmaking." BLM's Advancing Science in the BLM: An Implementation Strategy IB 2015-040 (BLM 2015) reinforces the use of science in decision-making.

To comply with these requirements, the EIS/RMPA should use the latest information from scientific journals and reports on the demographic status and trend of the tortoise; the needs of the tortoise for its survival and recovery in the Eastern Mojave Recovery Unit and rangewide including linkage habitats for connectivity; and how the direct, indirect, and cumulative impacts and impacts from connected actions and alternatives would affect the future survival and recovery of the tortoise in this recovery unit and range-wide, This analysis should include the ongoing and increasing severity of drought/climate change impacts and numerous development projects that have occurred and are planned to occur in southern Nevada. This analysis, which should include a spatial analysis of habitat for the tortoise and any conclusions stated in the EIS/RMPA regarding the tortoise, should be supported with citations from the scientific literature rather than be unsupported conclusions.

Clarify the Purpose and Need of the Proposed Action

The Ivanpah Valley Airport Public Lands Transfer Act states that the federal public lands are to be transferred "for the purpose of developing an airport facility and related infrastructure." However, during the public scoping meeting, the information conveyed was that the SNSA would be a cargo airport. The wording in the legislation does not limit the construction and use of the SNSA to a cargo airport. Thus, the wording in the legislation does not agree with the information conveyed during the public scoping meeting. The EIS/RMPA should clearly describe the purpose, function, and related infrastructure and uses of the airport.

The federal nexus for BLM's requirement to comply with NEPA in the development of the SNSA should be clearly explained in the EIS. For example, are some or all of the lands where the proposed airport development would occur currently managed by BLM?

The map provided on the BLM NEPA ePlanning webpage that shows the location of the proposed SNSA (Figure 1 in this letter) indicates that some airport infrastructure would occur in the Ivanpah ACEC. Please describe the purpose(s) for designating this ACEC; BLM's current management directives for this ACEC; the direct, indirect, and cumulative impacts and impacts from connected actions that would occur to the resources in this ACEC from airport construction and use; and using the best available information from the scientific literature analyze how these impacts to this ACEC would affect the ability of this ACEC to provide the purpose(s) for which it was designated.

Alternatives to the Proposed Action

The FAA and BLM should analyze several actions alternatives and ensure they are alternatives, not minor changes to the proposed action.

Alternatives that should be analyzed in the EIS/RMPA include the construction and use of a supplemental airport at one or more locations other than the proposed location. Another alternative to be evaluated is restricting the area of airport development and use to the immediate footprint of the airport, and securing all tortoise habitat on BLM land in the Northern Ivanpah Valley from future development (see "**Development of Airport and Associated Facilities that Accompany an Airport Servicing a Major Metropolitan Area**") and human activities (e.g., OHV use, etc.) that adversely impact the tortoise and tortoise habitat. This restricted land use around and near the airport footprint may partially mitigate the impacts to the tortoise and tortoise habitat from the direct, indirect, and cumulative impacts of the construction and use of the airport. This restrictive land use on BLM land in the Northern Ivanpah Valley would need to be a permanent commitment with assurances provided in legal authorities that are not subject to changes in planning documents or other federal agency authorizations. It would need to have effective and ongoing implementation of management, monitoring, and enforcement. The development and use of the airport would be a permanent impact so the mitigation for its construction and use also needs to be permanent.

However, BLM has a history of ineffective implementation of management, monitoring, and enforcement actions for the tortoise and tortoise habitat as documented with the data on the status and trend of the tortoise in the Eastern Mojave Recovery Unit (e.g., Allison and McLuckie 2018, USFWS 2020, 2022) and of allowing uses that are not compatible with conservation and recovery of the tortoise and its habitat (Tuma et al. 2016, Hromada 2022). This is in part because of inadequate funding and staffing. Thus, until it is analyzed, it is unknown whether it is a viable alternative for the tortoise.

When Congress identified lands in the Northern Ivanpah Valley in 2000 to be transferred to Clark County for the development and use of a supplemental airport, it is apparent in the crafting of this legislation that Congress was concerned about the impacts to natural and cultural resources from the airport's development and use. Congress expressed concerns about impact to the Preserve in the House Report on this legislation, and in the final bill Congress required that the NEPA analysis "specifically address any impacts on the purposes for which the Mojave National Preserve was created."

Also, the Ivanpah Valley Airport Public Lands Transfer Act was passed 25 years ago. At that time the available information on the distribution of the tortoise was that it was one species whose distribution extended from the Western Mojave Desert in southern California east to southwestern Utah and south through western and southern Arizona and western Sonora to northwestern Sinaloa, Mexico; the data on the rangewide demographic status and trend of the tortoise did not exist and therefore did not indicate substantial declines in tortoise abundance, density, and recruitment including in southern Nevada; and more intact, unfragmented habitat for the tortoise existed (Allison and McLuckie 2018).

Today the distribution of the tortoise has been revised based on new genetics analysis. What had been one species prior to 2011 is now recognized as three species: *G. agassizii,* in the Mojave and Colorado deserts in California, southern Nevada, southwestern Utah, and northwestern Arizona; *G. morafkai* (= Sonoran desert tortoise) in western and southern Arizona and northwestern and western Sonora; and *G. evgoodei* (Sinaloan thornscrub tortoise) in southwestern Sonora and northwestern Sinaloa.

With its limited distribution and ongoing development in much of its range including the Las Vegas metropolitan area, the development of a major airport in the Northern Ivanpah Valley would likely result in severing important linkage areas that provide population connectivity and gene flow (Averill-Murray et al. 2021) for the tortoise (Figure 2) from direct, indirect, and cumulative impacts and impacts from connected actions. This loss of connectivity would violate the purpose (i.e., to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved) and policy (i.e., that all federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act) of FESA.

If in 2000 Congress had the information on the current demographic status and trend of the Mojave desert tortoise, its needs for population connectivity to sustain the species, its dwindling likelihood for survival in the future, that its distribution was about a third of that described prior to 2011 because that distribution was comprised of three species of tortoises, not one, and increasing development and human activities that are destroying, degrading, and fragmenting tortoise habitat throughout the distribution of the species, it is unlikely Congress would have identified the lands in the Northern Ivanpah Valley to transfer to Clark County to develop an airport. (See "**Importance of Ivanpah Valley in Nevada for the Survival and Recovery of the Mojave Desert Tortoise**"). In other words, current conditions have changed compared those in 2000 and these changes should be analyzed in the EIS/RMPA.

We strongly request that the FAA and BLM identify other lands for locating a supplemental airport to serve Clark County. Such alternatives may include expanding an existing airport or identifying a new location that would not have the debilitating impacts to the tortoise that the Ivanpah Valley Airport site would have based on the best available biological information. Identifying and analyzing other sites for the supplemental airport is needed so that the FAA and BLM do not violate NEPA, and selecting another site is strongly recommended so the Ivanpah Valley Airport does not result in impacts that would likely preclude and survival and recovery of the tortoise in the Eastern Mojave Recovery Unit.

Another alternative that should be analyzed includes limiting the size of the supplemental airport, that is, the area of surface disturbance to the approximate area identified in the Ivanpah Valley Airport Public Lands Transfer Act of 2000 depicted in Figure 1 as light orange and Figure 3 as the long rectangle with private land at the southeast corner. This would include locating all ancillary facilities and associated development that typically occur with an airport near a major city within this footprint.

Economic Viability of the SNSA and Socio-economic Analysis of the Action Alternatives

When the Ivanpah Valley Airport Public Lands Transfer Act of 2000 was passed, the Las Vegas area was the fastest growing area in the United States. However, that has changed. Tourism is down, and tourism is the major source of employment in the Las Vegas area (Nevada Office of Workforce Innovation 2025). Also, the availability of water is reduced with climate change, continuing long-term drought, warmer temperatures, and greater demand for water because of the drought. A reliable source of water is critical for a city located in the Mojave Desert.

The EIS/RMPA should include an accounting of the benefits that would be lost from the implementation of the action alternatives and the economic cost that would be passed on to the local community and American public to "mitigate" these losses. Some of the benefits that are currently provided and that would be lost from construction and use of the SNSA include: (1) protection of air quality (cost = greater air pollution from particulate matter); (2) improved infiltration of precipitation adding to groundwater (cost = soil erosion, less groundwater available); (3) carbon sequestration (cost = more carbon released into and no longer removed from the atmosphere making climate change worse), nitrogen harvesting from the air to allow native woody plants to make food, grow, and reproduce (cost = loss of native woody shrubs elevating soil temperature, reduction of water infiltration); (4) loss of food and shelter for wildlife; (5) loss of visual resources; (6) loss of many current recreation opportunities; and (7) loss of wildlife. Currently these benefits are provided without a cost to the public.

Please analyze in the EIS/RMPA using information from the scientific literature the economic viability of the SNSA given current and future projections of economic growth and availability of water in the Las Vegas area and the socio-economic benefits, both direct and indirect, that would be lost from implementation of the proposed action.

Importance of Ivanpah Valley in Nevada for the Survival and Recovery of the Mojave Desert Tortoise

Linkage Habitats for Population Connectivity: In their analysis of linkage areas needed for population connectivity for the tortoise, Averill-Murray et al. (2021) identified crucial linkage areas for the tortoise (Figure 2).

"Maintaining an ecological network (recovery network) for the Mojave desert tortoise, with a system of core habitats (TCAs) connected by linkages (Hilty et al. 2020), is necessary to support demographically viable populations and longterm gene flow within and between TCAs" (Averill-Murray et al. 2021). In addition, "[l]arge, connected landscapes also are necessary to facilitate natural range shifts in response to climate change (Averill-Murray et al. 2021)." "Habitat linkages among TCAs must be wide enough to sustain multiple home ranges or local clusters of resident tortoises (Beier and others, 2008; Morafka, 1994), while accounting for edge effects, in order to sustain regional tortoise populations." "[N]arrowly delineated corridors may not allow for natural population dynamics if they do not accommodate overlapping home ranges along most of their widths so that tortoises reside, grow, find mates, and produce offspring that can replace older tortoises (Beier and Loe, 1992; Beier, 2018)"(Averill-Murray et al. 2021). Consequently, effective linkage habitats are not long narrow corridors. Any development within them or adjacent to them has an edge effect (i.e., indirect impact) that extends from all sides into the linkage habitat further narrowing and impeding or preventing the use of the linkage habitat, depending on the extent of the edge effect. In addition, most habitats outside TCAs may receive more development and surface disturbance than habitats within TCAs (Carter and others, 2020a in Averill-Murray et al. 2021).

Edge effects for the tortoise have been quantified to include the metric of "limited tortoise observations in areas with greater than 5-percent surface disturbance per km^2." (Averill-Murray et al. 2021). However, this metric is provided with a cautionary note because "5 percent may not maintain population sizes needed for demographic or functional connectivity; therefore, ideally, development thresholds should be lower" (Averill-Murray et al. 2021).

We remind BLM and FAA of the "importance of tortoise habitat outside of TCAs to recovery" of the tortoise as well as long-term survival because these areas are necessary to provide "gene flow among TCAs and minimizing impacts and edge effects within TCAs" (Averill-Murray et al. 2021).

Some of the area delineated for the SNSA is not considered to have a high tortoise habitat suitability ranking (Hromada et al. 2020). However, much of the area delineated for the SNSA in Figure 1 above has a high suitability ranking for tortoise habitat and all of the SNSA is immediately adjacent to high-ranking suitability habitat (Hromada et al. 2020) that was identified as linkage habitat for the tortoise (Figure 2) to provide needed connectivity (Averill-Murray et al. 2021). Thus, the direct loss of habitat needed for connectivity and the indirect impacts and edge effects to the remaining linkage habitat resulting from the construction, use of the SNSA, associated facilities, and services likely means that the function of this linkage habitat would be severely reduced or curtailed for the tortoise.

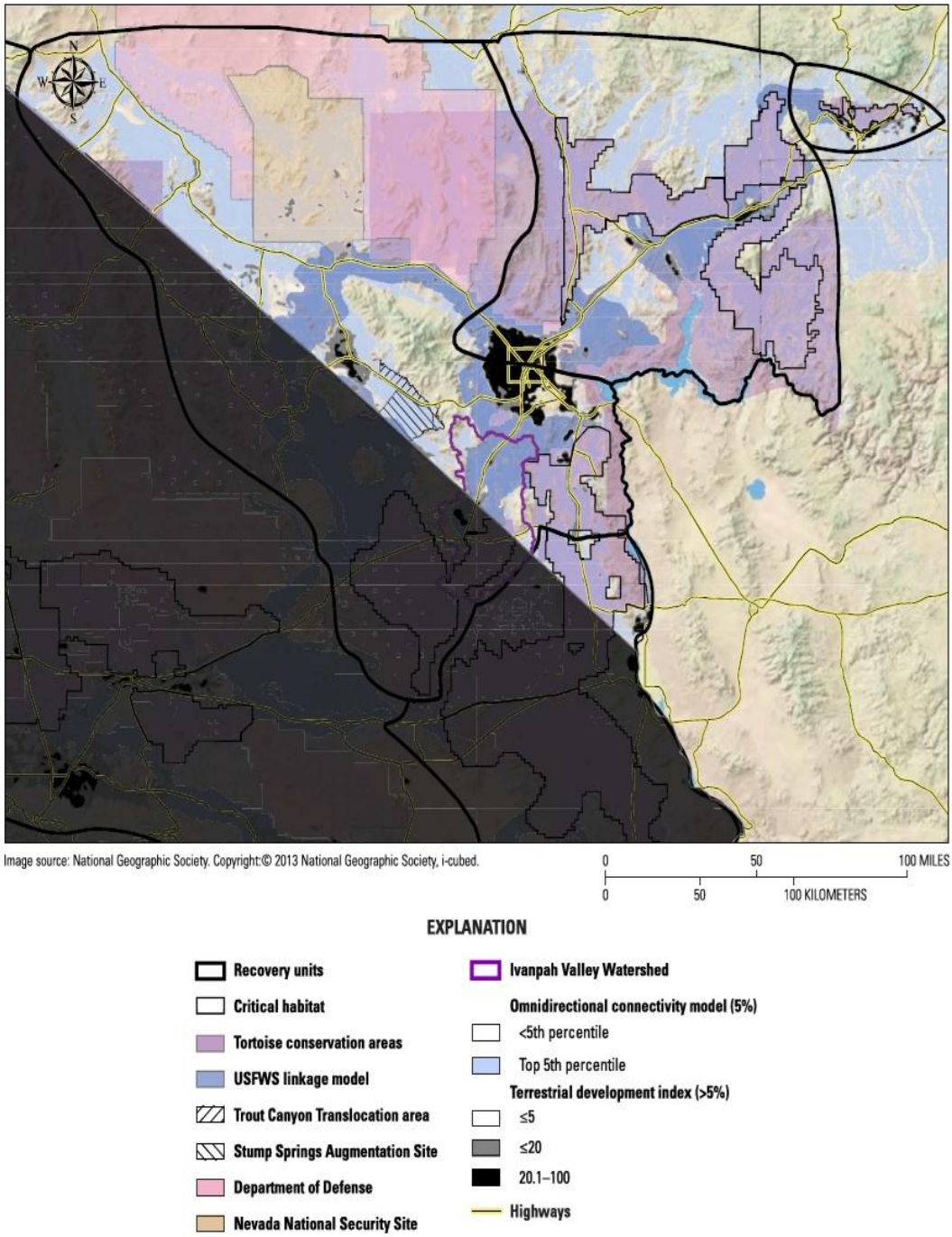


Figure 5. Tortoise conservation areas, linkages, and other habitat managed for desert tortoise population connectivity in Nevada, Utah, and Arizona.

Figure 2. TCAs, linkages, and other habitat managed for desert tortoise population connectivity in Nevada, Utah, and Arizona. From Averill-Murray et al. (2021).

Furthermore, with the additional development associated with the operation of large airports near large cities and the designation of an unincorporated town with boundaries that extend well beyond the SNSA footprint (Figure 1), the loss of additional tortoise habitat and extension of the indirect impacts and edge effects from the development and activities of this new town would effectively halt population connectivity for the tortoise in this identified linkage habitat.

Hromada (2022) studied natural and artificial corridors and their use by tortoises including Ivanpah Valley. The low mobility of the tortoise has led to "its classification as a corridor-dweller" (Averill-Murray et al. 2013), and a pressing concern is the configuration of functional corridors to maintain historic connectivity around new landscape-level disturbances within formerly contiguous habitat (Hromada 2022) needs to be sufficiently wide to contain home ranges of more than one tortoise. Hromada (2022) reported that the estimated home ranges of tortoises at his study plots were generally larger than those reported in other studies likely because of the finer-scale method he used to track tortoises.

Hromada (2022) reported that tortoise movement selection responded significantly to anthropogenic disturbances including roads, OHV use, and grazing. Tortoises are avoiding movement in proximity to paved and dirt roads. These behavioral responses to roads can contribute to fragmentation of tortoise populations either through behavior that leads to reduced habitat use near roads or increased use that may lead to higher rates of mortality (Hromada 2022). Tortoises are also avoiding other areas with impacts such as reduced vegetation cover that typically results from human activities (e.g., OHV use, grazing).

Designing corridors to maintain connectivity for a corridor-dwelling species such as the tortoise requires careful consideration of both habitat and movement preferences of tortoises (Beier et al. 2008) including the temporary forays outside a tortoise's established interannual home range and dispersal behavior exhibited by most size classes of tortoises, especially younger tortoises (Hromada 2022).

Please include the information from Averill-Murray et al. (2021) and Hromada (2022) and other relevant research when analyzing the impacts of the proposed action and alternatives in the EIS/RMPA on the needs of the tortoise for linkage habitat in the Northern Ivanpah Valley.

Genetic Importance of Tortoises in the Ivanpah Valley: The tortoises in the Ivanpah Valley are a genetic "hot spot" of genetic divergence (Vandergast et al. 2013). This divergence may "provide a rich resource for evolutionary resilience." "Low or reduced genetic diversity is generally associated with reductions in fitness and survival. Because genetic diversity underlies differentiation and adaptation, preserving regions with the greatest levels of genetic diversity and differentiation may help to preserve the evolutionary potential of these species (Vandergast et al. 2013)." The importance of the Ivanpah Valley tortoise population should be explained in the EIS/RMPA along with appropriate mitigation that avoids the impacts to this population. Avoidance should be the focus of the EIS/RMPA because it is not likely that equivalent functions and values can be created elsewhere to replace those of this population.

BLM's Decision to Exclude Development in Tortoise Habitat: During the development of the Programmatic Environmental Impact Statement for Utility-Scale Solar Energy Development (Solar PEIS) (BLM 2024), the USFWS provided to BLM information and maps on where development should be excluded to help manage for the survival of the tortoise in southern Nevada. The USFWS (May 2023) provided the following information to BLM:

> Exclusion areas were selected based on designated critical habitat for the species (USFWS 1994; USFWS 2011); updated datasets and models for tortoise occupancy (Kissel et al. 2023) and density (Allison and McLuckie 2018; Zylstra et al. 2023); habitat suitability (Nussear et al. 2009; Edwards et al. 2015); habitat connectivity (Grey et al. 2019; Averill-Murray et al. 2021); habitat disturbance (Carr and Leinwand 2020; Carter et al. 2020); road density (TIGER 2022; Averill-Murray and Allison 2023); land ownership, management, and conservation status (e.g., BLM Wilderness Areas, BLM ACECs, BLM TCAs); proximity of non-BLM managed federal lands and non-federal lands deemed important for tortoise populations and connective linkages (USFWS National Wildlife Refuges, Department of Defense Lands and Conservation Areas, National Park Service lands, etc.); solar energy zone (SEZ) designations in Nevada (SEZ; BLM 2012); solar development focal areas (DFA) in California (BLM 2016); and regional tortoise augmentation sites (USFWS 2021).
>
> Connected landscapes are essential for tortoises to maintain robust and heterogenetic populations that can withstand future landscape and climate change (Averill-Murray et al. 2021).

The USFWS identified tortoise habitat on both sides of I-15 between Jean and Primm, NV and between Jean and Las Vegas as those that should be excluded from development (Figure 3). In their August 2023 correspondence with BLM, USFWS stated that "[a]dditional areas such as habitats along the west side of Interstate 15 between Jean and Las Vegas, Nevada are needed to maintain connected tortoise populations in this region. Connective landscapes are essential for tortoises to maintain robust and heterogenetic populations that can withstand future landscape and climate change (Averill-Murray et al. 2021)." In the Final Solar PEIS (BLM 2024), BLM excluded this area from development because of its importance to the survival of the tortoise.

In the EIS/RMPA, please explain why the map provided for the proposed action (Figure 1 in this letter) shows BLM proposing to develop lands (e.g., detention basin, stormwater management conveyance, new I-15 interchange, noise compatibility area, unincorporated town boundary, etc.) that in 2024 were excluded from development in the Final Solar PEIS because of the importance of these lands for population connectivity and tortoise survival. BLM's decision to exclude these areas from solar development should apply to all development.

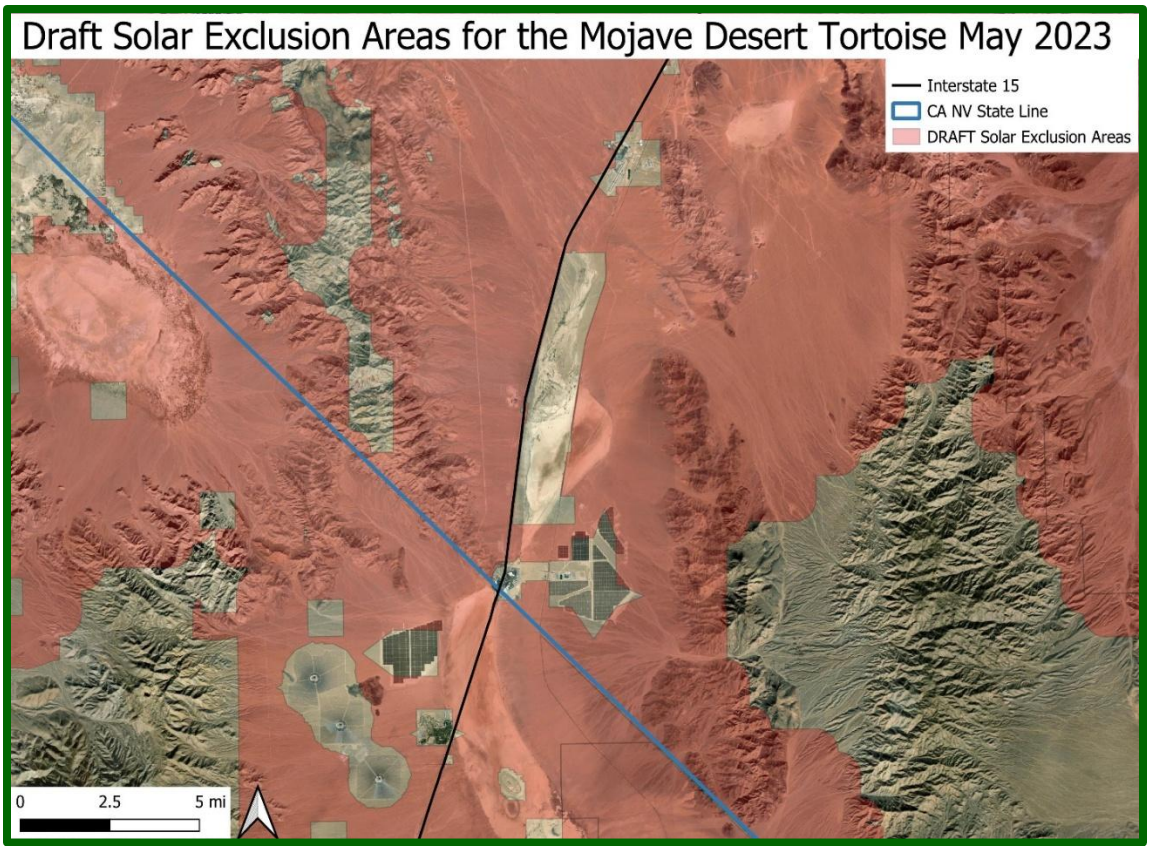


Figure 3. Areas identified by USFWS to BLM to exclude from development. Map depicts the area from just north of Jean, NV to the Ivanpah Solar Energy Generating System project (three connected circles, lower left) in California.

Environmental Assessment – Restoration Plan for Desert Tortoise Habitat Condition and Connectivity in the Large-Scale Translocation Study Site and Northern Ivanpah Valley: In 2024, BLM prepared and circulated this environmental assessment. According to BLM, the purpose of this proposed action was "to improve habitat conditions and to restore and maintain connectivity of desert tortoise habitat within the Northern Ivanpah Valley to decrease the effects of habitat fragmentation on tortoise population dynamics and long-term gene flow." "The need for the proposed action stems from the Endangered Species Act of 1973 and BLM Manual 6840 that compels the BLM to conserve federally listed species, such as the threatened desert tortoise (*Gopherus agassizii*)." "[C]oncerns have arisen over the connectivity of desert tortoise habitat as development continues to fragment habitat and surround designated conservation areas."

Habitat fragmentation negatively influences population dynamics by separating a population into smaller isolated populations. These isolated populations have a greater risk of extinction than populations that are connected due to the removal of genetic variation (Averill-Murray et al. 2021) and other factors. In contrast, populations with high connectivity are generally more resilient to localized disturbance through rescue effects from individuals of neighboring populations, meaning that the population remains genetically diverse (Scott and Shaffer 2020, Averill-Murray et al. 2021).

The proposed action in this environmental assessment included the area of the existing LSTS, which is a 26,200-acre area established in 1996 as the location for translocation of desert tortoises from areas of development within the Las Vegas Valley (Figure 1).

In 2024, BLM recognized the importance of connectivity of desert tortoise populations and linkage habitat within the Northern Ivanpah Valley by excluding all BLM lands from development in the Solar PEIS except the SNSA footprint. In the EIS/RMPA, BLM should explain why in 2025 they cancelled this project that would have improved habitat conditions and restored and maintained connectivity of desert tortoise populations and linkage habitat in the Northern Ivanpah Valley, and how the SNSA, connected actions, direct, indirect and cumulative impacts, and growth-inducing impacts would affect the implementation of this restoration plan for the benefit of tortoises and tortoise habitat in the LSTS and the Northern Ivanpah Valley.

Development of Airport and Associated Facilities that Accompany an Airport Servicing a Major Metropolitan Area

Airports that service large cities and associated suburban areas have numerous interrelated and interdependent actions that "but for" the airport would not likely occur. These include increased traffic to access the airport and associated facilities to provide access (e.g., added lanes to existing roads and/or construction of new roads, installing public transportation such as light rail, etc.), increased cargo hold buildings, customs inspection facilities, law enforcement facilities, fire and other emergency services and facilities, hotels, restaurants, shops, medical care, banks, rental cars, fuel stations, service facilities for rental cars, meeting facilities, waste holding and disposal, etc. Because the SNSA is in Nevada, there are also likely to be gambling facilities. In short, establishing a large airport near a major metropolitan area results in the creation of a new city or major expansion of an existing city.

All likely facilities and services associated with an airport to a major metropolitan area should be analyzed in the DEIS with respect to direct, indirect, and cumulative effects to the tortoise and its habitat including size, configuration, connectivity, and edge effects on tortoise populations and habitats at the project site in the Eastern Mojave Recovery Unit, and adjacent recovery units. In the cumulative impacts and connected actions sections of the EIS/RMPA, the growth-inducing impacts to the area surrounding the airport should be described, mapped, and analyzed especially with respect to the needs of the tortoise for survival and linkage habitat for population connectivity across the range of the species. Following this analysis, BLM and FAA should develop appropriate mitigation to fully offset these impacts and include this mitigation in the description of the proposed action and alternatives. If mitigation to fully offset these impacts to the tortoise is not feasible, BLM and FAA should explain the extent of the remaining impacts to the tortoise and how these impacts would affect the long-term persistence of tortoises in the Northern Ivanpah Valley.

Analysis of Impacts to Biological Resources & Special Status Species Including the Tortoise

We expect that the EIS/RMPA will include in the Affected Environment/Environmental Baseline section the current demographic status and trend of the tortoise and its habitat requirements including linkage habitat needed for population connectivity, and analyze the direct, indirect, and cumulative impacts to the tortoise as well as impacts from connected actions, and the tortoise's

ability to survive and recover if the proposed project is implemented. The analysis of the current status and needs and future conditions of the tortoise and its habitat including linkage habitat and population connectivity should include using the results from current scientific publications in this analysis and information in BLM files at the local and state levels for the four states where the Mojave tortoise occurs. Sources of information on the demographic status and trend for the tortoise include but are not limited to Allison and McLuckie (2018); USFWS (2015, 2016, 2018, 2019, 2020, 2022a, 2022b, 2025); Kissel et al. 2023. To facilitate this analysis, we are providing to BLM the "Demographic Status and Trend of the Mojave Desert Tortoise (*Gopherus agassizii*) including the Eastern Mojave Recovery Unit" as an appendix to this letter. Sources of information on habitat needs are provided in Averill-Murray et al. (2021) and information on areas avoided by tortoises in Hromada (2022). We expect this and other status information to be used in the EIS/RMPA in the analysis of direct, indirect, and cumulative impacts and impacts from connected actions from the implementation of the proposed action and alternatives.

Impacts to the tortoise and its habitat from the construction, use and maintenance of the proposed action include ongoing mortality, injury, collection, and vandalism from increased human access. Indirect impacts from human activities associated with the SNSA include the destruction, degradation, and/or fragmentation of tortoise habitat; removal of key areas of linkage habitat that prevents or severely impedes population connectivity; surface disturbance and introduction of non-native invasive plant species via construction equipment, public vehicles, and other sources; replacement of native forbs having high nutritional and water value with low nutritional non-native invasive grasses (Drake et al. 2016); increased occurrence of the size, intensity, and frequency of human-caused wildfires from fuels provided by non-native invasive plant species (Brooks and Esque 2002); increased predation from substantially increased numbers of predators that utilize subsides of food, water, and nesting locations provided by human activities (Boarman 2003); entrapment and drowning of tortoises in surface water management and flood control features; noise; and artificial light. Additional indirect impacts include modifications to a large area that disrupt established natural patterns of sheet flow and water movement in washes, thereby impacting large areas that are down-gradient and substantially reducing soil moisture and water for existing native vegetation down-gradient (Devitt et al. 2022). This would result in the death of vegetation in down-gradient areas and loss of additional tortoise habitat needed for connectivity with tortoise populations.

Other indirect impacts include the creation of an "urban heat island" effect, where native vegetation is replaced with large areas with buildings, parking facilities, runways, tarmacs, paved roads, and other hard-surface areas. These hard-surface areas absorb heat and raise the temperature of adjacent areas including tortoise habitat. This decreases soil moisture and increases plant transpiration that stresses native desert vegetation from reduced water availability and increased water loss. Increased temperatures could impact the species composition of vegetation and wildlife in the vicinity of the solar facility, where temperatures could be too high for certain species to persist. Wildlife species may be displaced as they are forced to vacate the area of increased temperatures.

Changes in hydrology could reduce water availability for vegetation communities and increases or decreases in soil temperatures could affect persistence of vegetation and habitat suitability for burrowing wildlife such as the tortoise. This rise in temperature also impacts the availability of

soil moisture and the ability of burrowing animals such as the tortoise in nearby areas to reduce their body temperatures at night to conserve energy and moisture. Recall that the tortoise is already living near the edge of its thermal and water balance tolerance levels especially reproductive female tortoises (Henen 2002, Petersen 1996). This impact would affect neonate and juvenile tortoises and reproductive females to a greater degree than subadult and adult male tortoises.

The impacts of elevated soil and air temperatures to areas adjacent to the proposed project should be analyzed in the EIS/RMPA including impacts to the survival, growth, and recruitment of native vegetation. This is important to the tortoise because the area surrounding the footprint of the SNSA is linkage habitat identified as needed for population connectivity. Because the tortoise is a corridor-dweller, this habitat must be able to support resident tortoises for it to function as linkage habitat and when tortoises exhibit forays and dispersal behavior.

These human activities and impacts to the tortoise would result in further declines in tortoise numbers and densities near the proposed SNSA where densities are already below the threshold of population viability in the Eastern Mojave Recovery Unit. These impacts would create an edge effect that would extend into adjacent tortoise habitat and impede or curtail the ability of this tortoise habitat to function as linkage habitat in the Northern Ivanpah Valley.

Please ensure that the EIS/RMPA describes and analyzes these impacts to the tortoise and any other impacts. Please ensure that the EIS/RMPA develops effective mitigation to fully offset these impacts so the proposed action does not result in severing connectivity for the tortoise in the Northen Ivanpah Valley.

Effects to the Tortoises in the Large-Scale Translocation Site and the Management of this Area for the Tortoise

The LSTS is part of the mitigation for the tortoise under the Clark County Incidental Take Permit (ITP) issued by the USFWS and described in the *Clark County Desert Conservation Plan* (CCDCP) (1995). It is the recipient area for healthy tortoises translocated from development projects on private lands in Clark County as authorized under the ITP. The LSTS is located adjacent to and along the west side of Interstate 15 between Jean and Primm, NV, extends west into the Spring Mountains (BLM 2024), and encompasses approximately 26,200 acres in the northwest portion of Ivanpah Valley on BLM land (BLM 2024). As part of the mitigation, the area was secured from some human activity by fencing it, because of numerous threats to tortoises and tortoise habitat.

As a mitigation area for receiving tortoises removed from lands developed in the Las Vegas Valley, this area should continue to be managed in perpetuity for the tortoise because it, in part, is intended to offset the authorized displacement of tortoises. Thus, any development proposed in a mitigation area is inappropriate and should be denied.

During the public scoping meeting, a map was presented that showed a town boundary and designation of 16,000 additional acres around the proposed SNSA. That town designation encompassed about one third of the LSTS mitigation area. The EIS/RMPA should explain what this overlay means for future land use on BLM land in the LSTS and how that development would impact the tortoise, tortoise habitat, and the current designation of the LSTS and the ITP's function.

What would be the final use of the additional 16,000 acres of land mentioned in the public scoping meeting? What would be the disposition of the tortoises that currently occupy the LSTS if this area is developed? How would BLM explain the authorization of this development when in 2024 BLM issued a NEPA document and Record of Decision that development would not occur on these lands because of their importance to the survival and recovery of the tortoise (BLM 2024)? Please answer these questions in the EIS/RMPA.

Impacts to Mojave National Preserve

Please analyze the impacts to the Preserve from the construction, operation, use, and maintenance of the SNSA and associated facilities and uses. This would include the direct effects, interrelated and interdependent actions, indirect effects, and cumulative effects of the SNSA and the other development and activities associated with airport construction, use, and maintenance.

In the Ivanpah Valley Airport Public Lands Transfer Act, Congress directed that funds collected from the purchase of federal lands under the Nevada Public Land Management Act of 1998 (112 Stat. 2345) are to be expended only for the acquisition of private inholdings in the Preserve. Please identify and analyze in the EIS the lands that would be acquired using these funds and when the acquisitions would occur with respect to the construction schedule for the SNSA**.** We presume that acquisition would occur prior to the initiation of airport construction because the public lands would need to be purchased before construction on the SNSA could begin.

Importance of Ivanpah Valley in Nevada for Survival and Recovery of the Mojave Desert Tortoise

The mission of the Council is to assure the perpetual survival of viable populations of desert tortoises represented throughout their historical ranges, which includes the Mojave desert tortoise. In their Revised Recovery Plan for the Mojave Population of the Desert Tortoise (USFWS 2011), the USFWS identified five recovery units for the tortoise. “Recovery units for the desert tortoise are special units that are geographically identifiable and are essential to the recovery of the entire listed population, i.e., recovery units are individually necessary to conserve the genetic, behavioral, morphological, and ecological diversity necessary for long-term sustainability of the entire listed population” (USFWS 2011). This Revised Recovery Plan specified that the first objective is to “maintain self-sustaining populations of desert tortoises within each recovery unit into the future.” This statement reinforces the Desert Tortoise Mojave Populations Recovery Plan (USFWS 1994) that stated “[w]hen all recovery units are considered recovered, the Mojave population of the desert tortoise could be considered for delisting.” Thus, if the tortoise in one recovery unit does not meet the recovery criteria, the Mojave tortoise population would not meet recovery criteria and would not be delisted.

The Proposed Action is located in the Eastern Mojave Recovery Unit of the tortoise. Tortoises in this recovery unit have experienced the greatest percent of decline in population density and abundance among the five recovery units, which is 67% between 2004 and 2014 (USFWS 2015, Allison and McLuckie 2018). Population densities are below those needed for population viability (USFWS 1994, USFWS 2015, Allison and McLuckie 2018) and more recent data indicate this downward decline and population densities below population viability is not improving (USFWS 2020, 2022, 2025).

For the tortoise to survive, recover, and persist, the USFWS must evaluate in a biological opinion whether a proposed action is likely to jeopardize the continued existence of a listed species. 50 Code of Federal Regulations (CFR) 402.02 defines "jeopardize the continued existence" to mean "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." Thus, any proposed action should be sited and designed so it does not reduce appreciably the likelihood of survival and recovery of the tortoise in the Eastern Mojave Recovery Unit or rangewide with respect to the current demographic status of the tortoise, threats, and how they affect the tortoise and tortoise habitat.

Consequently, it is in the best interest of the BLM and FAA to ensure that the construction and long-term use and maintenance of the SNSA and all associated facilities and activities do not reduce appreciably the survival and recovery of the tortoise in the Eastern Mojave Recovery Unit. This would include the direct effects, interrelated and interdependent actions, indirect effects, and cumulative effects of the SNSA to the tortoise and tortoise habitat needed for feeding, breeding, shelter, and connectivity of populations in the Eastern Mojave Recovery Unit with the adjacent Northeastern Mojave, Colorado Desert, and Western Mojave recovery units.

The Council has many concerns about the proposed action that extend beyond the direct loss of tortoise habitat to construction on the 6,000 acres given to Clark County via the Ivanpah Valley Airport Public Lands Transfer Act of 2000 for building an airport. We note the acreage allotted for the SNSA in the legislation is about twice the size of the current Herry Reid Airport in Las Vegas.

Analysis of Mitigation for Impacts to Tortoise Habitat and Disruption of Connectivity between Tortoise Populations: The EIS/RMPA should identify mitigation that would fully offset the functions and values of the habitat that would be lost, degraded, and fragmented from the development and use of the proposed SNSA. Partial mitigation for the direct loss of habitat could be decommissioning and restoring the Ivanpah Solar Energy Generating System (ISEGS) Project. Because the ISEGS Project may no longer have a purchaser for the power it generates, it may no longer be an economically viable project to operate and maintain. If so, it should be decommissioned and the lands restored to the quality and quantity of tortoise habitat that occurred there prior to construction of this project (i.e. undue degradation of public lands). Please analyze this proposed mitigation in the EIS/RMPA.

Such habitat restoration, if successfully implemented, would be considered partial mitigation for the direct loss of tortoise habitat from construction of the SNSA. It would not mitigate the loss of population connectivity necessary for the survival and recovery of the tortoise (Averill-Murray et al. 2021). The proposed location of the SNSA would sever the existing tortoise habitat that links the Northern Ivanpah Valley with the Southern Ivanpah Valley in the Ivanpah TCA and Mojave National Preserve, and would sever the link between the Ivanpah TCA and the Piute-Eldorado TCA.

Averill-Murray et al. (2021) reported that the limits of development "in some areas of California within the Desert Renewable Energy Conservation Plan, such as Ivanpah Valley, are more restrictive, at 0.1 percent [of the total area]. Continuity across the state line in Nevada could be achieved with comparable limits in the adjacent portion of Ivanpah Valley, as well as the Greater Trout Canyon Translocation Area and the Stump Springs Regional Augmentation Site. These more restrictive limits would help protect remaining habitat in the major interstate connectivity pathway through Ivanpah Valley and focal areas of population augmentation."

Furthermore, Averill-Murray et al. (2021) reported that to maintain tortoise habitability and permeability across non-conservation-designated tortoise habitat (e.g., linkage habitat), all surface disturbance should be "limited to less than 5-percent development per square kilometer because the 5-percent threshold for development is the point at which tortoise occupation drops precipitously (Carter and others, 2020a)."

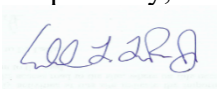
Averill-Murray et al. (2021) cautioned that this "…5-percent development per square kilometer may not allow for long-term persistence of healthy populations that are of adequate size needed for demographic or functional connectivity; therefore, a conservative interpretation suggests that, ideally, development could be lower."

We request that the EIS/RMPA use the information provided above and other relevant information from scientific journals and reports when analyzing the issues identified in this letter with respect to the survival and recovery of the tortoise. We also request that the EIS/RMPA answer the questions in this letter with respect to the future survival and recovery of the tortoise.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by the BLM and the FAA that may affect desert tortoises or their habitats, and that any subsequent environmental documentation for this proposed action is provided to us at the contact information listed above. Additionally, we ask that you notify the Council at eac@deserttortoise.org of any other proposed actions that the BLM or FAA may authorize, fund, or carry out in the range of any species of desert tortoise in the southwestern United States (i.e., *Gopherus agassizii*, *G. morafkai*, *G. berlandieri*, *G. flavomarginatus*) so we may comment on it to ensure that the BLM fully considers and implements actions to conserve these tortoises as part of its directive to conserve biodiversity on lands managed by the BLM.

Please respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this Project.

Respectfully,



Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Cc: Brian Croft, Field Supervisor, U.S. Fish and Wildlife Service, Palm Springs and Southern Nevada Field Offices; brian_croft@fws.gov
Jon Raby, Nevada State Director, Bureau of Land Management; jraby@blm.gov, BLM_NV_NVSO_web_mail@blm.gov
M. Ryan Chatterton, Acting District Manager, Bureau of Land Management, Southern Nevada District Office; blm_nv_sndo_web_mail@blm.gov
Bruce Sillitoe, Field Manager, Bureau of Land Management, Southern Nevada Field Office; blm_nv_sndo_web_mail@blm.gov
Raymond McPaddden, Superintendent, Mojave National Preserve, raymond_mcpadden@nps.gov, moja_superintendent@nps.gov
Ann McPherson, Environmental Review, U.S. Environmental Protection Agency, mcpherson.ann@epa.gov
Patrick Donnelly, Center for Biological Diversity, Nevada Office; pdonnelly@biologicaldiversity.org

Attachment: Appendix A. Demographic Status and Trend of the Mojave Desert Tortoise (*Gopherus agassizii*) including the Eastern Mojave Recovery Unit

Literature Cited

Allison L.J. and A.M. McLuckie. 2018. Population trends in Mojave desert tortoises (*Gopherus agassizii*). Herpetological Conservation and Biology. 2018 Aug 1. 13(2):433–452. http://www.herpconbio.org/Volume_13/Issue_2/Allison_McLuckie_2018.pdf
or
https://www.fws.gov/media/allison-and-mcluckie2018mojave-desert-tortoise-population-trends

Averill-Murray, R.C., T.C. Esque, L.J. Allison, S. Bassett, S.K. Carter, K.E. Dutcher, S.J. Hromada, K.E. Nussear, and K. Shoemaker. 2021. Connectivity of Mojave Desert tortoise populations—Management implications for maintaining a viable recovery network. U.S. Geological Survey Open-File Report 2021–1033, 23 p., https://doi.org/ 10.3133/ ofr20211033.
https://pubs.usgs.gov/of/2021/1033/ofr20211033.pdf

Averill-Murray, R.C., and L.J. Allison. 2023. Travel Management Planning for Wildlife with a Case Study on the Mojave Desert Tortoise. Journal of Fish and Wildlife Management 14(1):269–281; e1944-687X.
https://doi.org/10.3996/JFWM-22-030

Berry, K.H., L.J. Allison, A.M. McLuckie, M. Vaughn, and R.W. Murphy. 2021. *Gopherus agassizii*. The IUCN Red List of Threatened Species 2021: e.T97246272A3150871.
https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T97246272A3150871.en

[BLM] Bureau of Land Management. 2012. Approved resource management plan amendments/record of decision for solar energy development in six southwestern states.
https://solareis.anl.gov/documents/index.cfm

[BLM] U.S. Bureau of Land Management. 2015. Advancing Science in the BLM: An Implementation Strategy IB 2015-040. March 18, 2015. https://www.blm.gov/policy/ib-2015-040

[BLM] Bureau of Land Management. 2016. Desert Renewable Energy Conservation Plan Amendment to the California Desert Conservation Area Plan, the Bishop Resource Management Plan and the Bakersfield Resource Management Plan. Land Use Plan Amendment and Record of Decision. https://eplanning.blm.gov/eplanning-ui/project/66459/510

[BLM] Bureau of Land Management. 2024. Restoration Plan for Desert Tortoise Habitat Condition and Connectivity in the Large-Scale Translocation Study Site and Northern Ivanpah Valley. DOI-BLM-NV-S010-2024-0084-EA.

Carr, N.B., and I.L.L. Leinwand. 2020. Terrestrial Development Index for the western United States:1-kilometer moving window: U.S. Geological Survey data release. DOI 10.5066/P93ZU0R9. https://www.usgs.gov/data/terrestrial-development-index-western-united-states-1-kilometer-moving-window

Carter, S.K., K.E. Nussear, T.C. Esque, I.I.F Leinwand, E. Masters, R.D. Inman, N.B. Carr, and L.J. Allison. 2020. Quantifying development to inform management of Mojave and Sonoran desert tortoise habitat in the American southwest. Endangered Species Research 42:167–184. https://doi.org/ 10.3354/ esr01045. https://www.int-res.com/abstracts/esr/v42/p167-184/

[CDFW] California Department of Fish and Wildlife. 2024a. Status Review for Mojave Desert Tortoise (*Gopherus agassizii*) Report to the Fish and Game Commission, February 2024. https://nrm.dfg.ca.gov/documents/ContextDocs.aspx?cat=CESA-Listing

[CDFW] California Department of Fish and Wildlife. 2024b. 2022-2024 News Releases. California Fish and Game Commission Holds Hybrid Meeting, April 23, 2024. https://wildlife.ca.gov/News/Archive/california-fish-and-game-commission-holds-hybrid-meeting11

California Fish and Game Commission. 2025. CESA, Petitions to List Species Under the California Endangered Species Act, Finalized Petitions. https://fgc.ca.gov/CESA#1089124-mojave-aka-agassizs-desert-tortoise-2025 https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=232827&inline

Defenders of Wildlife, Desert Tortoise Preserve Committee, and Desert Tortoise Council. 2020. A Petition to the State of California Fish And Game Commission to move the Mojave desert tortoise from listed as threatened to endangered. https://defenders.org/sites/default/files/2020-03/Desert%20Tortoise%20Petition%203_20_2020%20Final_0.pdf

Dewitz, J., and U.S. Geological Survey [USGS]. 2021. National Land Cover Database (NLCD) 2019 Products (ver. 2.0, June 2021). U.S. Geological Survey data release. https://doi.org/10.5066/P9KZCM54

Edwards, T., K.H. Berry, R.D. Inman, T.C. Esque, K.E. Nussear, C.A. Jones, and M. Culver. 2015. Testing Taxon Tenacity of Tortoises: evidence for a geographical selection gradient at a secondary contact zone. Ecology and Evolution, 5(10): 2095-2114.

Gray, M.A., B.G Dickson, K.E. Nussear, T.C. Esque, and T. Chang. 2019. A range-wide model of contemporary, omni-directional connectivity for the threatened Mojave desert tortoise, Ecosphere 10(9)e02847. 10.1002/ecs2.2847. https://esajournals.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/ecs2.2847

Henen, B.T., 2002. Energy and water balance, diet, and reproduction of female desert tortoises (*Gopherus agassizii*). Chelonian Conservation and Biology 4: 319–329.

Kissel, A.M., B. Wallace, J. Anderson, B.G. Dickson, K. Van Neste, V. Landau, R.C. Averill-Murray, L.J. Allison, A. Fesnock. 2023. Range-wide occupancy trends for the Mojave desert tortoise (*Gopherus agassizii*). Ecosphere 10.1002/ecs2.4462. https://doi.org/10.1002/ecs2.4462??

[NPS] National Park Service. 2002. Mojave National Preserve General Management Plan. April 2002. https://www.nps.gov/moja/learn/management/gmp.htm

Nevada Office of Workforce Innovation. 2025. Employment By Industry. https://gowinn.nv.gov/workforce-development-matters/

Nussear, K.E., T.C. Esque, R.D. Inman, L. Gass, K.A. Thomas, C.S.A. Wallace, J.B. Blainey, D.M. Miller, and R.H. Webb. 2009. Modeling habitat of the desert tortoise (*Gopherus agassizii*) in the Mojave and parts of the Sonoran Deserts of California, Nevada, Utah, and Arizona. U.S. Geological Survey Open-File Report 2009-1102, 18 p. https://pubs.usgs.gov/of/2009/1102/ofr20091102.pdf

Peterson, C.C. 1996. Anhomeostasis: seasonal water and solute relations in two populations of the desert tortoise (*Gopherus agassizii*) during chronic drought. Physiological Zoology 69:1,324–1,358.

[TIGER] Topologically Integrated Geographic Encoding and Referencing (TIGER) System (2022). U.S. Census Bureau's geographic spatial data. TIGER Data Products Guide (census.gov)

[USFWS] U.S. Fish and Wildlife Service. 1994. Desert tortoise (Mojave population) Recovery Plan. U.S. Fish and Wildlife Service, Region 1, Portland, Oregon. 73 pages plus appendices. https://ecos.fws.gov/docs/recovery_plan/940628.pdf

[USFWS] U.S. Fish and Wildlife Service. 2011. Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, California and Nevada Region, Sacramento, California. https://www.fws.gov/sites/default/files/documents/USFWS.2011.RRP%20for%20the%20Mojave%20Desert%20Tortoise.pdf

[USFWS] U.S. Fish and Wildlife Service. 2015. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2013 and 2014 Annual Reports. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2015%20report.%20Rangewide%20monitoring%20report%202013-14.pdf

[USFWS] U.S. Fish and Wildlife Service. 2016. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2015 and 2016 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2016%20report.%20Rangewide%20monitoring%20report%202015-16.pdf

[USFWS] U.S. Fish and Wildlife Service. 2018. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2017 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2018%20report.%20Rangewide%20monitoring%20report%202017.pdf

[USFWS] U.S. Fish and Wildlife Service. 2019. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2018 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2019%20report.%20Rangewide%20monitoring%20report%202018.pdf

[USFWS] U.S. Fish and Wildlife Service. 2020. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2019 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. 42 pages. https://www.fws.gov/sites/default/files/documents/2019_Rangewide%20Mojave%20Desert%20Tortoise%20Monitoring.pdf

[USFWS] U.S. Fish and Wildlife Service. 2021. Population augmentation strategy for the Mojave desert tortoise recovery program. U.S. Fish and Wildlife Service, Las Vegas, Nevada. https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise%20population%20augmentation%20strategy_2021FEB.pdf

[USFWS] U.S. Fish and Wildlife Service. 2022a. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2020 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2022%20report.%20Rangewide%20monitoring%20report%202020.pdf

[USFWS] U.S. Fish and Wildlife Service. 2022b. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2021 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2022%20report.%20Rangewide%20monitoring%20report%202021.pdf

[USFWS] U.S. Fish and Wildlife Service. 2023. Exclusion Areas for Solar Energy Development to Promote Viable and Connected Populations for the Mojave Desert Tortoise. Draft document and associated spatial file provided to the U.S. Bureau of Land Management August 28, 2023.

Zylstra, E.R., L.J. Allison, R. Averill-Murray, V. Landau, N.S. Pope, R.J. Steidl. 2023. Spatially explicit model for density. Ecosphere 14(3):1-18. https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.4448

Appendix A. Demographic Status and Trend of the Mojave Desert Tortoise (*Gopherus agassizii*)

We provide the following information on the status and trend of the listed population of the desert tortoise (*Gopherus agassizii*) to assist the FAA and particularly the BLM with their analysis of the direct, indirect, and cumulative impacts of the Proposed Project on the Mojave desert tortoise.

BLM's implementation of a conservation strategy for the Mojave desert tortoise in its resource management plans through 2020 has resulted in the following changes in the status for the tortoise throughout its range and in Nevada from 2004 to 2014 (Table 1; USFWS 2015) and 2004 to 2020 (Table 2). There are 17 populations of Mojave desert tortoise described below that occur in the Critical Habitat Units (CHUs) and Tortoise Conservation Areas (TCAs); 14 are on lands managed by the BLM.

The Desert Tortoise Council (Council) has serious concerns about direct, indirect, and cumulative sources of human mortality for the Mojave desert tortoise given the status and trend of the species range-wide, within each of the five recovery units, and within the TCAs that comprise each recovery unit.

Densities of Adult Mojave Desert Tortoises: A few years after listing the Mojave desert tortoise under the Federal Endangered Species Act (FESA), the U.S. Fish and Wildlife Service (USFWS) published a Recovery Plan for the Mojave desert tortoise (USFWS 1994a). It contained a detailed population viability analysis. In this analysis, the minimum viable density of a Mojave desert tortoise population is 10 adult tortoises per mile^2 (3.9 adult tortoises per km^2). This assumed a male-female ratio of 1:1 (USFWS 1994a, page C25) and certain areas of habitat with most of these areas geographically linked by adjacent borders or corridors of suitable tortoise habitat. Populations of Mojave desert tortoises with densities below this density are in danger of extinction (USFWS 1994a, page 32). The Revised Recovery Plan (USFWS 2011) designated five recovery units for the Mojave desert tortoise that are intended to conserve the genetic, behavioral, and morphological diversity necessary for the recovery of the entire listed species (Allison and McLuckie 2018).

Range-wide, densities of adult Mojave desert tortoises declined more than 32% between 2004 and 2014 (Table 1) (USFWS 2015). At the recovery unit level, between 2004 and 2014, densities of adult desert tortoises declined, on average, in every recovery unit except the Northeastern Mojave (Table 1). Adult densities in the Northeastern Mojave Recovery Unit increased 3.1% per year (SE = 4.3%), while the other four recovery units declined at different annual rates: Colorado Desert (–4.5%, SE = 2.8%), Upper Virgin River (–3.2%, SE = 2.0%), Eastern Mojave (–11.2%, SE = 5.0%), and Western Mojave (–7.1%, SE = 3.3%)(Allison and McLuckie 2018). However, the small area and low starting density of the tortoises in the Northeastern Mojave Recovery Unit (lowest density of all Recovery Units) resulted in a small overall increase in the number of adult tortoises by 2014 (Allison and McLuckie 2018). In contrast, the much larger areas of the Eastern Mojave, Western Mojave, and Colorado Desert recovery units, plus the higher estimated initial densities in these areas, explained much of the estimated total loss of adult tortoises between 2004 and 2014 (Allison and McLuckie 2018).

At the population level, represented by tortoises in the TCAs, densities of 10 of 17 monitored populations of the Mojave desert tortoise declined from 26% to 64% and 11 have densities less than 3.9 adult tortoises per $km^{2,}$ that is densities below population viability (USFWS 2015).

Population Data on Mojave Desert Tortoise: The Mojave desert tortoise was listed as threatened under the FESA in 1990. The listing was warranted because of ongoing population declines throughout the range of the tortoise from multiple human-caused activities. Since the listing, the status of the species has changed. Population numbers (abundance) and densities continue to decline substantially (please see Tables 1 and 2).

Table 1. Summary of 10-year trend data for 5 Recovery Units and 17 CHUs/TCAs for the Mojave desert tortoise, *Gopherus agassizii* (=Agassiz's desert tortoise). The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km^2 and standard errors = SE), and the percent change in population density between 2004-2014. Populations below the viable level of 3.9 adults/km^2 (10 adults per mi^2) (assumes a 1:1 sex ratio) and showing a decline from 2004 to 2014 are in red (Allison and McLuckie 2018, USFWS 2015).

Recovery Unit Designated CHU/TCA	Surveyed area (km^2)	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km^2 (SE)	% 10-year change (2004–2014)
Western Mojave, CA	**6,294**	**24.51**	**2.8 (1.0)**	**–50.7 decline**
Fremont-Kramer	2,347	9.14	2.6 (1.0)	–50.6 decline
Ord-Rodman	852	3.32	3.6 (1.4)	–56.5 decline
Superior-Cronese	3,094	12.05	2.4 (0.9)	–61.5 decline
Colorado Desert, CA	**11,663**	**45.42**	**4.0 (1.4)**	**–36.25 decline**
Chocolate Mtn AGR, CA	713	2.78	7.2 (2.8)	–29.77 decline
Chuckwalla, CA	2,818	10.97	3.3 (1.3)	–37.43 decline
Chemehuevi, CA	3,763	14.65	2.8 (1.1)	–64.70 decline
Fenner, CA	1,782	6.94	4.8 (1.9)	–52.86 decline
Joshua Tree, CA	1,152	4.49	3.7 (1.5)	+178.62 increase
Pinto Mtn, CA	508	1.98	2.4 (1.0)	–60.30 decline
Piute Valley, NV	927	3.61	5.3 (2.1)	+162.36 increase
Northeastern Mojave	**4,160**	**16.2**	**4.5 (1.9)**	**+325.62 increase**
Beaver Dam Slope, NV, UT, AZ	750	2.92	6.2 (2.4)	+370.33 increase
Coyote Spring, NV	960	3.74	4.0 (1.6)	+ 265.06 increase
Gold Butte, NV & AZ	1,607	6.26	2.7 (1.0)	+ 384.37 increase
Mormon Mesa, NV	844	3.29	6.4 (2.5)	+ 217.80 increase
Eastern Mojave, NV & CA	**3,446**	**13.42**	**1.9 (0.7)**	**–67.26 decline**
El Dorado Valley, NV	999	3.89	1.5 (0.6)	–61.14 decline
Ivanpah Valley, CA	2,447	9.53	2.3 (0.9)	–56.05 decline
Upper Virgin River	**115**	**0.45**	**15.3 (6.0)**	**–26.57 decline**
Red Cliffs Desert	115	0.45	15.3 (6.0)	–26.57 decline
Total amount of land	**25,678**	**100.00**		**–32.18 decline**

Density of Juvenile Mojave Desert Tortoises: Survey results indicate that the proportion of juvenile desert tortoises has been decreasing in all five recovery units since 2007 (Allison and McLuckie 2018). The probability of encountering a juvenile tortoise was consistently lowest in the Western Mojave Recovery Unit. Allison and McLuckie (2018) provided reasons for the decline in juvenile desert tortoises in all recovery units. These included decreased food availability for adult female tortoises resulting in reduced clutch size, decreased food availability resulting in increased mortality of juvenile tortoises, prey switching by coyotes from mammals to tortoises, and increased abundance of common ravens that typically prey on smaller desert tortoises.

Declining adult tortoise densities through 2014 have left the Eastern Mojave adult numbers at 33% (a 67% decline of their 2004 levels) (Allison and McLuckie 2018, USFWS 2015). Such steep declines in the density of adults are only sustainable if there are suitably large improvements in reproduction and juvenile growth and survival. However, the proportion of juveniles has not increased anywhere in the range of the Mojave desert tortoise since 2007, and in the Eastern Mojave Recovery Unit the proportion of juveniles in 2014 declined from 14 to 11 percent (a 21% decline) of their representation since 2007 (Allison and McLuckie 2018).

The USFWS and Utah Division of Wildlife Resources have continued to collect density data on the Mojave desert tortoise since 2014. The results are provided in Table 2 along with the analysis USFWS (2015) conducted for tortoise density data from 2004 through 2014. These data show that adult tortoise densities in most Recovery Units continued to decline in density since the data collection methodology was initiated in 2004. In addition, in the Northeastern Mojave Recovery Unit that had shown an overall increase in tortoise density between 2004 and 2014, subsequent data indicate a decline in density since 2014 (USFWS 2016, 2018, 2019, 2020, 2022a, 2022b).

Table 2. Summary of data for Agassiz's desert tortoise, *Gopherus agassizii* (=Mojave desert tortoise) from 2004 to 2023 for the 5 Recovery Units and 17 CHUs/TCAs. The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km^2 and standard errors = SE), and percent change in population density between 2004-2014 (USFWS 2015). Populations below the viable level of 3.9 breeding individuals/km^2 (10 breeding individuals per mi^2) (assumes a 1:1 sex ratio) (USFWS 1994a, 2015) or showing a decline from 2004 to 2014 are in **red.**

Recovery Unit: Designated CHU/TCA &	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/ km^2 (SE)	% 10-year change (2004–2014)	2015 density/ km^2	2016 density/ km^2	2017 density/ km^2	2018 density/ km^2	2019 density/ km^2	2020 density/ km^2	2021 density/ km^2	2023 density/ km^2
Western Mojave, CA	**24.51**	**2.8 (1.0)**	**–50.7 decline**								
Fremont-Kramer	9.14	2.6 (1.0)	–50.6 decline	4.5	No data	4.1	No data	2.7	1.7	No data	No data
Ord-Rodman	3.32	3.6 (1.4)	–56.5 decline	No data	No data	3.9	2.5/3.4*	2.1/2.5*	No data	1.9/2.5*	No data
Superior-Cronese	12.05	2.4 (0.9)	–61.5 decline	2.6	3.6	1.7	No data	1.9	No data	No data	No data
Colorado Desert, CA	**45.42**	**4.0 (1.4)**	**–36.25 decline**								
Chocolate Mtn AGR, CA	2.78	7.2 (2.8)	–29.77 decline	10.3	8.5	9.4	7.6	7.0	7.1	3.9	6.9
Chuckwalla, CA	10.97	3.3 (1.3)	–37.43 decline	No data	No data	4.3	No data	1.8	4.6	2.6	No data
Chemehuevi, CA	14.65	2.8 (1.1)	–64.70 decline	No data	1.7	No data	2.9	No data	4.0	No data	No data
Fenner, CA	6.94	4.8 (1.9)	–52.86 decline	No data	5.5	No data	6.0	2.8	No data	5.3	No data
Joshua Tree, CA	4.49	3.7 (1.5)	+178.62 increase	No data	2.6	3.6	No data	3.1	3.9	No data	No data
Pinto Mtn, CA	1.98	2.4 (1.0)	–60.30 decline	No data	2.1	2.3	No data	1.7	2.9	No data	No data
Piute Valley, NV	3.61	5.3 (2.1)	+162.36 increase	No data	4.0	5.9	No data	No data	No data	3.9	No data

Recovery Unit: Designated CHU/TCA	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km² (SE)	% 10-year change (2004–2014)	2015 density/ km²	2016 density/ km²	2017 density/ km²	2018 density/ km²	2019 density/ km²	2020 density/ km²	2021 density/ km²	2023 density/ km²
Northeastern Mojave AZ, NV, & UT	**16.2**	**4.5 (1.9)**	**+325.62 increase**								
Beaver Dam Slope, NV, UT, & AZ	2.92	6.2 (2.4)	+370.33 increase	No data	5.6	1.3	5.1	2.0	No data	No data	No data
Coyote Spring, NV	3.74	4.0 (1.6)	+ 265.06 increase	No data	4.2	No data	No data	3.2	No data	No data	No data
Gold Butte, NV & AZ	6.26	2.7 (1.0)	+ 384.37 increase	No data	No data	1.9	2.3	No data	No data	2.4	No data
Mormon Mesa, NV	3.29	6.4 (2.5)	+ 217.80 increase	No data	2.1	No data	3.6	No data	5.2	5.2	No data
Eastern Mojave, NV & CA	**13.42**	**1.9 (0.7)**	**–67.26 decline**								
El Dorado Valley, NV	3.89	1.5 (0.6)	–61.14 decline	No data	2.7	5.6	No data	2.3	No data	No data	No data
Ivanpah Valley, CA	9.53	2.3 (0.9)	–56.05 decline	1.9	No data	No data	3.7	2.6	No data	1.8	No data
Upper Virgin River, UT & AZ	0.45	15.3 (6.0)	**–26.57 decline**								
Red Cliffs Desert**	0.45	29.1 (21.4-39.6)**	**–26.57 decline**	15.0	No data	19.1	No data	17.2	No data	No data	17.5
Rangewide Area of CHUs - TCAs/Rangewide Change in Population Status	**100.00**		**–32.18 decline**								

*This density includes the adult tortoises translocated from the expansion of the MCAGCC, that is resident adult tortoises and translocated adult tortoises.

**Methodology for collecting density data initiated in 1999.

Abundance of Mojave Desert Tortoises: Allison and McLuckie (2018) noted that because the area available to tortoises (i.e., tortoise habitat and linkage areas between habitats) is decreasing, trends in tortoise density no longer capture the magnitude of decreases in abundance. Hence, they reported on the change in abundance or numbers of the Mojave desert tortoise in each recovery unit (Table 2). They noted that these estimates in abundance are likely higher than actual numbers of tortoises, and the changes in abundance (i.e., decrease in numbers) are likely lower than actual numbers because of their habitat calculation method. They used area estimates that removed only impervious surfaces created by development as cities in the desert expanded. They did not consider degradation and loss of habitat from other sources, such as the recent expansion of military operations (753.4 km^2 so far on Fort Irwin and the Marine Corps Air Ground Combat Center), intense or large scale fires (e.g., 576.2 km^2 of critical habitat that burned in 2005), development of utility-scale solar facilities (as of 2015, 194 km^2 have been permitted) (USFWS 2016), or other sources of degradation or loss of habitat (e.g., recreation, mining, grazing, infrastructure, etc.). Thus, the declines in abundance of Mojave desert tortoise are likely greater than those reported in Table 3.

Table 3. Estimated change in abundance of adult Mojave desert tortoises in each recovery unit between 2004 and 2014 (Allison and McLuckie 2018). Decreases in abundance are in red.

Recovery Unit	Modeled Habitat (km^2)	2004 Abundance	2014 Abundance	Change in Abundance	Percent Change in Abundance
Western Mojave	23,139	131,540	64,871	-66,668	-51%
Colorado Desert	18,024	103,675	66,097	-37,578	-36%
Northeastern Mojave	10,664	12,610	46,701	34,091	270%
Eastern Mojave	16,061	75,342	24,664	-50,679	-67%
Upper Virgin River	613	13,226	10,010	-3,216	-24%
Total	**68,501**	**336,393**	**212,343**	**-124,050**	**-37%**

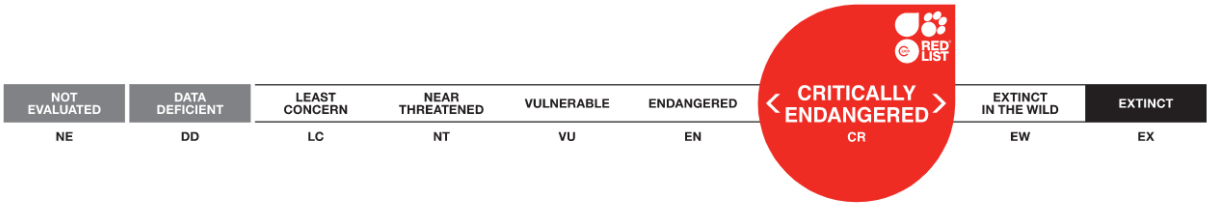
Habitat Availability: Data on population density or abundance does not indicate population viability. The area of protected habitat or reserves for the subject species is a crucial part of the viability analysis along with data on density, abundance, and other population parameters. In the Desert Tortoise (Mojave Population) Recovery Plan (USFWS 1994a), the analysis of population viability included population density and size of reserves (i.e., areas managed for the desert tortoise) and population numbers (abundance) and size of reserves. The USFWS Recovery Plan reported that as population densities for the Mojave desert tortoise decline, reserve sizes must increase, and as population numbers (abundance) for the Mojave desert tortoise decline, reserve sizes must increase (USFWS 1994a). In 1994, reserve design (USFWS 1994a) and designation of critical habitat (USFWS 1994b) were based on the population viability analysis from numbers (abundance) and densities of populations of the Mojave desert tortoise in the early 1990s. Inherent in this analysis is that the lands be managed with reserve level protection (USFWS 1994a, page 36) or ecosystem protection as described in section 2(b) of the FESA, and that sources of mortality be reduced so recruitment exceeds mortality (that is, lambda > 1)(USFWS 1994a, page C46).

Habitat loss would also disrupt the prevailing population structure of this widely distributed species with geographically limited dispersal (isolation by resistance Dutcher et al. 2020). Allison and McLuckie (2018) anticipate an additional impact of this habitat loss/degradation is decreasing resilience of local tortoise populations by reducing demographic connections to neighboring populations (Fahrig 2007). Military and commercial operations and infrastructure projects that reduce tortoise habitat in the desert are anticipated to continue (Allison and McLuckie 2018) as are other sources of habitat loss/degradation.

Allison and McLuckie (2018) reported that the life history of the Mojave desert tortoise puts it at greater risk from even slightly elevated adult mortality (Congdon et al. 1993; Doak et al. 1994), and recovery from population declines will require more than enhancing adult survivorship (Spencer et al. 2017). The negative population trends in most of the TCAs for the Mojave desert tortoise indicate that this species is on the path to extinction under current conditions (Allison and McLuckie 2018). They state that their results are a call to action to remove ongoing threats to tortoises from TCAs, and possibly to contemplate the role of human activities outside TCAs and their impact on tortoise populations inside them.

Densities, numbers, and habitat for the Mojave desert tortoise declined between 2004 and 2014 and densities continue to decline in most Recovery Units since 2014. As reported in the population viability analysis, to improve the status of the Mojave desert tortoise, reserves (area of protected habitat) must be established and managed. When densities of tortoises decline, the area of protected habitat must increase. When the abundance of tortoises declines, the area of protected habitat must increase. We note that the Desert Tortoise (Mojave Population) Recovery Plan was released in 1994 and its report on population viability and reserve design was reiterated in the 2011 Revised Recovery Plan as needing to be updated with current population data (USFWS 2011, p. 83). With lower population densities and abundance, a revised population viability analysis would show the need for greater areas of habitat to receive reserve level of management for the Mojave desert tortoise. In addition, we note that none of the recovery actions that are fundamental tenets of conservation biology has been implemented throughout most or all of the range of the Mojave desert tortoise.

IUCN Species Survival Commission: The Mojave desert tortoise is now on the list of the world's most endangered tortoises and freshwater turtles. It is in the top 50 species. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers Mojave desert tortoise to be Critically Endangered (Berry et al. 2021). As such, it is a "species that possess an extremely high risk of extinction as a result of rapid population declines of 80 to more than 90 percent over the previous 10 years (or three generations), a current population size of fewer than 50 individuals, or other factors." It is one of three turtle and tortoise species in the United States to be critically endangered. This designation is more grave than endangered.



Literature Cited in Appendix A

Allison, L.J. and A.M. McLuckie. 2018. Population trends in Mojave desert tortoises (*Gopherus agassizii*). Herpetological Conservation and Biology 13(2):433–452.

Berry, K.H., L.J. Allison, A.M. McLuckie, M. Vaughn, and R.W. Murphy. 2021. *Gopherus agassizii*. The IUCN Red List of Threatened Species 2021: e.T97246272A3150871. https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T97246272A3150871.en

Congdon, J.D., A.E. Dunham, and R.C. van Loeben Sels. 1993. Delayed sexual maturity and demographics of Blanding's Turtles (*Emydoidea blandingii*): implications for conservation and management of long-lived organisms. Conservation Biology 7:826–833.

Doak, D., P. Karieva, and B. Klepetka.1994. Modeling population viability for the Desert Tortoise in the Western Mojave. Ecological Applications 4:446–460.

Dutcher, K.E., A.G. Vandergast, T.C Esque, A. Mitelberg, M.D. Matocq, J.S. Heaton, and K.E. Nussear. 2020. Genes in space: what Mojave desert tortoise genetics can tell us about landscape connectivity. Conservation Genetics 21:289–303(2020).

Fahrig, L. 2007. Non-optimal animal movement in human-altered landscapes. Functional Ecology 21:1003–1015.

McLuckie, A.M., T.G. Victor, and R.A. Fridell. 2024. Mojave Desert Tortoise Population Monitoring within the Red Cliffs National Conservation Area, 2023. Publication Number 24-07, Utah Division of Wildlife Resources, Salt Lake City. A Final Report to the St. George Field Office, Bureau of Land Management, St. George, Utah, Cooperative Agreement L22AS00196.

Murphy, R.W., K.H. Berry, T. Edwards, and A.M. McLuckie. 2007. A genetic assessment of the recovery units for the Mojave population of the Desert Tortoise, *Gopherus agassizii*. Chelonian Conservation and Biology 6:229–251.

Murphy, R.W., K.H. Berry, T. Edwards, A.E. Leviton, A. Lathrop, and J. D. Riedle. 2011. The dazed and confused identity of Agassiz's land tortoise, *Gopherus agassizii* (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation. ZooKeys 113: 39–71. doi: 10.3897/zookeys.113.1353.

Spencer, R.-J., J.U. Van Dyke, and M.B. Thompson. 2017. Critically evaluating best management practices for preventing freshwater turtle extinctions. Conservation Biology 31:1340–1349.

Turtle Conservation Coalition. 2018. Turtles in Trouble: The World's 25+ Most Endangered Tortoises and Freshwater Turtles. www.iucn-tftsg.org/trouble.

[USFWS] U.S. Fish and Wildlife Service. 1994a. Desert tortoise (Mojave population) Recovery Plan. U.S. Fish and Wildlife Service, Region 1, Portland, Oregon. 73 pages plus appendices.

[USFWS] U.S. Fish and Wildlife Service. 1994b. Endangered and threatened wildlife and plants; determination of critical habitat for the Mojave population of the desert tortoise. Federal Register 55(26):5820-5866. Washington, D.C.

[USFWS] U.S. Fish and Wildlife Service. 2011. Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, California and Nevada Region, Sacramento, California.

[USFWS] U.S. Fish and Wildlife Service. 2015. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2013 and 2014 Annual Reports. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2015%20report.%20Rangewide%20monitoring%20report%202013-14.pdf

[USFWS] U.S. Fish and Wildlife Service. 2016. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2015 and 2016 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2016%20report.%20Rangewide%20monitoring%20report%202015-16.pdf

[USFWS] U.S. Fish and Wildlife Service. 2018. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2017 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2018%20report.%20Rangewide%20monitoring%20report%202017.pdf

[USFWS] U.S. Fish and Wildlife Service. 2019. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2018 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2019%20report.%20Rangewide%20monitoring%20report%202018.pdf

[USFWS] U.S. Fish and Wildlife Service. 2020. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2019 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. 42 pages. https://www.fws.gov/sites/default/files/documents/2019_Rangewide%20Mojave%20Desert%20Tortoise%20Monitoring.pdf

[USFWS] U.S. Fish and Wildlife Service. 2022a. Range-wide Monitoring of the Mojave Desert Tortoise (Gopherus agassizii): 2020 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2022%20report.%20Rangewide%20monitoring%20report%202020.pdf

[USFWS] U.S. Fish and Wildlife Service. 2022b. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2021 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada. https://www.fws.gov/sites/default/files/documents/USFWS.2022%20report.%20Rangewide%20monitoring%20report%202021.pdf

[USFWS] U.S. Fish and Wildlife Service. 2025. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2023 Annual Reporting. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Las Vegas, Nevada. https://www.fws.gov/sites/default/files/documents/2025-05/usfws_2023_rangewide-mojave-desert-tortoise-monitoring.pdf

From:	Katrina Bruce NAIOP
To:	SNSA EIS
Cc:	Matt Hoyt
Subject:	Attn: Dave Kessler
Date:	Wednesday, September 3, 2025 11:51:52 AM
Attachments:	image001.png SNSA EIS - NAIOP Southern Nevada Comment Letter 2025-09-03.pdf

---

You don't often get email from katrina@naiopnv.org. Learn why this is important

Dear Mr. Kessler,

Attached please find a letter from NAIOP Southern Nevada with Scoping Comments on the Environmental Impact Statement for the Proposed Southern Nevada Supplemental Airport.

Thank you,
Katrina

Katrina Bruce
Chapter Executive | NAIOP Southern Nevada
PO Box 96694 | Las Vegas, NV 89193
Tel: (702) 798-7194 | Fax: (702) 798-8653
katrina@naiopnv.org | www.naiopnv.org

NAIOP
COMMERCIAL REAL ESTATE DEVELOPMENT ASSOCIATION
SOUTHERN NEVADA CHAPTER

September 3, 2025

Federal Aviation Administration
Western-Pacific Region – AWP-600
Attention: Dave Kessler, Project Manager
P.O. Box 92007
Los Angeles, CA 90009-2007

Via Email: SNSAEIS@landrumbrown.com

Re: Scoping Comments – Environmental Impact Statement for the Proposed Southern Nevada Supplemental Airport

Dear Mr. Kessler,

On behalf of NAIOP Southern Nevada, the Commercial Real Estate Development Association, we appreciate the opportunity to provide input during the scoping process for the Environmental Impact Statement (EIS) and Resource Management Plan Amendment (RMPA) for the proposed Southern Nevada Supplemental Airport in Ivanpah.

NAIOP represents the interests of developers, owners, investors, and other stakeholders in the commercial real estate industry. We strongly support efforts that responsibly expand regional infrastructure and enhance Southern Nevada's long-term economic competitiveness. We believe the proposed airport offers such an opportunity, particularly for the warehousing, logistics, and industrial sectors that are vital to the region's future.

As you develop the scope of the EIS, we respectfully offer the following considerations:

1. Environmental Impacts of the No-Action Alternative

The EIS should thoroughly analyze the environmental consequences of *not* developing the Ivanpah Supplemental Airport. Inaction would exacerbate several challenges, including:

- Increased truck traffic and emissions on I-15, particularly from goods movement between Southern California ports and Nevada.
- Intensified aircraft congestion at Harry Reid International Airport, resulting in greater delays, inefficient flight paths, increased fuel burn, noise pollution, and potentially safety issues that we have seen at other severely congested airports like Washington's Reagan National.
- Missed opportunities to decentralize logistics infrastructure and relieve pressure on core urban areas.

2. Benefits of a Multimodal Inland Port

The EIS should consider the potential benefits of developing a multimodal freight hub in conjunction with the airport:

- Reduced truck miles traveled from California ports through earlier modal shifts.
- Consolidated, efficient freight movement and lower emissions per ton-mile.
- Promotion of dense, sustainable industrial development with opportunity for renewable energy, low-emission vehicles, and modern stormwater management.

During the 2025 state legislative session, our elected representatives saw the benefit to this type of development and enacted AB462, expanding the scope of the Inland Port Authority to cover industrial parks and to create incentives to develop them.

3. Support for Regional Growth and Industrial Land Supply

The Ivanpah corridor represents one of the few remaining areas to accommodate large-scale logistics development. The EIS should consider how the project will:

- Relieve industrial land supply constraints in the Las Vegas Valley.
- Support the state's economic development goals and diversification.
- Reduce uncoordinated sprawl and foster planned, infrastructure-supported development.

Our community leaders forecasted the need for this facility years ago and have made decisions with it in mind. To abandon this plan would undermine years of strategic growth premised on its development.

4. Coordination with Transportation and Utility Agencies

We urge the FAA and BLM to coordinate closely with NDOT, RTC, and water/utility providers as well as the commercial real estate industry, including NAIOP, to:

- Align transportation infrastructure with planned growth.
- Study cumulative and secondary impacts of related capital improvements.
- Promote long-term sustainability and resilience in infrastructure design.

Conclusion

NAIOP strongly supports advancing the Ivanpah Supplemental Airport EIS. We urge the FAA and BLM to consider and reasonably mitigate the environmental impacts of the project itself while also recognizing the costs of inaction and the opportunity to catalyze responsible, sustainable development that benefits Southern Nevada.

Thank you for your consideration. We welcome continued engagement throughout this process.

Sincerely,

Matt Hoyt
President
NAIOP Southern Nevada
mhoyt@lapour.com

From: Patrick Donnelly
To: SNSA EIS; Kessler, Dave (FAA); Guerrero, Joanie J
Cc: Olivia Tanager; ndesai@npca.org; Kyle Roerink
Subject: Scoping comments on SNSA
Date: Friday, September 5, 2025 5:04:54 PM
Attachments: SCT-NPCA-GBWN-CBD SNSA Scoping Comments.pdf

You don't often get email from pdonnelly@biologicaldiversity.org. Learn why this is important

Hello,

Attached you will find a scoping comment letter for the Southern Nevada Supplemental Airport EIS from the Sierra Club Toiyabe Chapter, National Parks Conservation Association, Great Basin Water Network, and Center for Biological Diversity.

Best regards,
-Patrick

Patrick Donnelly
Great Basin Director
Center for Biological Diversity
775.990.9332
pdonnelly@biologicaldiversity.org

September 5, 2025

David B. Kessler, AICP
Project Manager, SNSA EIS
Federal Aviation Administration
Western-Pacific Region
777 South Aviation Boulevard
El Segundo, California 90245
Telephone 424-405-7315
Email: dave.kessler@faa.gov

Joanie Guerrero
Realty Specialist
Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
Telephone: 702-515-5274
Email: jjguerrero@blm.gov

Re: Southern Nevada Supplemental Airport Scoping Comments

Dear Mr. Kessler and Ms. Guerrero,

Pursuant to the Bureau of Land Management Scoping Notice (June 2025), please accept these comments on the Southern Nevada Supplemental Airport Project from the Sierra Club, Great Basin Water Network, National Parks Conservation Association, and Center for Biological Diversity ("Conservation Groups").

The Toiyabe Chapter of the Sierra Club covers the state of Nevada and the Eastern Sierra, California, which are both in the Great Basin and Range region. We consist of more than 40,000 members and supporters in Nevada. Our members protect, explore and enjoy Bureau of Land Management lands, including the Ivanpah Valley.

The Center for Biological Diversity is a 501(c)3 non-profit organization headquartered in Tucson, Arizona that fights to save life on Earth. We have over 1.7 million members and supporters nationwide, including thousands in southern Nevada who use and recreate on public lands which would be affected by the SNSA. The Center's Great Basin program focuses on endangered species and public lands across the Great Basin and Northern Mojave Deserts.

The National Parks Conservation Association is a non-profit organization established in 1919, and along with our over 1.6 million members and supporters nationwide, we work to protect and enhance America's National Park System for present and future generations.

The Great Basin Water Network is a 501(c)3 non-profit organization based in Baker, Nevada, and was formed to protect the water resources of the Great Basin for residents, animals, and plants. Because of the profound impacts that Clark County's use of water can have on communities across the Great Basin, GBWN has been involved in water issues in Southern Nevada for over two decades.

Below, we outline what the Bureau of Land Management should consider in the Environmental Impact Statement (EIS) for the Southern Nevada Supplemental Airport project, including economic considerations, air quality and environmental justice issues, climate impacts, water availability and infrastructure, impacts on the Mojave Desert Tortoise, impacts on the White Margined Penstemon, and impacts on the Mojave National Preserve and other protected areas.

FAA and BLM's OBLIGATIONS UNDER NEPA

In NEPA, Congress recognized the "profound impact" of human activities, including "resource exploitation," on the environment and declared a national policy "to create and maintain conditions under which man and nature can exist in productive harmony." 42 U.S.C. § 4331 (a). To further this policy, NEPA "establishes 'action-forcing' procedures that require agencies to take a 'hard look' at environmental consequences." *Metcalf v. Daley*, 214 F.3d 1135, 1141 (9th Cir. 2000) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348, (1989)). Chief among these procedures is the preparation of an environmental impact statement ("EIS").

NEPA requires preparation of an EIS for "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). Every EIS must "provide [a] full

and fair discussion of significant environmental impacts" of the proposed agency action. 40 C.F.R. § 1502.1.

An EIS serves two purposes. "First, [i]t ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 768, (2004). "Second, it guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Id.*

Every EIS must "[r]igorously explore and objectively evaluate all reasonable alternatives" to the proposed action. 40 C.F.R. § 1502.14(a). The analysis of alternatives is "the heart of the environmental impact statement." *Or. Natural Desert Ass'n v. Bureau of Land Mgmt.*, 531 F.3d 1114, 1121 (9th Cir. 2008) (quoting 40 C.F.R. § 1502.14). "The existence of reasonable but unexamined alternatives renders an EIS inadequate." *Friends of Southeast's Future v. Morrison*, 153 F.3d 1059, 1065 (9th Cir. 1998).

PURPOSE AND NEED

NEPA planning begins with an identification of the purpose and need for a project. NEPA's implementing regulations provide that an environmental document should "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternative including the proposed action." 40 C.F.R. § 1502.13. "Agencies are afforded considerable, although not unlimited, discretion to define the purpose and need of a project." *Northwest Ecosystem Alliance v. Rey*, 380 F. Supp. 2d 1175, 1185 (W.D. Wash. 2005) (citation omitted).

However, "deference does not mean dormancy, and the rule of reason does not give agencies license to fulfill their own prophecies, whatever the parochial impulses that drive them." *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991), cert denied, 502 U.S. 994 (1991). Accordingly, "an agency may not define the objectives of its actions in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality." Id. (citation omitted); see also *City of New York v. United States Dep't of Transp.*, 715 F.2d 732, 743 (2nd Cir. 1983) ("[A]n agency will not be permitted to narrow the objective of its action artificially and thereby circumvent the requirement that relevant alternatives be considered.").

Furthermore, an agency must exercise independent judgment in defining the purpose and need of a project and cannot rely exclusively on the statements and opinions of the applicant. See *Simmons v. United States Army Corps of Engrs*., 120 F.3d 664, 669 (7th Cir. 1997) (stating that

"an agency cannot restrict its analysis to those alternative means by which a particular applicant can reach his goals") (internal citation and quotations omitted).

An agency may not "define a project so narrowly that it forecloses a reasonable consideration of alternatives." *Fuel Safe Washington v. Fed. Energy Regulatory Comm'n*, 389 F.3d 1313, 1324 (10th Cir. 2004) (quoting Davis v. Mineta, 302 F.3d 1104, 1119 (10th Cir. 2002)); C*itizens' Comm. To Save Our Canyons v. U.S. Forest Serv.*, 297 F.3d 1012, 1030 (10th Cir. 2002). "Because the purpose and need defines the range of alternatives, an agency 'cannot define its objectives in unreasonably narrow terms.'" *Sierra Club v. U.S. Dep't of Transp.*, 310 F.Supp.2d 1168, 1192 (D. Nev. 2004) (citing *City of Carmel-By-The-Sea v. U.S. Dep't of Transp.*, 123 F.3d 1142, 1155 (9th Cir. 1997)).

ECONOMIC CONCERNS

We urge decision makers involved in the permitting of the airport to carefully examine whether this project is truly viable and in the public interest given today's environmental, social, and economic realities.

When Congress authorized this project in 2000, the context was vastly different. Las Vegas was not yet identified as one of the fastest-warming metropolitan areas in the country. Lake Mead's water levels had not plummeted to crisis lows. The recessions triggered by 9/11, the 2008 economic collapse, and the COVID-19 pandemic were unimaginable. Since then, Southern Nevadans have endured steep cost-of-living increases, rising utility bills, and deepening inequities between working families and the wealthiest residents.

Large-scale infrastructure projects in our region have rarely translated into economic relief for everyday people. Nothing in the current planning documents demonstrates that this airport will lower costs for residents or improve affordability in our communities. To the contrary, history suggests that existing residents will ultimately shoulder the financial burden for the ancillary infrastructure the airport will require—roads, utilities, water and wastewater systems, emergency services, and electricity supply.

We request that the EIS include a thorough and transparent accounting of these costs:

- What are the full estimates for the infrastructure needed to support the airport?
- Who will be responsible for paying them?
- How will financial burdens fall on working-class residents?

In addition to financial questions, the proposed airport raises serious concerns about environmental impacts on federal public lands, including Mojave National Preserve, Lake Mead National Recreation Area, Sloan Canyon National Conservation Area, and other nearby

landscapes. These areas will face permanent direct and indirect impacts from airport construction and operation. The NEPA process must clearly identify:

- What mitigation measures are being considered?
- What are the projected ecological and recreational costs of those impacts?
- Who will bear the responsibility for funding long-term mitigation?

We are also concerned about the opportunity costs of advancing such a massive public works project at this time. Southern Nevada is already struggling to meet pressing needs in education, health care, emergency response, housing, and climate adaptation. Committing billions of dollars to a new airport could further strain limited fiscal capacity and force residents to forgo critical public services.

In preparation for scoping, we request that the EIS require detailed answers to the following questions in the Environmental Impact Statement:

1. What are the financing mechanisms for the airport itself?
2. What oversight will exist for bonding and revenue-raising efforts?
3. Will the project require state or federal funds?
4. How will it impact Clark County's bonding capacity?
5. Will regressive sales tax measures be extended or expanded to fund this project?
6. What are the long-term cost estimates for maintaining supporting infrastructure (roads, utilities, emergency services, etc.)?
7. Will additional development along the I-15 corridor and in Primm be necessary to support the airport?
8. How will impacts to federal lands with heightened conservation designations be avoided, minimized, or mitigated?

Residents of Southern Nevada deserve clear, honest answers to these questions—not reliance on a 25-year-old authorization. This airport could become the largest infrastructure project in Nevada's history, with permanent consequences for the region's environment, economy, and quality of life.

We urge the FAA and BLM to ensure the NEPA process fully examines whether this project is justified, who will pay its true costs, and how it will affect public lands and communities for generations to come.

ENVIRONMENTAL JUSTICE & AIR QUALITY

The proposed airport is closely linked to sprawling development into the Ivanpah Valley and toward Primm. The expansion of Clark County's disposal boundary for aviation and logistics infrastructure would:

- Increase traffic congestion and car dependency due to long travel distances between homes, jobs, and services.
- Pollute air and water resources through added vehicle emissions, runoff, and roadway construction.
- Destroy open space and desert soils that are important carbon sinks.
- Waste public funds on extended infrastructure (roads, water lines, sewers, utilities, emergency services).
- Harm schools and community resources as funding is diverted to support sprawl.
- Fragment habitat for the federally threatened Desert Tortoise and other sensitive species.

Sprawl in Southern Nevada has historically created these problems, not solved them. Expanding development around a new airport would repeat and intensify these negative patterns, reducing quality of life while degrading surrounding public lands. These cumulative impacts should be examined in the context of this project moving forward. As such, we urge the FAA and BLM to include an environmental justice analysis that evaluates how increased emissions, traffic, and infrastructure burdens will affect the most vulnerable Southern Nevadans. This analysis must include health impacts, asthma rates, and transportation inequities.

CLIMATE IMPACTS

The EIS must consider the detrimental impacts of this project to our climate. This airport would result in the loss of carbon sequestration from lands developed and the additional carbon emissions that will come from the sprawl and associated vehicle travel this project would increase. The development of a shipping facility and airport would remove desert plants that extract carbon dioxide from the air and that have deep roots that hold the soil and sequester carbon deep below ground. Researchers "also estimate that deserts already account for 15 to 28 percent of the current land-based uptake of carbon emissions today."[1] Additionally, "If the

[1] https://www.biologicaldiversity.org/news/center/articles/science-07-13-2008.html

Mojave readings represent an average CO_2 uptake, then deserts and semiarid regions may be absorbing up to 5.2 billion tons of carbon a year—roughly half the amount emitted globally by burning fossil fuels," according to John 'Jay' Arnone, an ecologist in Desert Research Institute's Reno lab. This project would result in a net increase of carbon emissions and the intensification of Las Vegas' urban heat, increased air pollution, and other environmental justice impacts. Nothing in this proposal would result in decreased carbon emissions over current levels. Is it not important to protect our natural methods of carbon-sequestration? Is it not important for all projects on public lands to be developed in a context of mitigating carbon emissions and improving environmental justice? Unfortunately, the Southern Nevada Supplemental Airport would only worsen the climate impacts currently being felt in the region, and as such, the FAA and BLM should take this into consideration in moving forward.

Despite references to climate mitigation funding in related legislation, no analysis demonstrates how this project would produce a measurable decrease in emissions. We urge the FAA and BLM to require a climate audit of the project's impacts, consistent with the Nevada Climate Strategy, Senate Bill 254 (2019).

WATER AVAILABILITY AND INFRASTRUCTURE

There is not sufficient groundwater or surface water available in Ivanpah Valley, Jean Lake Valley, and Hidden Valley to accommodate — feasibly and sustainably — a major international airport and ancillary development in the region. For example, the Ivanpah Northern and Southern Hydrographic areas are already grossly over-allocated on paper.[2] [3]

- Federal agencies must provide an assessment of how much groundwater the airport will consume each year.
- Will the airport use any groundwater from any of the hydrographic basins in the vicinity of the airport?
- Will it use groundwater that would be exported to Ivanpah from the Las Vegas Valley aquifer, which is already severely over-pumped?
- How will that use of groundwater impact existing uses in the systems?
- How will that use of groundwater potential impact Mojave National Preserve, Avi Qua Ame National Monument, and Sloan Canyon National Recreation Area.
- Additionally, how will any use of groundwater from the Las Vegas Valley Hydrographic system continue to impact declining groundwater levels in that aquifer system?

[2] Nevada Division of Water Resources. Hydrographic Basin Summaries: Ivanpah Valley, Southern. Last accessed: September 5, 2025. https://tools.water.nv.gov/DisplayHydrographicGeneralReport.aspx?basin=164B
[3] Nevada Division of Water Resources. Hydrographic Basin Summaries: Ivanpah Valley, Northern. Last accessed: September 5, 2025. https://tools.water.nv.gov/DisplayHydrographicGeneralReport.aspx?basin=164A

Nevertheless, what boosters of the airport fail to mention is that this airport will become dependent on the Colorado River. That will come at great expense to ratepayers. There will need to be pipelines that transport water to and from Ivanpah Valley. And that infrastructure must tap into a network that ultimately facilitates return-flow credit mechanisms. In other words:

- What will it cost to build pipelines from Ivanpah to Lake Mead?
- What will that mean for demands and impacts on existing return flow infrastructure?

These costs are essential to better understanding the socio-economic impacts of Southern Nevada residents. Any cost associated with moving water must also consider the associated electricity costs for transporting large quantities of water. That water, after all, will need to be pumped uphill in order to be transported and treated. What will that require from an electricity demand perspective and who will pay for that new demand? Without an understanding of the water supply's requisite infrastructure, we will not be giving the public a complete understanding of the impacts of the project.

And, of course, if agencies are not providing robust analysis of the Colorado River, they will be failing the public. In its August 24-Month Most-Probable analysis of future Lake Mead elevations, the Bureau of Reclamation predicted that Lake Mead will be hitting its lowest levels since the reservoir reached its full capacity in 1941 in the next two years.[4] Those predictions signal continued cuts in Nevada's available allocation of the river.

While the Southern Nevada Water Authority has repurposed turf grass, limited consumptive uses, and planned for a drier future, the Colorado River's uncertainty poses many questions. After all, the Southern Nevada Water Authority's 2025 Water Resource Plan, which makes considerable assumptions about access to future and temporary supplies, showcases that there are hydrologic scenarios where Southern Nevada needs a new, additional supply of water in the coming decades that overlap with the lifespan of the airport.[5]

The nation's top scientists believe that the river system will lose another 10-20 percent in flows in the coming years.[6] How will the airport be able to endure that? The public must have a detailed water accounting that showcases how current conservation efforts can meet demands in Ivanpah. That means the demand should be assessed and then weighed against existing supply. Additionally, that analysis must include impact scenarios that showcase what will happen if the Colorado River System averages 10 million and 11 million acre feet natural flows in the future. What will that mean in relation to meeting the estimated demand of the airport and ancillary

---

[4] Bureau of Reclamation. August 2025 Most Probably 24-Month Study. August 15, 2025. https://www.usbr.gov/lc/region/g4000/24mo.pdf

[5] Southern Nevada Water Authority. 2025 Water Resource Plan. Chapter 4. 2025. https://www.snwa.com/assets/pdf/water-resource-plan-2025.pdf

[6] Udall, Bradley and Overpeck, Jonathan. The Twenty-First Century Colorado Hot Drought and Implications For The Future. Water Resources Research. Volume 53, Issue 3. March 2017. https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2016WR019638

development that the water authority will have to meet. This will begin to provide the best means of estimating long-term availability for the airport's water needs.

MOJAVE DESERT TORTOISE

Status of the Mojave Desert Tortoise

The Mojave desert tortoise (Gopherus aggasizii) stands on the precipice of extinction. Catastrophic population declines continue unabated across all Mojave Desert tortoise habitats and the totality of its range. Densities of desert tortoises are below the minimum reproductive viability density of 3.9 tortoise per square kilometer across most Tortoise Conservation Areas (TCAs).

The desert tortoise was listed as Threatened under the Federal Endangered Species Act in 1990 and has seen substantial declines in all five Recovery Units according to USFWS data through 2021.

In 2018 Allison & McLuckie wrote a definitive assessment of the status of the Mojave desert tortoise, referencing decades of population surveys and demographic data.[7] Their report presents the stark situation faced by the desert tortoise and its prospects as a species. "Overall, this threatened species is experiencing large, ongoing population declines, and adult tortoise numbers have decreased by over 50% in some recovery units since 2004." They conclude that "this species is on the path to extinction under current conditions."

The U.S. Fish and Wildlife Service has determined that the desert tortoise has seen a 37 percent range-wide decline between 2004 and 2014 and has not experienced any improvement. In the Eastern Mojave Recovery Unit where many new proposed solar projects including Rough Hat would be located, the desert tortoise has seen a 67 percent decline in tortoise density between 2004 and 2014.[8] Approval of the numerous solar proposals in Pahrump Valley such as the Rough Hat Clark County Solar Project will predictably contribute to this on-going extinction trend.

Maintaining densities above the minimum viability threshold of 3.9 tortoises per square kilometer is essential to ensuring the future of the species. Tortoise densities in the Eastern Mojave unit are currently at 1.9 per square kilometer and continue to decline precipitously. According to Allison and McLuckie: "Declining adult densities through 2014 have left the… Eastern Mojave at 33% of [its] 2004 level. Such steep declines in the density of adults are

---

[7] Allison LJ and McLuckie AM. 2018. Population trends in Mojave desert tortoises (Gopherus agassizii). Herpetological Conservation and Biology 13(2):433–452.
[8] *Id.*

only sustainable if there were suitably large improvements in reproduction and juvenile growth and survival. However, the proportion of juveniles has not increased anywhere since 2007, and in [this] recovery unit the proportion of juveniles in 2014 has declined to 77% of their representation in 2004…"[9]

More recent reporting on density monitoring paints a bleak picture across the entirety of the range of the Mojave desert tortoise.[10] In 2020, every TCU had tortoise densities below 3.9 tortoise per square kilometer. Half of TCUs had densities below 2 tortoises per square kilometer. Twelve of the sixteen TCUs had declining densities, and while four of them (all in the Northeast Mojave Recovery Unit) had increasing densities, these increases were of 5% or less and may not be significant. Extrapolating the density data using modeling, Zylstra et al. found that the desert tortoise had likely lost approximately one-third of its rangewide population between 2001 and 2020.

Further, it is important to note that population and density trends do not tell the whole story for the desert tortoise. "...if the area available to tortoises is decreasing, then trends in tortoise density no longer capture the magnitude of decreases in abundance."[11] Habitat loss is a significant driver of localized extirpations and rangewide population declines.[12] There is an additional impact of habitat loss from "decreasing resilience of local tortoise populations by reducing demographic connections to neighboring populations (Fahrig 2007)."[13]

Translocation Is Not a Viable Mitigation Strategy

Translocation is the most common mitigation measure employed when projects result in direct loss and destruction of occupied desert tortoise habitat. Translocation may be successful at preventing direct mortality of tortoises, but it is an ineffective mitigation measure at preventing jeopardy to the species and setting the stage for recovery.

Introducing hundreds of new, foreign tortoises into established tortoise territories will throw off social dynamics and increase competition for scarce food resources.[14] Tortoise translocations

---

[9] *Id.*
[10] Zylstra, Erin R., Linda J. Allison, Roy C. Averill-Murray, Vincent Landau, Nathaniel S. Pope, and Robert J. Steidl. 2023. "A Spatially Explicit Model for Density that Accounts for Availability: A Case Study with Mojave Desert Tortoises." Ecosphere 14(3): e4448. https://doi.org/10.1002/ecs2.4448
[11] Allison and McLuckie 2018.
[12] Berry, K.H. & R.W. Murphy, 2019. "Gopherus agassizii (Cooper 1861) - Mojave Desert Tortoise, Agassiz's Desert Tortoise." Chelonian Research Monographs 5(13): 109.1-109.45. https://pubs.er.usgs.gov/publication/70208836
[13] *Internal citation,* Allison and McLuckie 2018.
[14] Scott, P.A., Allison, L.J., Field, K.J., Averill-Murray, R.C. & H.B. Shaffer, 2020. "Individual heterozygosity predicts translocation success in threatened desert tortoises." Science 370, 1086-1089. https://www.science.org/doi/10.1126/science.abb0421

can also alter the disease ecology of resident populations, increasing the likelihood of disease outbreak following translocation.[15]

Translocation has not been proven to be successful at maintaining or increasing tortoise populations either in target locations or rangewide. There have been numerous studies on survival rates of translocations, which have shown mixed results, but few projects can be deemed to be a success. The largest translocation project, the Large-Scale Translocation Site in Ivanpah Valley, had just a 3.3% overall survival rate after 20 years, in both the translocated and resident populations combined.[16] A more recent study found only a 47% survival of juvenile tortoises over 3 years.[17]

The Southwest is experiencing long-term drought. Translocating desert tortoise during drought puts the animals at much greater risk of mortality. The Revised Recovery Plan for the desert tortoise states "Predators, especially during drought, have been shown to negatively impact tortoise populations across their range"[18] and goes on to state that "Recent studies also indicate that even a relatively short-term drought combined with little or no biomass of annual plants can cause a severe reduction in adult tortoise survival. A study of adult tortoise survival rates at two sites in the eastern Mojave desert attributed die-offs in 1996 to a period of drought that began in the summer of 1995, coupled with failure of annual vegetation production in 1996 (Longshore et al. 2003)."[19]

One study of a much smaller desert tortoise translocation of 32 adult desert tortoises, documents a 68% survival rate of translocated tortoises over an approximate 20-month period.[20] All of the confirmed mortalities occurred within the first eight months during drought conditions. Another study found that persistent drought was a leading indicator for tortoise mortality: "The postures and positions of a majority of dead tortoises found in 2012 were consistent with death by dehydration and starvation."[21]

---

[15] Aiello, C.M., Nussear, K.E., Walde, A.D., Esque, T.C., Emblidge, P.G., Sah, P., Bansal, S. & P.J. Hudson, 2014. "Disease dynamics during wildlife translocations: disruptions to the host population and potential consequences for transmission in desert tortoise contact networks." Animal Conservation 17(suppl. 1): 27-39. https://pubs.er.usgs.gov/publication/70134921

[16] Scott, et al. 2020.

[17] Hall, D.B., Ostler, W.K., Nafus, M.G., Perry, J.A., & J.M. Germano, 2016. Factors Influencing Survival of Translocated Juvenile Desert Tortoises. https://www.osti.gov/servlets/purl/1734870

[18] US Fish and Wildlife Service, 2011. Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii). https://ecos.fws.gov/docs/recovery_plan/RRP%20for%20the%20Mojave%20Desert%20Tortoise%20-%20May%202011_1.pdf

[19] *Id.*, *internal citation.*

[20] Field, Kimberleigh J; Tracy, C Richard; Medica, Philip A ; Marlow, Ronald W ; and Corn, Paul Stephen, "Return to the wild: Translocation as a tool in conservation of the Desert Tortoise (Gopherus agassizii)" (2007) USGS Staff -- Published Research 93 http://digitalcommons.unl.edu/usgsstafpub/93

[21] Lovich, J.E., Yackulic, C.B., Freilich, J., Agha, M., Austin, M., Meyer, K.P., Arundel, T.R., Hansen, J., Vamstad, M.S., & S.A. Root, 2014. "Climatic variation and tortoise survival: Has a desert species met its match?" Biological Conservation 169: 214-224. https://www.sciencedirect.com/science/article/pii/S0006320713003443

Ostensibly the purpose of translocation is not just to save the individual tortoises but to allow the species to perpetuate and for the genetic material of translocated animals to be passed down through reproduction. In this sense, translocation has been a failure. A study found that 100% of genetically tested hatchling tortoises in a translocation site were fathered by resident tortoises.[22] This means that the translocation of the male tortoises was a failure, as they "are not genetically integrating into the population at large."[23] Should translocation continue to grow in prevalence, it poses grave threats to the long-term genetic health and diversity of the species.

It's not clear that translocation provides any conservation benefit to the desert tortoise. This is especially true for "mitigation-driven" translocations, where the chief driver is allowing development to move forward, rather than translocation carried out for scientifically based management reasons.[24] One study found, due to the numerous failures of mitigation-based translocations, that "Translocation as a regulatory tool may be ill-suited for biologically mitigating environmental damage caused by development."[25]

Issues for Analysis

- What is the current baseline status of the desert tortoise rangewide?
- What is the current baseline status of the desert tortoise in Ivanpah Valley?
- How many tortoises currently reside in both the SNSA Site and the Noise Compatibility Area?
- Given that translocation is a failed strategy that will not perpetuate the health of the species, what is the plan for dealing with tortoises found on site?
- The SNSA will result in the loss of thousands of acres of tortoise habitat. What compensatory mitigation measures will be proposed to ensure a net benefit to the desert tortoise?
- How will airport activities, including noise, dust, raven subsidy, and other effects of large-scale development affect desert tortoises not directly within the site boundaries - for instance at the Large-Scale Translocation Area across the highway from the airport?

---

[22] Mulder, K.P., A.D. Walde, W.I. Boarman, A.P. Woodman, E.K. Latch and R.C. Fleischer 2017. No paternal genetic integration in desert tortoises (Gopherus agassizii) following translocation into an existing population. Biological Conservation 210 (2017) 318–324.
[23] *Id.*
[24] Germano, J.M., K.F. Field, R.A. Griffiths, S. Cuclow, J. Foster, G. Harding and R.R. Swaisgood. 2015. Mitigation-driven translocations: are we moving wildlife in the right direction? Front Ecol Environ 13(2): 100-105. https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1890/140137
[25] *Id.*

WHITE-MARGINED PENSTEMON

The white-margined penstemon is a distinctive member of the genus *Penstemon* found in certain sandy habitats of the Mojave Desert. The species is known from four geographically disjunct and genetically distinct population centers in Mohave County, Arizona; San Bernardino County, California; and Clark and Nye Counties, Nevada. The plant has a combined range of ca. 716 km^2, however suitable occupied habitat is a much smaller area. The white-margined penstemon typically occupies sandy desert washes, valley floors, mountain foot-slopes, and erosional terraces comprised of deep eolian sand deposits or sandy alluvium although specific soil characteristics vary by location. Long taproots anchor these perennial plants in deep sandy soils, allowing them to endure brief periods of environmental stress. However, the rapidly accelerating effects of climate change including severe drought, combined with compounding pressures of habitat loss, proposed development, herbivory, off-highway vehicle use, and other threats have put the species on a declining trajectory with a high potential for quasi-extinction.[26]

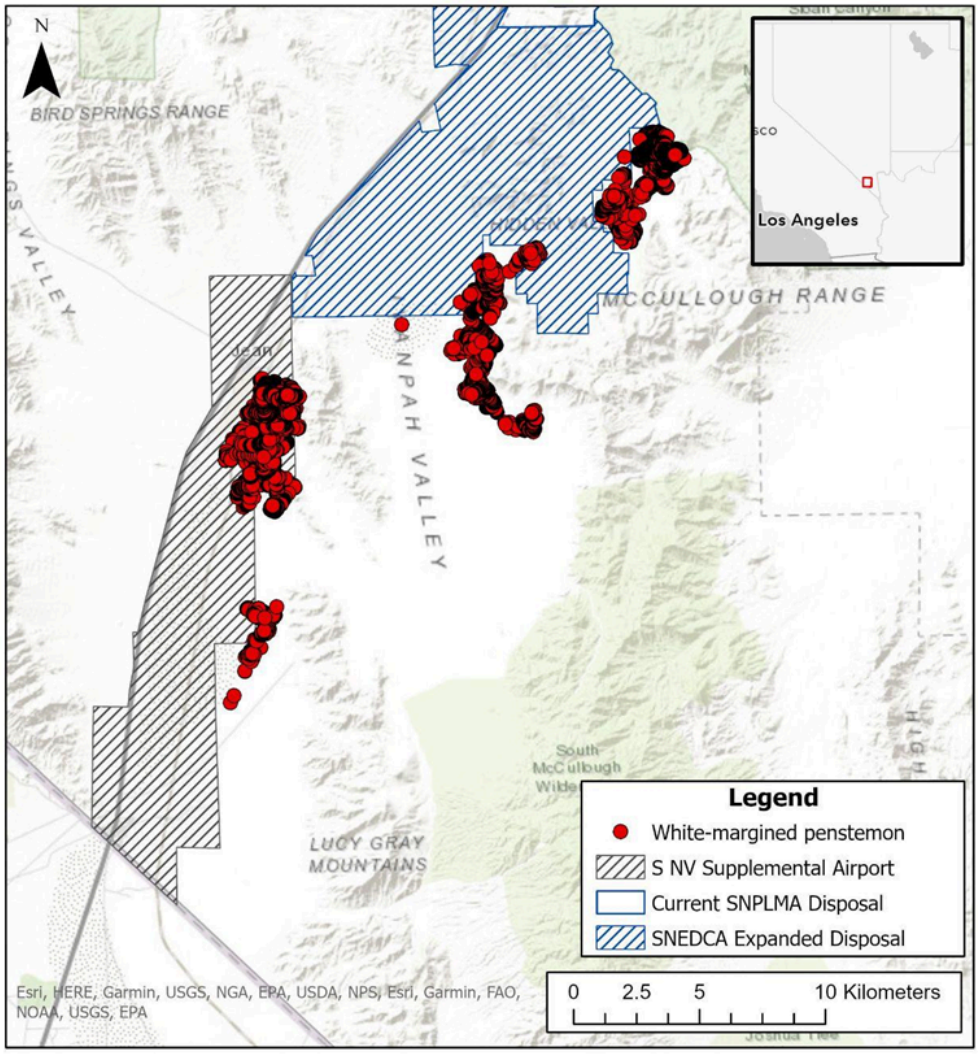
The Clark County population of the white-margined penstemon occurs in four subpopulations: Roach Lake South, near the western foot of the Lucy Gray Mountains; Roach Lake North, south of the town of Jean; one on the eastern margin of Jean Valley; and one in Hidden Valley. Exact censuses have not been conducted but the Jean subpopulation is likely the largest of the four. The Clark County population of white-margined penstemon is facing extreme pressures from numerous compounding threats which pose the distinct possibility of extirpation over the mid- to long range future; and the high likelihood of severe population loss and degradation in the short term. These threats include catastrophic drought & climate change; unauthorized and authorized off-highway vehicle (OHV) use; cattle and feral equid grazing and trampling; and trash dumping and other wildland-urban interface (WUI) impacts.

However the most serious threat facing the white-margined penstemon population in Clark County is habitat loss and degradation due to development. The Clark County lands bill, also known as the Southern Nevada Economic Development and Conservation Act, would authorize the sale of tens of thousands of acres of public lands for sprawl development, particularly in Jean and Hidden Valleys. Some of the white-margined penstemons are directly within the footprint of areas to be sold to developers; in other instances, the boundaries of the lands to be sold are drawn to exclude some amount of the plants, hopelessly condemning them to a slow extirpation as relicts surrounded by development.

The SNSA is the other major threat. Almost the entirety of the Roach Lake North subpopulation, and a significant portion of the Roach Lake South subpopulation, are within the PL 107-282 noise compatibility area. A portion of the Roach Lake North subpopulation is actually within the PL 106-362 SNSA Site. A portion of the Roach Lake South subpopulation is within one of the

[26] Miller AL. 2021. Status assessment of white-margined beardtongue (*Penstemon albomarginatus*) using population viability analysis. Pyramid Botanical Consultants. Prepared for U.S. Fish and Wildlife Service, Southern Nevada Fish and Wildlife. Las Vegas, NV.

PL 113-291 stormwater management conveyances. While the destruction of the portion of the Roach Lake North subpopulation within the SNSA Site is a virtual certainty, there is great uncertainty about the fate of the noise compatibility lands. We can only assume they are targeted for development, in which case the complete extirpation of the Roach Lake North subpopulation is a likely consequence of the SNSA's development. A similar fate may await the Roach Lake South subpopulation, particularly if the stormwater conveyances turn into further detention ponds or otherwise involve large-scale earthworks.



The white-margined penstemon was petitioned for protection under the Endangered Species Act in 2023. In 2024, the U.S. Fish and Wildlife Service determined that the petition presented "substantial scientific or commercial information indicating that the petitioned action may be warranted."[27] The Service is now conducting a larger study to determine whether or not the species needs Endangered Species Act protections. The white-margined penstemon is also

[27] 89 Fed. Reg. 4884

designated by BLM as a BLM Sensitive Species.[28] BLM Sensitive Species are to be managed, "to conserve these species and their habitats… [and] to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA."[29]

The EIS must disclose and analyze the impacts of the proposed action to the white-margined penstemon.

- The EIS must include adequate baseline information to properly evaluate those impacts. This must include a complete census of the Clark County population. The timing of such an effort is critical: some years the white-margined penstemon is prolific, and some years it barely comes up at all. Because the full extent of the population will not be observable during a dry year, the project proponent must ensure that surveys are conducted after a wet winter, with at or above normal levels of precipitation.
- The EIS must estimate the amount and acreage of plants which will be destroyed by the proposed action.
- The EIS must analyze the effects of the proposed action in the context of other threats and other land use decisions which may simultaneously affect the Clark County population, including the Clark County lands bill.
- The EIS must analyze the effects of the proposed action in the context of the overall species and the observed trends in its population and habitats.
- The EIS must justify how a proposed action which may result in the extirpation of two subpopulations of this rare species would comport with BLM's Sensitive Species policy.
- Translocation and salvage is infeasible for perennial plants with deep taproots. There is no acceptable mitigation for the loss of entire subpopulations of this species. Any proposed mitigation measures must be fully analyzed including providing empirical evidence of the likelihood of such measures' success.

The conservation of the white-margined penstemon is fundamentally incompatible with the development of the SNSA as currently proposed. The only acceptable outcome for the white-margined penstemon is for the SNSA to be reconfigured to completely avoid occupied penstemon habitat. The EIS must contain a penstemon conservation alternative which realigns the SNSA footprint and noise compatibility area development plans to avoid all occupied habitat.

MOJAVE NATIONAL PRESERVE AND OTHER PROTECTED PUBLIC LANDS

Congress established a rationale for the Mojave National Preserve ("Preserve") in the California Desert Protection Act with the following language:

[28] BLM NV-IM-2024-003, https://www.blm.gov/policy/nv-im-2024-003
[29] BLM 6840 Handbook

These desert wildlands display unique scenic, historical, archeological, environmental, ecological, wildlife, cultural, scientific, educational and recreational values used and enjoyed by millions of Americans for hiking and camping, scientific study and scenic appreciation.

The size of the Preserve is impressive—at 1.6 million acres, it was designed to create a vast desert expanse for visitors. The National Park Service (NPS) objectives for the Preserve, as stated in the Preserve's General Management Plan,[30] include the need to "manage visitor use in a manner that promotes and perpetuates a sense of exploration and self-discovery, while protecting resources from overuse," "perpetuate the natural quiet and sense of solitude in the Preserve," and "adopt strategies and work actively to reduce human-caused noise impacts from internal and external noise sources, including aircraft overflights." Because of the importance that Congress and the American people have attached to the Preserve, avoidance of impacts to the Preserve's resources is a critical factor in assessing the impacts of the proposed project, including determining the need and location of it.

Though we highlight potential impacts to Mojave National Preserve in this letter, we recognize that there may be impacts to other protected landscapes such as Death Valley National Park, the Old Spanish National Historic Trail, Lake Mead National Recreation Area wilderness areas, and Avi Kwa Ame National Monument. The agencies should fully assess and disclose the potential impacts of the EIS project alternatives to the purpose, management goals, resources, and protection standards for these 4 landscapes.

Purpose and Need

The public lands in this region and affected area, such as the Mojave National Preserve, were protected for the benefit of the entire nation. Millions of people visit these special places each year. They are cherished precisely because they preserve natural and cultural resources, without degradation or impairment, for the benefit of future generations. In your Purpose and Need statement, please include the need to preserve these places, unimpaired and without degradation, for present and future generations.

The Preserve's Foundation Document[31] includes the following significance statements that must be considered when developing alternatives and assessing impacts.

- "Mojave National Preserve protects a large, relatively intact ecosystem of the eastern Mojave Desert from continuing threats associated with expanding development and provides connectivity between other protected natural areas within the larger Mojave Desert ecoregion.

[30] https://www.nps.gov/moja/learn/management/gmp.htm
[31] https://npshistory.com/publications/foundation-documents/moja-fd-2013.pdf

- Mojave National Preserve offers exceptional access to remote, wild places and provides a unique sense of discovery for visitors throughout its 1.6 million acres.
- The preserve encompasses a wide variety of classic desert landforms, including mesas, bajadas, dry lakes, sand dunes, and cinder cones. These exposed geologic features exemplify the rugged beauty of the West.
- Mojave National Preserve provides opportunities for solitude, exemplified by natural sounds and dark night skies, functioning as an increasingly rare refuge from nearby urban areas.
- Mojave National Preserve has a long, robust history as a well-traveled corridor across a harsh and foreboding desert, linking the Southwest with the coast of California from ancient times to the present.
- Mojave National Preserve protects a continuous record and remnant sites of the resilient people who have adapted to and manipulated the desert through evolving relationships with the landscape—shaped by cultural values that are both ancient and contemporary."

Dark Night Sky, Natural Quiet and Scenic Resources

A dark night sky is one of the key resources of the Preserve and must be protected from further intrusions of artificial light. The use of downward directed light at the airport itself will not be sufficient to avert further light pollution and artificial light will be generated by additional development and traffic associated with the airport, within and outside its boundary. The cumulative impact of dark night skies and natural quiet define the restorative and reflective desert experience. With the introduction of even a limited number of human-made sounds, the natural quiet values that must be protected within the Preserve are adversely impacted.

Important Issues for Analysis

1) The EIS should establish the baseline measurements for the dark night sky and natural quiet resources at points throughout the Preserve and impacted wilderness and protected land areas elsewhere in the affected environment, including areas of high ecological sensitivity, backcountry roads and mountain peaks, and visitor serving locations including campgrounds and trails, and assess project impacts against them.

2) The EIS should identify the potentially affected species in the Preserve and nearby protected landscapes such as Avi Kwa Ame, and disclose the scotobiological and artificial sound impacts, such as impacts to biological processes, cycles, etc., from the project on these species.

3) The EIS analysis should evaluate and disclose the impacts from the range of sound that might occur, including at take-offs and landings.

4) The EIS should evaluate and disclose the impacts of the proposed project, from construction to operation, on scenic resources. This would include reviewing impacts from dust pollution and flight paths.

Land Use Planning, Wildlife and Recreation

1) The EIS should evaluate and disclose impacts from the project to the Clark Mountain wildlife crossing in California that is currently under development per state law. This would include impacts to desert bighorn sheep.

2) The EIS should evaluate and disclose impacts from the project on recreation throughout the Preserve and nearby protected public lands within the affected environment.

In conclusion, the Southern Nevada Supplemental Airport, if built, will define the future of Clark County's growth for generations. As currently framed, it risks worsening sprawl, fueling climate change, straining water supplies, deepening inequities, sending threatened species towards extinction, and harming treasured public lands.

We urge BLM and the FAA to conduct a comprehensive analysis of these concerns through the NEPA process and to ensure that alternatives, including rejecting or scaling back the project, are fully considered. The people of Southern Nevada deserve a transparent, equitable, and climate-resilient vision for their future, not a project rooted in outdated assumptions from 25 years ago.

Sincerely,

Olivia Tanager, Executive Director
Sierra Club Toiyabe Chapter

Neal Desai, Senior Pacific Regional Director
National Parks Conservation Association

Kyle Roerink, Executive Director
Great Basin Water Network

Patrick Donnelly, Great Basin Director
Center for Biological Diversity

From:	Alvarez Salgado, Tony (NBCUniversal)
To:	SNSA EIS
Cc:	Perez Vidrio, Jessica (NBCUniversal)
Subject:	RE: FAA and BLM Announce Public Meetings on Proposed Supplemental Airport for Las Vegas
Date:	Friday, June 27, 2025 7:29:01 PM
Attachments:	image001.png image002.png image003.png image004.png

---

> You don't often get email from tony.alvarezsalgado@nbcuni.com. Learn why this is important

Hello,

This is Tony Alvarez from Telemundo Las Vegas. We are reaching out to ask if there will be an opportunity for a Q&A for press? Or an opportunity for interview before the event dates? Please, advise. Should you have any questions or for further information, please do not hesitate to contact me at the info provided below. I thank you in advance for your time.

Best regards,

Tony Alvarez
Assignment Desk Editor
Telemundo Las Vegas

6380 Polaris Ave.
Las Vegas, Nevada 89118
C: 702-417-7553
Tony.Alvarezsalgado@nbcuni.com

TelemundoLasVegas.com | M

COMMENT FORM

Public Scoping Meeting

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for the preparation of an EIS/RMPA for the Proposed SNSA. The purpose of this comment form is to receive your input on issues and concerns you would like to see addressed in the EIS/RMPA. Please use this form to submit written comments by topic. If you have multiple comments, you may include them on this form and/or provide additional pages. Either place the form in the comment box at tonight's meeting, or mail to the address below not later than 5:00 p.m. Pacific Daylight Time **September 5, 2025**. You can also submit your comments via email to SNSAEIS@landrumbrown.com by 5:00 p.m. Pacific Daylight Time **September 5, 2025.**

Before including your name, address, telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

TOPIC: The airport's existance

COMMENT: I do not believe that the supplemental airport is at all necessary. With a growing number of alternative transportation methods, it is likely that Harry Reid will be sufficient into the future. Even if it is not, another airport is not worth the environmental impact.

Contact Information (Optional):

NAME / AFFILIATION

EMAIL

ADDRESS

Would you like to be added to the email distribution list? ☐ YES ☐ NO

CITY

Additional page included? ☐ YES ☐ NO

STATE

ZIP CODE

From:	Kerensa Brooks
To:	SNSA EIS
Cc:	Kessler, Dave (FAA); Guerrero, Joanie J; Mariah Jackson; Bella Huston; Paul Dockweiler
Subject:	Questions from SNSA EIS-RNPA Public Meeting, 29 July 2025
Date:	Tuesday, July 29, 2025 10:59:30 PM
Attachments:	image001.png image002.png

You don't often get email from kerensa.brooks@geosyntec.com. Learn why this is important

Hello Southern Nevada Supplemental Airport (SNSA) EIS-RMPA Project Manager,

Per request during this evening's SNSA EIS-RMPA public meeting, here are a copy of the questions that were asked:

1. Have Nellis AFB and the NV Army National Guard been included in the agencies who will review the EIS-RMPA?

2. Has the Lahontan Regional Water Quality Control Board (LRWQCB) been contacted about groundwater/surface water across state lines? (Lahontan Regional Water Quality Control Board, 15095 Amargosa Rd Ste 210, Victorville, CA 92394, (760) 241-6583)

3. Has the University of Nevada Seismological Laboratory been contacted for comments regarding proximity of Ivanpah Valley to the southern Walker Lane Belt of tectonism in southern Nevada and California? Ivanpah Valley straddles the Eastern California shear zone, east of the San Andreas fault zone and south of the Garlock fault zone; the proposed runways are nearly perpendicular to the oblique extensional faulting in the area.

4. How will you address this?: From the Nevada Bureau of Mines and Geology 2010 report titled**:** Geologic Assessment of Piedmont and Playa Flood Hazards in the Ivanpah Valley Area, Clark County, Nevada:
   "*Construction of a major airport facility on the Roach playa and immediately surrounding low-lying areas has been proposed. A development of this scale will have a significant effect on local drainage. It is also likely that addressing these effects will involve flood hazard mitigation efforts on piedmont areas throughout much of the study area. The construction of the airport would also result in a vastly enhanced utility and transportation infrastructure in the valley that would likely stimulate additional development, much of which would occur on piedmont surfaces. Piedmont and playa areas comprise 60% of the study area.* ***Results from this study indicate that more than 50% of that area pose significant***

floodplain management concerns."

5. You mentioned three proposed runoff "Retention" basins which will be evaporative and fenced. Who will be responsible for maintaining these retention basins and fences? Animal encroachment may be anticipated.

6. Has the Natural Resources Conservation Service (NRCS) been contacted about reseeding of any native plants that may be disturbed during construction/development? NRCS has had shortages in the recent past of common native seeds, including Artemesia tridentata (common ~~Great Basin~~ Big sagebrush).

7. The proposed map shows relocation areas for desert tortoise; has consideration also been given to Great Basin Desert and Mojave Desert burrowing owls?

8. While there are only two groups of federally recognized Southern Paiute bands that live in Nevada--the Moapa Band of Paiutes and the Las Vegas Paiute Band--the proposed SNSA project area lies within the Nuwuvi (Southern Paiute) Tribal Territory, one of four such tribal territories in Nevada. Have any of the federally recognized or unrecognized tribes of the area been consulted about this project? Nevada's Indian Territory

Thank you,

Kerensa Brooks
(she/her)
Senior Scientist
Geosyntec Consultants, Inc.
Mobile: 208-541-1424
Teams: 907-519-7097

INCLUSION | DIVERSITY | EQUITY

From: Guerrero, Joanie J <jjguerrero@blm.gov>
Sent: Thursday, June 5, 2025 12:11 PM
To: Burke, Cornelious <cburke@prologis.com>
Cc: Kessler, Dave (FAA) <dave.kessler@faa.gov>
Subject: Re: [EXTERNAL] Southern Nevada Supplemental Airport

Good afternoon Cornelious and thank you for your email. The virtual public scoping meeting for the proposed Southern Nevada Supplemental Airport EIS/RMPA is open to everyone. The Joint Lead Agency's website (https://www.snvairporteis.com/) for the EIS/RMPA has a link for the public to read a general description about the proposed airport, as well as a link to register for the virtual public meeting (link is below). You may also send an email to the EIS website email address to receive notifications about the project throughout the EIS/RMPA process.

https://us02web.zoom.us/meeting/register/FQVWnhFxR8CoweyXTTdQzw#/registration

Thanks again for contacting us!

Very respectfully,
Joanie

Joanie Guerrero
Major Projects Team
Bureau of Land Management (BLM)
Southern Nevada District Office (SNDO)

cc: FAA Joint Lead

From: Burke, Cornelious <cburke@prologis.com>
Sent: Thursday, June 5, 2025 11:00 AM
To: Guerrero, Joanie J <jjguerrero@blm.gov>
Subject: [EXTERNAL] Southern Nevada Supplemental Airport

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

To it may concern:

May I receive the project description and the virtual scoping meeting information. I would like to participate virtually.

Cornelious

Cornelious Burke | Director, Government Affairs
Pier 1, Bay 1 | San Francisco | California | 94111 | United States of America
Direct +1 (415) 733-9521 | Mobile +1 (916) 764-6981 | cburke@prologis.com
www.prologis.com | Follow us on LinkedIn and Facebook

The information transmitted, including any attachments, is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited, and all liability arising therefrom is disclaimed. If you received this in error, please contact the sender and delete the material from any computer.

COMMENT FORM

Public Scoping Meeting

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for the preparation of an EIS/RMPA for the Proposed SNSA. The purpose of this comment form is to receive your input on issues and concerns you would like to see addressed in the EIS/RMPA. Please use this form to submit written comments by topic. If you have multiple comments, you may include them on this form and/or provide additional pages. Either place the form in the comment box at tonight's meeting, or mail to the address below not later than 5:00 p.m. Pacific Daylight Time **September 5, 2025**. You can also submit your comments via email to SNSAEIS@landrumbrown.com by 5:00 p.m. Pacific Daylight Time **September 5, 2025.**

Before including your name, address, telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

TOPIC: TRANSPORTATION

COMMENT:

I AM VERY WORRIED ABOUT HOW THESE PLANS WILL AFFECT TRAFFIC ON THE I 15 CORRIDOR. WILL THERE BE ADEQUATE MASS TRANSIT TO/FRO THIS AIRPORT???

AND WHAT ABOUT THE WATER NEEDS??

Contact Information (Optional):

NAME / AFFILIATION: JANET CARTER / SIERRA CLUB

ADDRESS: 5850 Sky Pointe Dr. #1036

CITY: Las Vegas

STATE: NV

ZIP CODE: 89130

EMAIL: jkumar167@cox.net

Would you like to be added to the email distribution list? ☒ YES ☐ NO

Additional page included? ☐ YES ☒ NO

From: Chris Chacko
To: SNSA EIS
Subject: Proposed Southern Nevada Supplemental Airport
Date: Tuesday, August 26, 2025 4:28:49 PM

You don't often get email from chrisjchacko@gmail.com. Learn why this is important

To whom it may concern,

As a concerned citizen, I am writing to you today to urge you to reconsider locating the proposed Southern Nevada Supplemental Airport in the Ivanpah Valley north of Primm.

The Ivanpah Valley is home to species like the iconic but endangered desert tortoise and the threatened white-margined penstemon flower. Building an airport on this land and allowing for further urban sprawl into this territory would threaten these two species.

The white-margined penstemon is a rare flower that is only known to be found in 4 counties throughout the southwestern U.S. (Clark County, Nye County, San Bernardino County and Mohave County in Arizona). Further, these flowers can only grow in certain conditions such as the area around Ivanpah Valley and cannot be easily relocated to ensure their survival. This flower has evolved to grow in some of the harshest environments in the world and the largest threat it is currently facing is land development such as the proposed Southern Nevada Supplemental Airport.

In addition to the white-margined penstemon, desert tortoises call the Ivanpah Valley home and developing in this region would further displace and endanger them. Although relocation of the desert tortoises in this region has been proposed, this is not a viable option. Recent studies done by the U.S. Geological Survey have found that relocating desert tortoises can be detrimental to their survival. The study specifically found that that 50% of relocated tortoises died in the first three years after relocation. Desert tortoises are already listed as an endangered species. Further development in their habitat will only accelerate their extinction.

It is also worth noting that the Ivanpah Valley is an important migratory corridor for many animals that call this region home. Developing on this land will negatively impact otherwise stable and healthy species by impeding their ability to migrate and breed.

The proposed development of the Supplemental Airport also brings up questions of water scarcity in an already parched region. Year after year, we are seeing less and less snowpack. As the Ivanpah aquifer is sourced from the Spring Mountains and the New York mountains, which are in a drought, developing on this land would decimate an already struggling water source.

For all the reasons listed above, I urge you to reconsider locating the proposed Southern Nevada Supplemental Airport in the Ivanpah Valley north of Primm.

Regards,

Christopher Chacko
702-326-6338

From: Barry Davis
To: SNSA EIS
Subject: SNSA-Request for notifications
Date: Wednesday, May 21, 2025 7:15:57 AM

> You don't often get email from barryjamesdavis@gmail.com. Learn why this is important

Hello,

I am requesting notifications throughout the EIS/RMPA process.

Barry J Davis
barryjamesdavis@gmail.com
iPhone: 425-698-3568

From: Marianne Donnelly
To: SNSA EIS
Cc: Marianne Donnelly
Subject: Please add this email to notifications of airport development. Thank you. Best of luck!
Date: Monday, July 14, 2025 6:43:41 PM

You don't often get email from mdonnelly00@gmail.com. Learn why this is important

****
Marianne Donnelly performs quality family entertainment for schools, libraries, chautauquas, festivals, senior and theatrical occasions.
Shows and Workshops:
Accurately portrayed courageous women:
* Louisa May Alcott
* Janis Joplin
* Nellie Bly
Vibrant Stories and Songs:
* Exquisitely costumed
seasonal and holiday characters
* Traditional tales, myths, fables
"delights all ages..." Las Vegas Tribune
"well crafted..." Arizona Republic
"joyful riot..." Boston Globe

725-444-0198

resume, references, photos: bestfamilyentertainment.com

Alcott at Chautauqua:
https://youtu.be/e7kxxNmWBV0?feature

Alcott at Lyceum:
https://www.nhpr.org/special-program/2014-07-31/marianne-donnelly-beyond-little-women

select published articles: https://www.broadwayworld.com/author/Mari-Donnelly
https://muckrack.com/mariannedonnelly/portfolio
****

From: Trdmd
To: SNSA EIS
Subject: Supplemental airport comments
Date: Wednesday, August 20, 2025 7:26:13 PM

You don't often get email from trdmd@aol.com. Learn why this is important

Comments and questions concerning the proposed Southern Nevada Supplemental Airport:

1. What is the estimated number and percentage of travelers who normally use LAS will instead drive from Las Vegas to the new airport ?
2. Is it anticipated that most travelers who will use the new airport be from south of Las Vegas or California?
3. Will airlines be willing to pay the presumed higher landing fees at the new airport?
4. Will airlines be given the choice of which airport to use?
5. I doubt that an airline would use both airports.
6. I doubt that most residents of Las Vegas and north of Las Vegas would be willing to drive past LAS and to the new airport unless the airline ticket price is much lower than at LAS.
7. Would discount airlines be the major user of the new airport?
8. I don't think that there are any significant environmental concerns with the location of the new airport.
9. I live in Las Vegas and doubt that I would want to drive the extra distance to the new airport. I fly out of LAS about four times a year. All of my trips are for pleasure. None are for business.

Thank you.
Tom Douglass

From: Carlos Espinoza
To: SNSA EIS
Cc: Venugopal Veeramachaneni
Subject: Southern Nevada Supplemental Airport EIS/RMPA - comments
Date: Tuesday, August 5, 2025 11:27:48 AM
Attachments: image001.png

> You don't often get email from cespinoza@cleanwaterteam.com. Learn why this is important

Good morning,

Can you confirm that the transportation and utility corridor, the noise compatible area, and the senate bill 19 unincorporated town boundary is included in the EIS/RMPA? If the transportation and utility corridor is not included in the EIS/RMPA, can it be included for the infrastructure needed to service the SNSA?

Thank you in advance for taking my questions,

Carlos Espinoza, P.E.
Principal Civil Engineer
Engineering & Construction Service Center
Office: (702) 668-8232

From: Frank Ferraro
To: SNSA EIS
Subject: Clark County Supplemental Airport
Date: Tuesday, August 5, 2025 12:14:45 PM

> You don't often get email from sundevil911@gmail.com. Learn why this is important

I would like to be notified of the progress of the Clark County Supplemental Airport progress and public meetings. Thank you.

Frank T Ferraro
sundevil911@gmail.com
2732 Cheshire Ct, Las Vegas, NV 89108

From: snore1600rep@aol.com
To: SNSA EIS
Subject: Proposed airport
Date: Monday, August 25, 2025 6:23:55 PM

You don't often get email from snore1600rep@aol.com. Learn why this is important

With the current water issues in Las Vegas it makes no sense to build a new airport and warehouses that can not be supported with water. The are also is very supported of desert wildlife that should not be disturbed for an airport .

Ken Freeman

COMMENT FORM

Public Scoping Meeting

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for the preparation of an EIS/RMPA for the Proposed SNSA. The purpose of this comment form is to receive your input on issues and concerns you would like to see addressed in the EIS/RMPA. Please use this form to submit written comments by topic. If you have multiple comments, you may include them on this form and/or provide additional pages. Either place the form in the comment box at tonight's meeting, or mail to the address below not later than 5:00 p.m. Pacific Daylight Time **September 5, 2025**. You can also submit your comments via email to SNSAEIS@landrumbrown.com by 5:00 p.m. Pacific Daylight Time **September 5, 2025.**

Before including your name, address, telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

TOPIC: Environmental impact.

COMMENT: The amount of sprawl that this development will create is unsustainable. The concern for the wildlife will be real, but impact on our water and air will be worse

Contact Information (Optional):

Peter Frigeri
NAME / AFFILIATION

1601 Chapman Dr
ADDRESS

LV
CITY

NV 89104
STATE ZIP CODE

Peterfrigeri@gmail.com
EMAIL

Would you like to be added to the email distribution list? ☒ YES ☐ NO

Additional page included? ☐ YES ☒ NO

Written Comments

it's July 29, 2025. And I stand here concerned about a secondary airport at Ivanhap between Jean and Primm being discussed again. If I remember correctly Randy Walker, former director of aviation, proposed this in 2001. It was discussed as being needed for cargo. In 2008, projected project costs went from 2 billion to 7 billion. In 2011 it was again discussed as a planned commercial service airport. A EIS WAS TO BE RELEASED but was mothballed by the airport in 2010. In between that time T 3 was built & Runways have been lengthened to a accommodate larger aircraft.. It was said that Reid's capacity is around 65 mil. In 2024 we hit a high of 58.4 mil passengers. But in June of this year passenger count saw a 4% drop to 22 mil.

We are land locked, some of that js due to the shenanigans of the former director selling & auctioning off property to developers which added to a lack of ability to expand its footprint nearby but that's a lost opportunity now. So what's really happening is simply encouraging more sprawl.

Questions that need to be addressed in the EIS & RMPA being done by BLM & FAA are numerous. I do think it's interesting that the 2 nd of 2 public hearings will be in PRIMM where hardly anyone resides and you have shuttered gaming operations in the area. So much for the public weighing in.

While the proposed airport isn't directly inside the Sloan Canyon National Conservation Area it will likely have an impact with noise and light pollution, air quality and habitat. This impact must be looked into.

The land conveyed included 17,000 acres from BLM for a compatibility buffer. The land use and zoning is supposed to be compatible with normal airport environs. How'will that be accomplished since we are hearing a new town will be needed since having workers drive 30 miles each way is a concern along with adding traffic problems with travelers coming from CA. And In 2023, state lawmakers unanimously approved Senate Bill 19 which would allow Clark County to put aside at least 5,000 acres for a new commercial and residential development in the vicinity of the new airport. This impact must be included in the EIS.

Mainly where will the water come from? The Ivanpah acquifer which is sourced from the Spring mtn and New York mountains. We are in a drought, our snow pack was minimal across the Spring mtn range.
So where is the water? The current groundwater has 650 AFY.

Where will the electricity come from? Will there be transition lines?
What about air quality ?
What are the lighting and impacts on habitat & pilots
What about any renewable energy projects.

The Clark County Water Reclamation District (CCWRD) will play a key role in this project, particularly in relation to water infrastructure, sewage management, and water reclamation services for the new airport site. While I didn't find specific presentations by the CCWRD on the new Ivanpah airport, their involvement is key in the overall environmental impact and planning.
CCWRD's planning should include:

- Water Infrastructure: The SNSA development involves a significant utility infrastructure upgrade to bring water, electricity, and reclamation services to the site in Jean, Nevada. The CCWRD would be responsible for ensuring the proper design, construction, and operation of wastewater collection and treatment systems to serve the airport and potential surrounding developments.
- Wastewater Treatment and Reclamation: The CCWRD is responsible for the collection, treatment, and reclamation of wastewater for a large part of Southern Nevada. For the new airport, they would be responsible for treating wastewater to the necessary standards before it is discharged or potentially reused.
- Environmental Considerations: The EIS will assess the potential environmental impacts of the airport, including those related to water resources. The CCWRD's expertise in water reclamation and environmental protection would be crucial in developing mitigation measures and ensuring the project adheres to environmental regulations.

just as important the impact on the Desert tortoise needs to use current science on its habitat including climate and population data, connectivity corridor,

access to water & vegetation to sustain them, how to protect burrows. Further, science is s50wing translocation is not working and shouldn't be considered.

We have a delicate flower that only exists in 3 areas in the Mojave Desert. The white- margined penstemon. It must be protected and the EIS should address how to minimize impacts on its habitat.

How will the infrastructure and buildout be financed? Remember, the airport can't charge airlines upfront. they build first then try to recoup costs through airline fees. They can't price themselves out of competition. Reid tends to rely on fares that are discounted to passengers so profits are less for airlines. Finally, someone needs to answer if this expansion really needed & if so is it for passengers or commercial cargo or both. And Are their other transit options that should be considered.

Personally, I'd prefer that the airport not be constructed but if it does materialize these questions need to be answered robustly and thoughtfully.

Thank you,

Chris Giunchigliani
1717 S 15 th St
LV NV 89104

From: Christina Giunchigliani
To: SNSA EIS
Subject: please keep me informed on the project
Date: Wednesday, July 30, 2025 10:48:18 AM

[You don't often get email from giunchigliani@icloud.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

Sent from my iPad

From: Christina Giunchigliani
To: SNSA EIS
Subject: i'd like to receive information on this
Date: Saturday, August 16, 2025 11:08:00 AM

Chris
Sent from my iPad

From: J G
To: SNSA EIS
Subject: SNSA Ivanpah
Date: Friday, August 22, 2025 12:54:57 AM

> You don't often get email from feefatc@yahoo.com. Learn why this is important

Hello,

Please include me in information regarding the SNSA project in the Las Vegas, Nevada area.

Thank you

Jose Gonzalez
661-644-4054 Cell
feefatc@yahoo.com

From: Trent Hanson
To: SNSA EIS
Subject: Notifications through EIS/RMPA Process
Date: Monday, August 4, 2025 11:38:21 AM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png

> You don't often get email from thanson@gcwengineering.com. Learn why this is important

Hello,

Please add me to your mailing list for notifications during the EIS/RMPA Process.

Thanks,

GCW ENGINEERS \ SURVEYORS
Serving Nevada Since 1969

Trent Hanson, PE
Project Engineer - Water/Wastewater

D 702.804.2122 O 702.804.2000
W gcwengineering.com

1555 South Rainbow Boulevard
Las Vegas, Nevada 89146

Sending us a large file? **Use the** GCW File Transfer Site
Note - Any files contained within are to be used for information ONLY. Accuracy or design information to be verified from approved original plans. Use of electronic media is at the sole risk of the user.

From: Linda L. Hunt
To: SNSA EIS
Subject: Comments about Proposed Southern Nevada Supplemental Airport
Date: Thursday, July 31, 2025 10:44:29 PM

You don't often get email from scoopypepebenelli@gmail.com. Learn why this is important

Please stop destroying our plañet...añd all creatures that call it home

From: Albert Kaneshiro
To: SNSA EIS
Subject: re: REQUEST NOTIFICATIONS THROUGHOUT THE EIS/RMPA PROCESS
Date: Tuesday, June 24, 2025 4:58:41 PM

You don't often get email from albert.kaneshiro@hok.com. Learn why this is important

To Whom It May Concern,

Please add me to the list to receive notifications throughout the EIS/RMPA Process.

Thank you,

ALBERT KANESHIRO AIA, LEED AP BD+C, DBIA
Sr. Principal | Sr. Regional Practice Leader

HOK
757 South Alameda Street, Suite 400 | Los Angeles, CA 90021 USA
t +1 424 298 4556 *m* +1 310 730 3363 albert.kaneshiro@hok.com

hok.com | privacy policy

From: Howard Kendall
To: SNSA EIS
Subject: New Primm airport
Date: Sunday, August 3, 2025 8:19:58 PM

[You don't often get email from howard_777@comcast.net. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

Hello

I would like to give my support for the new airport. There is a lot of desert out there this small parcel should affect only a small portion of the wildlife population!

Thank you

Howard Kendall
Sent from my iPad

From: Andrew Logan
To: SNSA EIS
Subject: Notifications Request
Date: Thursday, July 31, 2025 6:25:41 PM

You don't often get email from andrewryanlogan@gmail.com. Learn why this is important

I would like to request to be notified throughout the EIS/RMPA process.

- Respectfully,
Andrew Logan

From: JM
To: SNSA EIS
Subject: RE: Notification / Reports & Documents for Jean and Primm proposed Airport
Date: Thursday, July 24, 2025 7:33:19 PM

You don't often get email from vegaslandbroker@yahoo.com. Learn why this is important

Hi Staff,

Please add me to your list to be notified of any documents or meetings related to the development of the proposed CCA Jean Airport.

Thank you.

Warm regards,

Brand Real Estate
John Mendoza / NV Lic. S.51233
2252 E. Pama Lane
Las Vegas, NV 89119
702-271-2600 - cell
https://brandrealest.com/
https://www.nevadatavernadvisor.com/

From: mm
To: SNSA EIS
Subject: is this airport really necessary with the downturn of the economy
Date: Saturday, August 2, 2025 10:18:57 AM

You don't often get email from mossermarian@gmail.com. Learn why this is important

who is paying for this number one. what is the impact to traffic already a problem in vegas.

there needs to be a complete study and release to the impact to the flow of traffic and impact to neighborhoods. Is this really needed at this location?

thanks

From: Nancy Olds
To: SNSA EIS
Subject: Comments About proposed Supplemental Airport
Date: Thursday, August 28, 2025 7:20:51 PM

You don't often get email from njolds2@gmail.com. Learn why this is important

In July, I attended a public hearing for this planned supplemental airport (SNSA)at the East Las Vegas Library. I am an environmentalist and a member of the Toiyabe Chapter of the Sierra Club and the Red Rock Audubon Society. In fact, I wrote an article for our Sierra Club newsletter about the SNSA.

My husband & I moved to Henderson from Northern Virginia because we enjoyed all the public parks out here. We have the major parks, such as the Lake Mead National Recreation Area and Red Rock Canyon National Recreation Area. We also have a great variety of county and local parks worth visiting. We didn't move here for the Vegas Strip! I am a professional photographer who enjoys wildlife photography!

Creating a supplemental airport, an ambitious project, will cause more harm than good. This project, if approved, is not expected to be completed until 2038. I question how Clark County will benefit by more than a decade later.

Clark County has grown exponentially since we bought a home in late 2017. The urban and suburban sprawl has been alarming, considering that Nevada heavily depends on the Lower Colorado River Basin for its water. Our members of the Sierra Club were surprised that there wasn't any representation from the Southern Nevada Water Authority at the meeting last July. Commercial airports require massive amounts of water. Where will that water be coming from?

The location for this supplemental airport is right in the middle of the endangered desert tortoise habitat. These amazing reptiles are already compromised by climate change. Their burrows have been overheating, affecting population growth. Will this busy airport, vibrating with airplanes taking off on the runways, help the conditions for their future? I think not. Possible airplane accidents and fires (again, where is the water coming from?), and the pollution will be disastrous. It is estimated that highway traffic will expand accordingly in that region. More sprawl means that the desert tortoise will have nowhere to keep safe! Nevada is great for its public lands, as it has over 86% of them. However, it can't recover from this massive stress to our precious ecosystems and our pristine desert lands right here in Clark County. Are we sacrificing paradise to gain an airport expansion?

A better solution for transportation is the emergence of the Brightline West to Las Vegas. This train service will cut emissions, and it is affordable. Presently, tourist travel to Las Vegas is slowing down. The economy is uncertain. This is a bet that is never worth the risks!

Nancy J. Olds
(703) 577-8624

From: Sam Palmer, P.E., CBO
To: SNSA EIS
Subject: SNSA
Date: Wednesday, August 27, 2025 3:11:29 PM

> You don't often get email from spalmer@teamues.com. Learn why this is important

Please send me notifications for the Southern Nevada Supplemental Airport throughout the EIS/RMPA process.
Thank you,
Sam

Sam Palmer, PE, CBO/CFM
UES LV Engineering Manager
4480 W. Hacienda Ave, Suite 104
Las Vegas, NV 89118
702-873-3478 office
702-203-6278 cell
spalmer@teamues.com

From: Jade Parke
To: SNSA EIS
Subject: Proposed Southern Nevada Supplemental Airport
Date: Tuesday, August 26, 2025 3:51:52 PM

You don't often get email from jparke2014@gmail.com. Learn why this is important

To whom it may concern,

As a concerned citizen, I am writing to you today to urge you to reconsider locating the proposed Southern Nevada Supplemental Airport in the Ivanpah Valley north of Primm.

The Ivanpah Valley is home to species like the iconic but endangered desert tortoise and the threatened white-margined penstemon flower. Building an airport on this land and allowing for further urban sprawl into this territory would threaten these two species.

The white-margined penstemon is a rare flower that is only known to be found in 4 counties throughout the southwestern U.S. (Clark County, Nye County, San Bernardino County and Mohave County in Arizona). Further, these flowers can only grow in certain conditions such as the area around Ivanpah Valley and cannot be easily relocated to ensure their survival. This flower has evolved to grow in some of the harshest environments in the world and the largest threat it is currently facing is land development such as the proposed Southern Nevada Supplemental Airport.

In addition to the white-margined penstemon, desert tortoises call the Ivanpah Valley home and developing in this region would further displace and endanger them. Although relocation of the desert tortoises in this region has been proposed, this is not a viable option. Recent studies done by the U.S. Geological Survey have found that relocating desert tortoises can be detrimental to their survival. The study specifically found that that 50% of relocated tortoises died in the first three years after relocation. Desert tortoises are already listed as an endangered species. Further development in their habitat will only accelerate their extinction.

It is also worth noting that the Ivanpah Valley is an important migratory corridor for many animals that call this region home. Developing on this land will negatively impact otherwise stable and healthy species by impeding their ability to migrate and breed.

The proposed development of the Supplemental Airport also brings up questions of water scarcity in an already parched region. Year after year, we are seeing less and less snowpack. As the Ivanpah aquifer is sourced from the Spring Mountains and the New York mountains, which are in a drought, developing on this land would decimate an already struggling water source.

For all the reasons listed above, I urge you to reconsider locating the proposed Southern Nevada Supplemental Airport in the Ivanpah Valley north of Primm.

Regards,

Jade Parke
(702) 279-2599

From: Michael Phillips
To: SNSA EIS
Subject: Notifications for SNSA
Date: Friday, August 1, 2025 9:36:49 PM

> You don't often get email from mhphillips@cleanwaterteam.com. Learn why this is important

Good evening,

May I please request to be put on the notifications list for the SNSA EIS?

Thank you,

Mike

From: Kimberly Reinhart
To: SNSA EIS
Subject: Email Notifications for SNSA
Date: Tuesday, August 19, 2025 6:30:32 PM

> You don't often get email from kimberly.reinhart@snwa.com. Learn why this is important

Please add me to the email list for the Southern Nevada Supplemental Airport.

Thank you.

Kimberly Reinhart
Manager, Environmental Resources
Water Resources Department

Southern Nevada Water Authority
100 City Parkway, Suite 700, Las Vegas, NV 89106
Mailing Address: P.O. Box 99956, Las Vegas, NV 89193-9956
Telephone: 702-862-3457; Mobile: 702-539-7073; Fax: 702-691-5227
Email: kimberly.reinhart@snwa.com

From: Riano, Steve
To: SNSA EIS
Subject: REQUEST NOTIFICATIONS THROUGHOUT THE EIS/RMPA PROCESS
Date: Sunday, June 15, 2025 5:38:49 PM

You don't often get email from swriano@bechtel.com. Learn why this is important

Please send notifications throughout the Southern Nevada Supplemental Airport (SNSA) EIS/RMPA process. Please confirm receipt of this email. Thanks.

Steve W. Riano, AIA, NCARB | Aviation Division Manager
Infrastructure Planning & Development Group
Bechtel Infrastructure Corporation
San Francisco, CA 94105 USA
M: +415.306.4039 | E: swriano@bechtel.com

From: Tim Rogers
To: SNSA EIS
Subject: SNSA - EIS Virtual Public Meeting
Date: Wednesday, May 28, 2025 3:05:21 PM

> You don't often get email from t.rogers@avairpros.com. Learn why this is important

Would it be possible to get the details of how to virtually attend the public meeting.

Thanks

Tim

Timothy Rogers, AIA, CCM, LEED AP
Senior Managing Director – California Market Leader
AvAirPros
300 Continental Blvd | Suite 510 | El Segundo, CA 90245
310.321.6721 direct | 310.997.8030 mobile

From: k ryder
To: SNSA EIS
Subject: Opposition to the proposed Ivanpah airport
Date: Friday, August 22, 2025 4:20:03 PM

You don't often get email from kryder09alisha@gmail.com. Learn why this is important

To whom it may concern,

This is a terrible idea. I have lived in Las Vegas, Nevada for 30 years. We do not need this. I speak for the residents when I say we are AGAINST this passing.
Stop trying to take away native plants just to build something we do not need! The endangered species DO NOT AGREE WITH THIS!
BOO on all of you for even allowing such building to be done in a time such as these.

Sincerely,
Kristen Ryder
725-235-8319

From: nicolas sanchez
To: SNSA EIS
Subject: Supplemental Airport Comment
Date: Friday, August 1, 2025 1:58:58 PM

You don't often get email from nicolassanchez2@yahoo.com. Learn why this is important

Las Vegas needs the supplemental airport and the city needs to continue to grow out of the valley to keep home prices/inventory in check. Other desert cities such as Phoenix continue to sprawl with less water availability than Las Vegas. We need to grow! The valley is getting too crowded and the demand is not going to go down anytime soon. This airport will also expand our global reach and perhaps create new sectors of jobs that are not entirely reliant on the tourism industry. I strongly agree with the supplemental airport being built.

From: jamie schwartzberg
To: SNSA EIS
Subject: Public comment
Date: Thursday, September 4, 2025 5:56:19 PM

You don't often get email from jaymees1992@gmail.com. Learn why this is important

To whom it may concern,

I am writing to express my strong opposition to the proposed Southern Nevada Supplemental Airport in Ivanpah Valley, north of Primm, due to its significant environmental impacts.

Ivanpah Valley is a critical habitat for endangered species, including the desert tortoise and the threatened white-margined penstemon flower. The white-margined penstemon, found only in Clark and Nye Counties in Nevada, San Bernardino County in California, and Mohave County in Arizona, thrives in specific conditions unique to this region. Construction and urban expansion from the airport would jeopardize its survival, as relocation is not feasible for this rare plant adapted to harsh desert environments.

Similarly, the desert tortoise, already endangered, faces further risk from habitat disruption. A U.S. Geological Survey study indicates that 50% of relocated tortoises die within three years, making relocation an ineffective solution. Development in Ivanpah Valley would accelerate their decline.

Additionally, the valley serves as a vital migratory corridor for numerous species. An airport would disrupt migration and breeding patterns, harming otherwise stable populations.

The project also threatens the region’s scarce water resources. The Ivanpah aquifer, fed by the drought-stricken Spring and New York Mountains, cannot sustain additional strain from development, especially given the region’s diminishing snowpack.

For these reasons, I urge you to reconsider the location of the Southern Nevada Supplemental Airport to protect Ivanpah Valley’s unique ecosystem and resources.

Sincerely,

Jamie Schwartzberg

From: Danielle Sears
To: SNSA EIS
Subject: Public Comment: Ivanpah Airport
Date: Thursday, September 4, 2025 5:52:19 PM

You don't often get email from daniellejsears@gmail.com. Learn why this is important

Hi, there.

As a concerned citizen, I am writing to you today to urge you to reconsider locating the proposed Southern Nevada Supplemental Airport in the Ivanpah Valley north of Primm for the following reasons:

1. Building an airport on The Ivanpah Valley would threaten the endangered desert tortoise and the threatened white-margined penstemon flower.

1a. The white-margined penstemon is a rare flower that is only known to be found in 4 counties throughout the southwestern U.S. (Clark County, Nye County, San Bernardino County and Mohave County in Arizona).

These flowers can only grow in certain conditions such as the area around Ivanpah Valley and cannot be easily relocated to ensure their survival.

This flower has evolved to grow in some of the harshest environments in the world and the largest threat it is currently facing is land development such as the proposed Southern Nevada Supplemental Airport.

2a. Separately, desert tortoises call the Ivanpah Valley home and developing in this region would further displace and endanger them.

Relocation of the desert tortoises in this region has been proposed and this is not a viable option: Recent studies done by the U.S. Geological Survey have found that relocating desert tortoises can be detrimental to their survival.

The study specifically found that that 50% of relocated tortoises died in the first three years after relocation. Desert tortoises are already listed as an endangered species.

Further development in their habitat will only accelerate their extinction.

3. It is also worth noting that the Ivanpah Valley is an important migratory corridor for many animals that call this region home.

Developing on this land will negatively impact otherwise stable and healthy species by impeding their ability to migrate and breed.

4. The proposed development of the Supplemental Airport also brings up questions of water scarcity in an already parched region. Year after year, we are seeing less and less snowpack. As the Ivanpah aquifer is sourced from the Spring Mountains and the New York mountains, which are in a drought, developing on this land would decimate an already struggling water source.

For all the reasons listed above, I urge you to reconsider locating the proposed Southern Nevada Supplemental Airport in the Ivanpah Valley north of Primm.

Thank you for your consideration and time,

Danielle Sears

COMMENT FORM

Public Scoping Meeting

Proposed Southern Nevada Supplemental Airport (SNSA)
Environmental Impact Statement (EIS) & Resource Management Plan Amendment (RMPA)

The Federal Aviation Administration (FAA) and Bureau of Land Management (BLM) are Joint Lead Agencies (JLA) for the preparation of an EIS/RMPA for the Proposed SNSA. The purpose of this comment form is to receive your input on issues and concerns you would like to see addressed in the EIS/RMPA. Please use this form to submit written comments by topic. If you have multiple comments, you may include them on this form and/or provide additional pages. Either place the form in the comment box at tonight's meeting, or mail to the address below not later than 5:00 p.m. Pacific Daylight Time **September 5, 2025**. You can also submit your comments via email to SNSAEIS@landrumbrown.com by 5:00 p.m. Pacific Daylight Time **September 5, 2025.**

Before including your name, address, telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

TOPIC: Proposed S NV Supplemental Airport

COMMENT: This seems like an attempt for public tax dollars to pay for the infrastructure that would support sprawl (land bill) from LV to primm. We pay for the airport & extending our infrastructure and developers profit by now having easier access for development. This 2nd airport is in no one's best interest. We need to use our tax dollars to build smarter. Climate change is real and we can't afford to expand the use of our water & the negative affects on air quality. We should support in fill within LV and better local transportation and rail between LV & CA. Need further support of need for new airport travel to Vegas is DaBOMB!

Contact Information (Optional):

Patricia Sheffield
NAME / AFFILIATION

217 Bruin Way
ADDRESS

Las Vegas
CITY

NV
STATE

89145
ZIP CODE

millertrisha7@gmail.com
EMAIL

Would you like to be added to the email distribution list? ☒ YES ☐ NO

Additional page included? ☐ YES ☒ NO

From: Mark Silverstein <mreloslesen@gmail.com>
Sent: Monday, August 4, 2025 2:20 PM
To: jjguerrero@blm.gov
Cc: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>
Subject: SNSA Public Meeting and Follow-up Issues

You don't often get email from mreloslesen@gmail.com. Learn why this is important

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Guerrero,

It was nice meeting and talking with you at the Southern Nevada Supplemental Airport (SNSA) NEPA/EIS/RMPA Scoping Meeting on Thursday evening, 7/31/2025, in Primm.

Among the topics we discussed were my first-hand experiences working on the SNSA as the Clark County Department of Aviation's (CCDOA) Principal Environmental Planner from December 2008 to February 2020, when I retired.

As you know, the SNSA EIS and planning processes had been suspended at CCDOA's request in 2010 due to the Great Recession, and not restarted until 2018. However, during that suspension period, I and an intermittent "skeleton crew" of consultants and CCDOA coworkers continued to monitor activities that may have had an effect on future SNSA development in the Ivanpah Valley. These included permit applications received by the BLM's Las Vegas Field Office (LVFO) and related NEPA actions from proponents of activities and projects on federal lands, such as utility-scale solar facilities, microwave towers, off-road races, and even the Seven Magic Mountains installation on lands BLM manages outside of the 6,000-acre parcel paid for and owned by Clark County and on the 17,000-acre Noise Compatibility Area (NCA)/Transportation and Utility Corridor footprint, as defined in the 2000 and 2002 Congressional Acts, respectively.

With that, when permit applications for land use on federal lands in the Ivanpah Valley were received by the BLM LVFO and if/when approvals (e.g., NOIs) for the NEPA/RMP process were issued, the BLM properly notified CCDOA of them and/or we became aware of them as we monitored the Federal Register. At such times, the LVFO requested that CCDOA collaborate directly with those proponents to ensure a direct dialogue and to assess their respective projects' compatibility with what the SNSA would require when the NEPA/RMPA processes resumed; thereby, keeping the BLM from having to function as the intermediary/go-between. A reasonable request that CCDOA actively pursued to eliminate, mitigate, or minimize the potential for conflicts.

This most certainly was the case with respect to First Solar's Silver State Solar South/North NEPA/EIS/RMPA utility-scale solar projects, the footprints of which were directly adjacent to and east of the SNSA's combined footprints.

My principal "purpose and need" in contacting you now is to more completely describe to you what transpired between CCDOA and First Solar, and between First Solar and the LVFO between 2009 and 2013—long before your tenure at the LVFO--and their impacts on CCDOA's future plans for the SNSA; consequences of which reverberate down to today. Thus, herein are more details of what transpired, especially in 2012/13, than I expressed to you at the scoping meeting.

Commencing ca. 2009 CCDOA and the First Solar proponent for the Silver State Solar projects met fairly regularly in the CCDOA's Planning Department offices; monthly, initially, and then on an as-needed basis as the solar projects' EIS processes advanced. These meetings were cordial and were held in good faith and with transparency--we thought--with the First Solar's corporate lead and its local environmental legal counsel.

In addition, at the time, it was common knowledge that there was a faction of technician- and/or management-level staffers at the BLM LVFO who were adamantly against the SNSA from ever being built. While having personal opinions for or against a particular proposed project is understandable, as you know, by a governmental official in the execution of their duties imposing such leanings in management decisions is wholly contrary to the letter and spirit of the NEPA and RMP legislations.

> [Note: Per the mission of the organization, Public Employees for Environmental Responsibility (PEER), government employees have the right in "…defending whistleblowers, shining the light on improper or illegal government actions, working to improve laws and regulations, and supporting the work of other organizations…" https://peer.org/about-us/. However, this does not give them the right to apply their own biases on what is mandated to be objective decisions and policymaking and/or acts of Congress.]

The principal reason for their opposition to the SNSA, among possible others, was legitimate concerns about listed and unlisted species in the Ivanpah Valley which they deemed would be greatly negatively impacted by an airport. In that vein, among the efforts to thwart a successful SNSA NEPA/RMP process, an aeolian sediment transport study was mandated by the LVFO, which I believe had to be funded, but not conducted, by CCDOA. The study's purpose was a concern about the SNSA's potential disturbance of and harm to known populations and the distribution and potential future limitations of the range of *Penstemon albomarginatus*. While I was not with CCDOA when the study was initiated, I was there when the results were presented by the eminent desert botanist, Dr. Stephen Zitzer. There was a palpable anger registered in the audience among a few of the BLM staff in attendance when he reported there would be no detriment to the survival of plant if the SNSA was built. In fact, there were more populations and areas with suitable substrate to enhance the range than was previously known. [See: "Characterizing the Ecology of White Margined Penstemon (*Penstemon albomarginatus*) in Nevada (2008-2010)," Stephen Zitzer, Vic Etyemezian and James King Desert Research Institute, https://www.clarkcountynv.gov/assets/documents/government/departments/environment_and_sustainability/desert_conservation_program/06-mshcp-zitzer-2010-talk.pdf]

Banking on a different outcome, those who were most disappointed were those who mandated the study--and being contrary to the scientific method as taught to fifth-grade science-fair contestants—were holding a foregone conclusion in search of confirmatory results which, to their chagrin, were not to be reported. Ironically, those are the same folks who should have celebrated the fact that the *P. albomarginatus* population and viable range was more extensive than had been predicted. Go figure.

Be that as it may, undeterred by that backfired "setback"--and even after (more accurately, in spite of) three years of CCDOA working in good faith with the First Solar representatives--as the Silver State Solar SEIS/RMPA process was in its final stages, CCDOA was completely blindsided by a backroom deal (my and others' opinions and observations) the LVFO made with the proponent's representatives in the Nevada State BLM Office in Reno. That deal was to convert a major portion of the proposed permitted area—miraculously, excess land not actually needed for solar electric generation and plant operations to fulfill their power purchase agreement (PPA) requirements necessary for its purpose and need and Record of Decision (ROD)—into a whopping 31,859-acre Area of Critical Environmental Concern (ACEC). In fact, it is the very Ivanpah ACEC depicted on the maps displayed at the scoping meeting.

Seemingly from out of nowhere, from CCDOA's perspective and knowledge, the October 2012 SEIS/RMPA preferred alternative magically (or surgically) significantly changed into a FSEIS/PRMPA in September 2013, to include the ACEC as part of the preferred alternative. CCDOA was first made aware of this when the deal was done, faced with reading the shaded areas in the FSEIS/PRMPA mouths agape, never having had the opportunity to read or hear or comment on a word of it as it was quickly pushed through to approval. So much for a transparent process.

> [See shaded passage changes made to the FSEIS/FRMPA in: https://eplanning.blm.gov/public_projects/78155/200174043/20067973/250074155/2-Chapter_1-Introduction-Purpose-Need.pdf]

I excerpt here the following as it pertains to the SNSA's challenge that, I noted above, reverberates to this day. Note the bolded/underlined passage at the end (and throughout the Purpose and Need), which is attempted to be shrouded by the first passage:

> "Substantive revisions include… 4) revisions to ACEC management prescriptions to allow rights-of-way for construction and operation of the Southern Nevada Supplemental Airport (Airport) and associated facilities in the ACEC, subject to an approved Airport Final Environmental Impact Statement and Record of Decision **and subject to compliance with the Endangered Species Act, 16 U.S.C. § § 1531-1544**."

It doesn't take Sherlock Holmes (or George Knapp) to see that the intent of converting the remainder of the permitted acreage not slated for and apparently never needed for the solar arrays to meet First Solar's PPA needs had to have been well-known by First Solar long before, and creating a massive ACEC on BLM's part, with the RMPA serendipitously "opened up" by the solar EIS process to "slip" an ACEC into it, had to have been in the works in tandem with the project proponent and the originating non-governmental commenter/proponent requesting the creation of the ACEC (see https://basinandrangewatch.org/Ivanpah-ACEC.html); which the BLM executed under cover of night. An apparent coup to, at once, create an ACEC between draft and final for supposed tortoise connectivity and ostensibly to limit or disqualify the SNSA from ever being able to receive a successful Record of Decision (ROD). How clever and smug they must have felt, thumbing their noses at CCDOA and ironically, by connectivity, Congress and the FAA.

On First Solar's part, the ACEC designation was a "no skin off my nose" deal. And for BLM, "Go ahead and try to work around the ACEC, Clark County."

Proof of the bait-and-switch came on the next occasion I had when I ran into First Solar's legal counsel at some unrelated meeting or conference, letting them know that we knew they screwed the CCDOA. The sheepish reply was, "It's business." My response was, "I work for the government." In other words, Clark County was shined on and taken for suckers by First Solar and the BLM.

Whatever it was, what it was *not* was ethical. Per the PEER tenets, this was not a way to "…seek a higher standard of environmental ethics and scientific integrity."

Further, this conflict between the BLM and Clark County marches on. As recently as June 16, 2021 (eight years later), Nada Wolff Culver, then BLM's Deputy Director of Policy & Programs, in a statement on the proposed *Southern Nevada Economic Development and Conservation Act* before the US Senate Energy and Natural Resources Subcommittee on Public Lands, Forests and Mining (S. 567), is quoted as saying:

> "In addition, the bill revokes the existing Ivanpah ACEC. The BLM has concerns that removing the Ivanpah ACEC could negatively impact desert tortoise and certain rare plant habitat covered by the Clark County MSHCP. The BLM would like to continue to work with the sponsor on additional mitigation measures to ensure the purposes of these SMAs [Special Management Areas] are met. We would also like to work with the sponsor to clarify language describing the cooperative management agreement with the County."
> https://www.doi.gov/ocl/s-567

Thus, the debate over the Ivanpah ACEC is not over; this time, perhaps with a somewhat more cooperative tenor than in 2013?

Point in fact: As with the aforementioned aeolian transport study, the need for the hurried designation of the Ivanpah ACEC was executed, one might conclude, without significant scientific data—again, could one conclude it was another conclusion in search of results? This is witnessed, as described in a summation of a collection of papers published in, "Frontiers in Ecology and Evolution" in 2023, a decade after the ACEC designation in, "*Linear and landscape disturbances alter Mojave desert tortoise movement behavior"* (https://www.frontiersin.org/journals/ecology-and-evolution/articles/10.3389/fevo.2023.971337/full). In fact, conventional ecological wisdom of the day (ca. 2013) by scientists who study such phenomena, at least in my recollection, was that the desert tortoise could not negotiate the McCullough Pass—a significant aspect of/link in species connectivity. Since then, however, and in the citation referenced, this has been documented not to be the case.

Changing the subject, what I also mentioned to you, which I believed when I was employed at CCDOA and still do today--and in partial support of those folks protesting at the scoping meeting--is that the SNSA, if/when built (and its environs), must be designed, constructed, developed, and managed in the least environmentally, ecologically, culturally, and economically impactful manner as practicable—while also being mindful of the recreational needs and expectations of Southern Nevadans. With that, contrary to those utility-scale solar plants whose power and profits generated from them are of no benefit to the citizens of Southern Nevada—all we get is to look at the arrays and the spaghetti of transmission lines used to send power elsewhere—the SNSA will be by, of, and for the people of Clark County. Thus, it behooves us to be as conservation-minded as we can, as we as a community, move forward—ironically, in the very spirit (but not with the constraints) of an ACEC, just not with the intent of the ACEC designed to prohibit the SNSA's creation. Otherwise, as my mother would have said, "We'll be cutting off our nose to spite our face."

On the other hand with respect to the protests regarding water sourcing to service the airport—certainly a valid concern--I'd like to ask them if they are also so fervently protesting any water-consumptive development in such Colorado River user communities as, say, Denver, Pueblo, Phoenix, LA, Orange County, San Diego, Imperial Valley, Moab, Grand Junction, Tucson, and St. George. Being, that is, that those protesting very well know that Nevada is allotted the least amount of water in the river compact, and that the Las Vegas metro area is the most water conservative community on the river—and the only one which returns any significant amount of the water it uses back to the river.

And, with respect to their protestations regarding ecological destruction, do they not realize that if the ~23,000 (6,000 + 17,000) acres had not been set aside by Congressional Acts since 2000/02 from any development—sitting essentially untouched

and locked up from any development since that time--then those lands and other acreages in the Ivanpah Valley, which would have been opened to intense developmental pressures, would today be blanketed with solar panels on an industrial scale. All a skeptic of this claim needs to do is drive down to the Eldorado Valley south of (and owned by) Boulder City, which has at least a half-dozen utility-scale solar facilities there now, with potentially more on the way. Ironically, in the earliest stages of planning for the SNSA, the Eldorado Valley was noted as possibly even a preferred alternative to the Ivanpah Valley location. As I understand it, the citizens and/or city council of Boulder City voted, “Not just no!” on a supplemental airport within their city borders. In their wisdom, they chose utility-scale solar facilities, for which a total of ~19,000-acres have been zoned for energy generation, with approximately two-thirds of those acres currently in operation.

So, instead, with a successful ROD, and the NCA transferred into Clark County management, we all will have the opportunity, as a community, to debate how that land will be developed and/or left wholly or in part free from development. To, as they say, have more “bites at the apple” than we would have been afforded if those solar energy companies got to those 23,000-acres first. Perhaps, with a successful SNSA ROD, by the time Clark County has the opportunity to decide how those lands are to be managed, the science will have caught up to the perceptions and emotions. And, like Boulder City has done, we can decide on land use issues without outside interference.

Best of luck in completing the RMPA process,

Mark E. Silverstein

Las Vegas, NV

mreloslesen@gmail.com

From: Guerrero, Joanie J <jjguerrero@blm.gov>
Sent: Tuesday, August 12, 2025 5:21 PM
To: Spencer, Keith @ Las Vegas <Keith.Spencer@cbre.com>
Subject: Feedback Re: [EXTERNAL] SNSA EIS

Good afternoon Mr. Spencer,

Thank you for contacting us. Please visit the following link: https://www.snvairporteis.com/

There is a blue bar that is labeled "Scoping Meetings" that will take you to the link where you

can learn more about the proposed SNSA . There is a recording of our first, in person public meeting as well.

Please send your comments to SNSAEIS@landrumbrown.com.

The scoping process is open until 5:00 p.m. Pacific Daylight Time, on Friday, September 5, 2025.

Have a great evening,

Sincerely,

Joanie

Joanie Guerrero
Major Projects Team
Bureau of Land Management (BLM)

From: Spencer, Keith @ Las Vegas <Keith.Spencer@cbre.com>
Sent: Tuesday, August 12, 2025 2:24 PM
To: Guerrero, Joanie J <jjguerrero@blm.gov>
Subject: [EXTERNAL] SNSA EIS

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello Joanie,
I wanted to confirm the correct link to send public comments regarding the SNSA EIS.
Is it included in the website?
Thank you,
Keith Spencer

Keith Spencer
First Vice President
RE Lic # BS.15971

CBRE | Las Vegas | Land Services
8548 Rozita Lee Avenue, Suite 200
Las Vegas, NV 89113
T +1 702 369 4810 | F +1 702 794 0144 | C +1 702 528 4323
keith.spencer@cbre.com

Follow CBRE: CBRE.com

Details about the personal data CBRE collects and why, as well as your data privacy rights under applicable law, are available at **CBRE – Privacy Policy.**

From: Keith Spencer
To: SNSA EIS
Subject: SNSA EIS comments
Date: Tuesday, August 12, 2025 5:34:06 PM

You don't often get email from rk.ca.spencer@gmail.com. Learn why this is important

Is this the correct link for public comments regarding the SNSA EIS?

From:	Keith Spencer
To:	SNSA EIS
Subject:	Comment for SNSA EIS (see attached)
Date:	Sunday, August 31, 2025 12:46:42 AM
Attachments:	This Environmental Impact Statement and Resource Management Plan Amendment Process for the proposed Southern Nevada Supplemental Airport must contain the following.docx

---

Thank you for this opportunity to add my questions to the EIS.

Robert Spencer

This Environmental Impact Statement and Resource Management Plan Amendment Process for the proposed Southern Nevada Supplemental Airport must contain the following:

1. What type of soil engineering must be used to build the facilities anticipated as runways, terminals, warehouses, rail facilities, service centers, all new infrastructure or development associated with the +/- 6,000 acre site?
2. What dust mitigation measures will be required for the soils associated with the site?
3. How much water is currently used for dust mitigation at similar sites in Clark County (if they exist) as a gallon per acre calculation?
4. How much water is currently used for dust mitigation for larger acreage development sites in Clark County as a gallon per acre calculation?
5. How much water will be needed to accommodate the dust mitigation required for this proposed development of a Supplemental Airport?
6. What is the source of the water needed for the construction of this proposed development?
7. Who pays for that water?
8. At what cost?

Robert Spencer, Las Vegas, NV 8/30/2025

From: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>
Sent: Thursday, May 29, 2025 3:26 PM
To: Thalgott, Jamie L. <JThalgott@BHFS.com>
Cc: Angela Hammond <angela@naiopnv.org>; Steve Neiger <steve.neiger@cast-cap.com>; Guerrero, Joanie J <jjguerrero@blm.gov>; Sarah Potter <Sarah.Potter@landrumbrown.com>; Rob Adams <Rob.Adams@landrumbrown.com>; Gaby Elizondo <Gaby.Elizondo@landrumbrown.com>; Wolfers-Lawrence, Jean (FAA) <jean.wolfers-lawrence@faa.gov>; jonathan.p.aunger <jonathan.p.aunger@faa.gov>
Subject: RE: Proposed Southern NV Supplemental Airport

Good afternoon Jaime. Thank you for your email. The virtual public scoping meeting for the proposed Southern Nevada Supplemental Airport EIS/RMPA is open to everyone. The Joint Lead Agency's website (https://www.snvairporteis.com/) for the EIS/RMPA has a link for the public to register for the virtual public meeting on the Home page and on the Public Participation page. I've provided it below, for your reference. You can also send an email to the EIS website email address to receive notifications about the project throughout the EIS/RMPA process.

https://us02web.zoom.us/meeting/register/FQVWnhFxR8CoweyXTTdQzw#/registration

David B. Kessler, M.A., AICP
U.S. Department of Transportation
Federal Aviation Administration
Regional Environmental Protection Specialist
Airports Division – Western-Pacific Region
Voice: 424-405-7315
email: dave.kessler@faa.gov

Mailing address:
Federal Aviation Administration

Airports Division
Western-Pacific Region, AWP-610.1
777 S. Aviation Boulevard, Suite 150
El Segundo, CA 90245

From: Thalgott, Jamie L. JThalgott@BHFS.com>
Sent: Wednesday, May 28, 2025 9:42 AM
To: Kessler, Dave (FAA) <Dave.Kessler@faa.gov>; jjguerrero@blm.gov
Cc: Angela Hammond <angela@naiopnv.org>; Steve Neiger <steve.neiger@cast-cap.com>
Subject: Proposed Southern NV Supplemental Airport

You don't often get email from jthalgott@bhfs.com. Learn why this is important

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

Thank you both for leading the EIS/RMP amendment process for the above project (notice attached). Steve, Angela and I are involved in NAIOP, a commercial real estate development organization. We are hoping to participate in the public comment process in July. Is the first, virtual meeting open to industry? If so, would you please provide the log-in information once available so we can have a representative present? We look forward to working with you on this important matter.

Thanks,
Jamie

Jamie L. Thalgott
Brownstein Hyatt Farber Schreck, LLP
100 North City Parkway, Suite 1600
Las Vegas, NV 89106
702.464.7082 tel
JThalgott@BHFS.com

Brownstein - we're all in.

STATEMENT OF CONFIDENTIALITY & DISCLAIMER: The information contained in this email message is attorney privileged and confidential, intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this email is strictly prohibited. If you have received this email in error, please notify us immediately by calling (303) 223-1300 and delete the message. Thank you.

From: Thalgott, Jamie L.
To: SNSA EIS
Subject: Request for Notices
Date: Thursday, May 29, 2025 5:19:07 PM

> You don't often get email from jthalgott@bhfs.com. Learn why this is important

Hello, I would like to request notices during the EIS/RMPA process for the Nevada Ivanpah airport. Thank you.

Jamie L. Thalgott
Brownstein Hyatt Farber Schreck, LLP
100 North City Parkway, Suite 1600
Las Vegas, NV 89106
702.464.7082 tel
JThalgott@BHFS.com

Brownstein - we're all in.

STATEMENT OF CONFIDENTIALITY & DISCLAIMER: The information contained in this email message is attorney privileged and confidential, intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this email is strictly prohibited. If you have received this email in error, please notify us immediately by calling (303) 223-1300 and delete the message. Thank you.

From: Christopher Thompson
To: SNSA EIS
Subject: New airport
Date: Friday, September 5, 2025 2:16:32 AM

You don't often get email from thomp776@gmail.com. Learn why this is important

Hello,
My name is Christopher Thompson, a resident of Nevada and I am writing today in opposition to the proposed Ivanpah airport. This new airport endangers the ecosystem of the Mojave preserve for such little benefit to the people of Nevada. Nevadans and Californians alike value the beautiful desert landscape and cementing a superfluous airport right in the middle of it would be nothing more than an seldom used eyesore. Please reconsider the placement of this airport.
Thank you,
Christopher Thompson

From: VanHercke, William
To: SNSA EIS
Subject: Please add me to your notification list
Date: Tuesday, July 1, 2025 2:13:33 PM

> You don't often get email from william.vanhercke@jacobs.com. Learn why this is important

I would like to be added to the notification list for any updates on this project. Thank you!

Bill VanHercke, PE
Jacobs Aviation
Vice President / US West Aviation
William.VanHercke@Jacobs.com
(Office) 720-286-5246; (Cell) 720-205-7694
7001 E. Belleview Avenue, Suite 1000 (10th Floor)
Denver, CO 80237

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

IN RE: SOUTHERN NEVADA SUPPLEMENTAL AIRPORT

PUBLIC SCOPING MEETING

Taken on Wednesday, July 30, 2025

At 5:13 p.m.

At 2851 East Bonanza Road

Las Vegas, Nevada

Reported by: Tracy A. Manning, CCR 785
Job No. 61269, Firm No. 116F

SPEAKERS:

DAVID KESSLER: Environmental Protection Specialist for the Airports Division of the Federal Aviation Administration

STEPHEN LESLIE: Acting Deputy District Manager for the Bureau of Land Management

STATEMENTS:

Will Bradley

Janet Carter

Vinny Spotleson

Eva Olivia Chase

Chris Giunchigliani

WEDNESDAY, JULY 30, 2025

MR. KESSLER: Good afternoon, ladies and gentlemen. My name is David Kessler. I'm an Environmental Protection Specialist for the Airports Division of the Federal Aviation Administration, Western Pacific Region Office in Los Angeles.

I'd like to welcome you to the public scoping meeting that the FAA and the Bureau of Land Management, or the BLM, as joint lead agencies, or JLA, are conducting today with a draft Environmental Impact Statement, or EIS, and Resource Management Plan Amendment, or RMPA for the proposed Southern Nevada Supplemental Airport Project.

This is the second of three public meetings that are being conducted to collect comments from the public, local interest groups, government agencies, concerning the scope of the EIS/RMPA. The JLA is preparing the EIS/RMPA in accordance with federal legislation, known as National Environmental Policy Act of 1969 as amended, or NEPA. The Ivanpah Airport Public Lands Transfer Act of 2000. The JLA announced a notice of intent to prepare the EIS/RMPA in the May 19, 2025 issue of the Federal Register.

As I mentioned, the FAA and the Bureau of Land Management are the joint lead agencies for the preparation of the draft EIS/RMPA. The FAA is the administrative lead for the JLA.

The proposed project includes the transfer of land from the BLM to Clark County for the proposed airport itself, a noise compatibility area around the airport, and the management of flood waters in the area.

The county's proposal also includes construction of a new interchange, and the modification of another interchange on Interstate 15 for the new airport.

Therefore, the JLA has invited the Federal Highway Administration and the Nevada Department of Transportation to be cooperating agencies in preparation of the EIS/RMPA.

The JLA has also selected Landrum & Brown as the third-party consultant to assist us in preparing the EIS/RMPA.

I'd like to take this opportunity to make sure that everyone understands, no decisions are going to be made today as far as the proposed project. Our job is to listen to what you have to say about the scope of information that needs to be

included in the draft EIS/RMPA. In other words, it's your turn to talk to us.

Public scoping is a critical part of the federal environmental process, and we value your input to helping us identify the issues that need to be addressed in the EIS/RMPA.

When the draft EIS/RMPA is distributed for review, the U.S. Environmental Protection Agency, or USEPA, will publish a notice of availability of the draft EIS/RMPA in the Federal Register. These types of notices are usually published on -- in the Federal Register on Fridays.

Following publication of the draft EIS/RMPA for comment, the next step in the federal environmental disclosure process is to hold a public hearing on the adequacy of the information disclosed in the EIS/RMPA. The public hearing will be held during the public comment period on the EIS/RMPA, and notice of availability of the draft and the time, date, and location of the hearing will be published in the local newspaper. The JLA will provide at least 30 days' notice to the public prior to the public hearing.

After the public hearing has been held and the comment period has ended, we will then correct

and revise the EIS/RMPA as necessary, based upon the comments received. The JLA will also prepare responses to the comments we receive and include them in the final EIS/RMPA.

When the final EIS/RMPA is published, the USEPA will publish another notice of availability of the document in the Federal Register.

Following the BLM's protest period and governor's consistency review, the JLA will issue a record of decision.

Today, we're asking for your comments concerning, again, the scope of the EIS/RMPA. The JLA will prepare the EIS/RMPA in accordance with its own internal written guidance to comply with the National Environmental Policy Act.

We have a presentation that I'm going to show you in just a moment with some slides that will show you and help describe the proposed project in the federal environmental disclosure process.

I want to also make sure you understand, the slides that we have on the screen are also on the same boards that we have here around the room. So if it's difficult to see the slide, you're welcome to come up and see the presentation boards.

After the presentation, you'll have an

opportunity to speak with the JLA, subject matter experts, and representatives from Clark County at the presentation boards that we have here.

We also have a court reporter who will listen and record your verbal comments concerning the scope of the EIS/RMPA after the presentation. Again, when you do that, please fill out the note. We keep that so we know -- we can keep track of who said what comment so we can make sure what we have in the document.

So we're going to go ahead and start the presentation.

And it works. Sure it works. All right. Push the button. There we go. Yeah, I'm going to turn this off.

So, again, I'm Dave Kessler. Project manager for the Southern Nevada Supplemental Airport EIS from the Federal Aviation Administration. I'm in Los Angeles, is where my office is.

Steve Leslie, right here, he is the Acting Deputy District Manager from the Bureau of Land Management. As I mentioned earlier, we are joint lead agencies in the preparation of this document.

I'm not going to read the slide to everyone because I believe you can see it, and also,

we have around -- this is our agenda, what we're going to do tonight. The different things, the process, the environmental impact categories, things like that.

So, roles and responsibilities. For us, the FAA and the BLM, again, we're the joint lead agencies. We're making the document comply with the National Environmental Policy Act. We're coordinating and seeking comments from federal, state, and local offices, and the public and tribal nations to make sure we have the information necessary for the EIS. We ensure compliance with the National Environmental Policy Act the and the Federal Land Policy and Management Act and other special purpose laws.

The last thing we're going to do, we're also going to evaluate the proposed project, reasonable alternatives, including the no action alternative.

The BLM is going to evaluate the Resource Management Plan Amendment, or RMPA, that I mentioned earlier, to modify the Visual Resource Management class in order for the BLM to evaluate the established Ivanpah Transportation and Utility Corridor under Public Law 107-282. And that will

require an amendment to the existing 1998 Las Vegas Resource Management Plan. Steve will talk about that in a little bit.

After that, we prepare and issue a Record of Decision. So, cooperating agencies. We have two cooperating agencies, the Federal Highway Administration and Nevada Department of Transportation. The purpose of that is because Clark County is going to construct -- proposed to construct a new interchange and modify an existing interchange. Both Federal Highway Administration and NDOT have specific actions in order for that to occur.

The consulting team of Landrum & Brown, they report to the JLA. They work under our supervision. So under the supervision of both the FAA and the Bureau of Land Management. They conduct the impact analysis, they provide subject matter experts, they assist us with preparing the documentation itself. They also help plan and conduct the public outreach, like this meeting and the meeting we had yesterday virtually and another meeting that we're going to have in Primm tomorrow.

And again, as I mentioned, they have the subject matter experts with specific field work.

Clark County Department of Aviation, they are the sponsor or the owner of the proposed airport. They also own the other airports in the area: Harry Reid International, North Las Vegas Airport, Henderson Executive Airport, Jean Sport Aviation Field, Overton Perkins Field.

They are providing to us the planning, design, and other information that we need to evaluate their proposal. They are also a participating agency, along with a number of others which I will show you in a moment, in preparing the EIS/RMPA.

These are the 12 participating agencies we have. I'm going to -- for those that might have a hard time reading it in the back of the room: The National Park Service, Environmental Protection Agency, the U.S. Fish and Wildlife Service, Nevada Department of Wildlife, Nevada Department of Environmental Protection, Nevada Division of Forestry, Nevada State Historic Preservation Office, the Nevada Division of Natural Heritage, the Regional Transportation Commission of Southern Nevada, the Clark County Department of Environment and Sustainability, the Clark County Regional Flood Control District, and the Clark County Department of

Aviation.

Now we're going to look at here -- this is how we're going to get us from where we started to where we are now.

The project started with the 2000 Act -- the 2000 Act, the Ivanpah Valley Airport Public Lands Transfers Act, we call it -- for short it's Public Law 106-362.

In 2000, we will also mention that Clark County -- the BLM conveyed approximately 6,000 acres, actually 5,752 acres to Clark County for the proposed airport. I'm going to show you a drawing that will show that in just a moment.

So, there's other -- they had other activities that are going on in 2001, 2002. The thing I want to bring to your attention, you might remember, hey, wait a minute. Didn't you start this back in 2006? Well, yes, we did. And we issued a Notice of Intent, both the FAA along with the BLM, issued a Notice of Intent to start an EIS in 2006. We conducted scoping and then we issued a Purpose and Need working paper and an alternatives working paper in 2008.

In 2010, the effects of the recession that many of you might remember, had a lot of adverse

effects here. And Clark County asked us to stop the EIS at that point, and so we suspended the EIS.

In the ensuing time, you'll see at the bottom, the National Defense Authorization Act, that is law that indicates transfer of some other lands for flood control measures at such time as they're needed. That will be transferred to Clark County, or conveyed is the appropriate term, conveyed to Clark County after a positive Record of Decision is issued.

So in 2018 to 2023, Clark County was updating their planning for the proposed new airport. In 2024, the Joint Lead Agencies started -- we restarted the environmental process. We selected Landrum & Brown to assist us, and then we started this very process here on May 19, 2025, with a Notice of Intent, that's what NOI stands for, in the Federal Register. And also in the local newspaper.

What I was saying, and I want to point out, at the bottom in the lower right-hand corner, you'll see Nevada Senate Bill 19. I'm going to point that out to you in just a moment.

So, Clark County's preliminary purpose is to accommodate the aviation demand in the Las Vegas

Metropolitan area, and meeting FAA airport design standards in protecting the airspace from obstacle encroachment, and provide for safe and efficient flight procedures.

The need that Clark County's identified is insufficient facilities to accommodate the future aviation demand in the Las Vegas metropolitan area, and comply with Public Law 106-362. That's the 2000 Act for (indiscernible).

So, the FAA's purpose, our statutory mission, is to ensure the safe and efficient use of navigable airspace in the United States. That's the specific citation of where under law that we do that. Our need is to ensure that the airport provides a safe and efficient design under the FAA Act of 1958, and meets our FAA airport design standards. And we also need to comply with Public Law 106-362.

I'm going to turn this next over to Steve.

MR. LESLIE: Thanks, Dave.

So, for the BLM as Joint Lead Agency with the Federal Aviation Administration, our purpose is to convey the identified federal lands to facilitate development of the Southern Nevada Supplemental Airport.

And our need comes from the three public laws: 106-362, 107-282, and 113-291. So, provided the conditions set forth in those public laws are met, and also to meet agency responsibilities required by Federal Land Policy and Management Act of 1976. Our need is also, as Dave has mentioned, to evaluate the need for an amendment to the 1998 Las Vegas Resource Management Plan that would potentially modify the Visual Resource Management class within the established Ivanpah transportation and utility corridor that goes between the proposed airport and Las Vegas, along the east side of the I-15. Thank you.

MR. KESSLER: Now, as I mentioned earlier, we have two cooperating agencies, the Federal Highway Administration and NDOT, Nevada Department of Transportation. Their needs -- what we have to do, as you see at the top, for the Federal Highway Administration is to ensure that the roadways and highways are the safest and most technologically sound in the world, and consistent with the U.S. code as written up there.

Federal Highway -- again, the same thing. Federal highways and NDOT need to review and approve the design of the new interchange and the

modification to the existing interchange that's going to serve the new airport.

Now, we have a range of alternatives that we've identified so far, and than includes the no action alternative, other modes of transportation. For example, you see the intercity bus that we have in the picture up above, air traffic demand management strategies, enhancement of existing airports including the use of advanced technologies, and the last alternative of construction of the new airport.

Now, what I'm show you -- and again these slides might be difficult to see. From the back of the room you're not going to be able to read the word. We do have them up around the room here. So, a couple things. I want to make sure it's clear to understand that this new airport is in addition to Harry Reid International Airport. It is not a replacement, it is a supplemental airport located about 35 miles southwest of downtown Las Vegas, about six miles north of Primm. So not far from the California-Nevada line. And again, as I mentioned earlier, 5,752 acres, which we commonly -- and you'll see this when we get our document, commonly referred to as the 6,000 acre parcel.

Little bit closer view. So, I'm going to try to use my pointer here, see if that's successful or not. How about that; nice little red dot.

So, what I'm going to show you here, a couple things. We'll zoom up on this. The Transportation Utility Corridor on the east side of Interstate 15, not on the west side. So that Transportation Utility Corridor here, the 6,000 acres is this area right in through here, where the airport is -- again, I'll zoom up on it.

A couple things I want to bring to your attention. I mentioned Senate Bill 19. If you look at this light green line with the curved borders, this is a township created by the state legislature that will give Clark County the land use authority to control the land use in that area to prevent inappropriate encroachment.

Another little thing I want to show you right here. This little light area, and we'll zoom up on that in a moment. That is for drainage mitigation, and will also provide the soil that we're going to use -- that the county is going to use to build a platform in which to build up the airport on the Roach Dry Lake, Platt.

Little bit closer view here, and again, I

have the -- we have the slides here on the presentation boards. So what you see here, this tan area here, this is commonly referred to as the 6,000 acre parcel. This is where the airport will be built, these two lines here, the long line here; one runway, the other runway. One is proposed to be 15,000 feet long, the other is about 12,000 feet long. 15,000 one would be used primarily for departures, 12,000 foot long one would be primarily for arrivals. The gray areas in here, these are taxiways and aircraft parking aprons. The black areas right here, these are going to be part concourse. Here, the initial -- this is looking at what -- at the moment, what the county is looking at for opening day.

And then just to the north of that we have a terminal building, parking area, and then the road -- access road in and out of the airport here. The primary access into the airport will be from the north to that interchange near Jean that will be modified.

The other area -- again, this is a basin. We call this the north basin. It will be a basin to collect waters from storm events that will come down. And then the area here where the county can

then manage the water, as far as -- so we make sure that we do not induce and attract it to wildlife. There's also a couple on-airport basins that will also be used to manage the water at such time as when it rains.

Now, our environmental impact categories. Both the FAA and the BLM have specific environmental impact categories that we look at in our written guidance. What you're seeing here, all these different categories, I'm going to read them for those that might have a hard time reading in the back of the room.

We begin with the aviation emissions and air quality. Biologic resources, including fish, wildlife, and plants. That also includes special status species of flora and fauna. Think endangered species under the Federal Endangered Species Act, which is, again, we have threatened and endangered species. We have Department of Transportation Act, Section 4(f), parks and other recreation sources. Farmlands. Fuel and fire management. Geology and mineral resources. Hazardous materials, solid waste, and pollution prevention. Historical, architectural, archeological, and cultural resources. Land use and realty. Natural resources

and energy supply. National historic trails. Noise and noise compatible land use. Recreation. Socioeconomic and children's health and safety issues. Soils, vegetation, nonNative and noxious weeds. Visual effects, including light emissions and Visual Resource Management. Water resource, including wetlands, floodplains, surface water and groundwater. And finally, wild horses and burros. These are the impact categories that are combined for both the FAA and the Bureau of Land Management.

Now we're going to go to the process. This is the RMPA process.

MR. LESLIE: Thanks, Dave.

So, we've talked about a Resource Management Plan Amendment through the presentation. And just for some context. A Resource Management Plan is what provides the framework for BLM management of public lands under the principles of multiple use and sustained yield as mandated by the Federal Land Policy and Management Act.

In the case of southern Nevada, as I said before, this is the 1998 Las Vegas Resource Management Plan. Now, a plan amendment can be identified when there is a need to modify management or to accommodate a project that may result in a

change in the scope of resource uses, or a change in the decisions of the approved plan.

So, in the case of this project, we are evaluating the need to modify the Visual Resource Management class, and that's related to potential future development associated with the proposed supplemental airport within the Ivanpah Transportation and Utilities Corridor.

So, some important elements to highlight about the amendment process. So, similar to the National Environmental Policy Act, it does use an interdisciplinary approach. Provides for the meaningful involvement of our federal, state, county, local, and tribal government partners. It also provides opportunities for meaningful public participation, such as during these meetings associated with the public scoping process. And is prepared in compliance with the National Environmental Policy Act as part of it. And as part of the amendment process, the BLM does develop and review planning criteria.

And then Dave had mentioned this earlier, it also includes a protest period of those planning decisions, as well as time for a governor's consistency review of the decisions for various

state plans.

And then I just want to highlight. A plan amendment is only approved when a Record of Decision is signed to adopt that proposed amendment.

So, as part of the amendment process, we are required to develop planning criteria, and this is as a guide that helps us lay the groundwork for effects analysis.

And so BLM has identified the three preliminary planning criteria on the slide, and I'll point out, as Dave has, we also have a poster at the back of the room there.

The preliminary planning criteria here, again, have been developed to guide the process. And they can be modified, and we can also identify additional criteria through this public scoping process.

So with that, I'm going to turn it back over to Dave for the rest of the presentation. Thank you.

MR. KESSLER: Thanks, Steve.

Okay. Now, you'll see this board, this flag here, which we have a board right there near the door. So where we are, we published the notice -- it helps if I push the correct button,

too. Right here on May 19, 2025, we published a notice of -- you'll see it says notice of cancellation, notice of intent. Cancellation. We canceled the old EIS that we started in 2006. We had to draw a bright line to terminate that process and then start the new process right now, consistent with the National Environmental Policy Act.

So now, the sign here where it says we're here, this is where we are, we're conducting the public and agency scoping. So we're finding out information that we need to include in the EIS.

So after that -- after tonight's hearing -- or excuse me, tonight's meeting and then tomorrow's meeting, we go back and start to work to prepare the document. That includes field work, coordination with other agencies, and to prepare the document itself.

Then, as I mentioned at the beginning, we have published a notice of availability of the document. Then we have the comment period on that. It will be a 90-day comment period. Then we will conduct a public hearing. And that will be no less than 30 days after we've made the document available. After the comment period is over, we'll then prepare the final EIS/RMPA, publish the notice

of availability, then as Steve mentioned, they have the BLM's protest period and the governor's consistency review. Following that, we'll issue a Record of Decision.

So now, here's the timeline of what we were looking at. So again, starting May 19th, just a couple months ago. Here we are, July, this is where we are right now. Then this time period, this long bar here, this is preparing the document itself. So we're looking to -- we're aiming for publishing sometime around June of 2027. So about two years from now. So then, as I mentioned, public hearing about -- no sooner than a month after that. Then we prepare this green bar here, then we prepare the final document, publish it. We're looking at that around March of '28. Beginning the protest period and the governor's consistency review in March of '28. And then in May of 2028 issuing the Record of Decision.

Now, here's a couple things for comments. This is why we've asked you to come tonight. You can either give us comments in person today. So if you're going to give us a verbal comment, please sign up on the sign-in sheet, again, so we make sure we can get that for the court reporter. We have the

comment attributed to the correct person.

We have comment forms and we have boxes in the back. We have -- we do have cards that you can take home. It's got a QR code. You can use that for smart phones. And then you can e-mail to us or you can also send us -- you can send us an e-mail. Again, snsaeis@landrumbrown.com. And then you can send a letter to us at Landrum & Brown's address. We also have an EIS website, snvairporteis.com. So this presentation we're going to get that up on the website probably sometime next week.

Again, contact information for myself, Dave Kessler, and Joanie Guerrero, she's our BLM contact individual. And our project e-mail address. Again, snsaeis@landrumbrown.com.

Now, questions.

MS. CARTER: I have a lot of questions, but start with a question --

MR. KESSLER: Let me give you the microphone.

MS. CARTER: I have questions and comments. But my first question is: Where is the court reporter and who do you sign up with? Because that wasn't given -- information was not given to at least several of us when we walked in the room.

MR. KESSLER: The court reporter -- wave -- is in back. The court reporter is in the back in the corner. And the sign-in sheet, right back there where she's waving her hand.

MS. CARTER: Is that the same sign-up sheet we signed as we walked in?

MR. KESSLER: No.

MS. CARTER: Okay. That was not made clear. So it needs to be made clear that it's a separate --

MR. KESSLER: I'll make sure we take care of that.

MS. CARTER: I don't know when it's appropriate to make comments or questions.

MR. KESSLER: Now is good.

MS. CARTER: My name is Janet Carter.

This is not really a comment as much as a question. I see a lot of mention here about the I-15 interchange. My concern is with public transportation, among other things. And with transit in general. And I'm wondering, yeah, we can talk about the interchange, but are we talking about the traffic on I-15 itself? Shouldn't that be part of the scoping and how it might be affected by this airport?

MR. KESSLER: That's a good comment.
MS. CARTER: That's more of a question.
MR. KESSLER: Now, what we're going to do here. I have some other things I wanted to get across to everybody here.
So as I did mention, the court reporter is in the back in the corner, so thank you, very much. If you have the opportunity, you can sign up to have your verbal comment recorded. We're going to call anybody that wants to do that. We can call them in order to do that. If you have -- we'd like you to limit your verbal comments to three minutes to give everybody the opportunity to say something.
If you need more than three minutes, we're asking you to write the comment down. We have comment sheets. You may take them home and write the comment out if you want to do that more fully, you can mail them back to us. As I mentioned earlier, you can also send them to us in the e-mail.
Comments are due -- here's the thing I want you to pay attention to. Comments are due by Friday, September 5th, 2025. So you can -- you don't have to do it just tonight. Tonight is not the only time. You can go home, think about it, send us a comment, and then you can do that -- but

please send it to us by September 5th, 2025.

So, as I said you can e-mail it -- and some people may be uncomfortable speaking in front of the public. And, so, again, take the opportunity. We want to get your comment.

UNIDENTIFIED SPEAKER: Yes. This adjunct airport to Harry Reid, what capacity of planes can it carry? So, is this going to be an international airport or is this a regional airport?

MR. KESSLER: I'm going to have the county folks, they can talk to you about that after we're done with this.

In fact, what I'd like to do now is, I would, you know -- have a comment? Just a second. Do you have a question? Comment?

UNIDENTIFIED SPEAKER: There hasn't been a single word about how much this thing is costing. How much has it cost so far to go through this, what, 20-year process of achieving nothing, and now starting new process. What's the end cost of all this?

And I would point out that we have a number of airports in this -- in southern Nevada already. And they're mainly used for creating wars all over the world. And I think that's going to

come to an end. Why not think about using one of those airports?

MR. KESSLER: All right. Give us your name, too, if you could, please.

MS. YAN: Minjia Yan, M-i-n-j-i-a Y-a-n. My question is about when it first started back in 2000 for the Lands Act, was there a capacity study at the existing airport, and has it been updated in the past 30 years? And has it accounted, the fact that we're now building a high-speed rail connecting to California and how much of those passenger value will be absorbed by the high-speed train instead of existing McCarran airport and how that affects the capacity of the existing airport. And Terminal 3 did not expand it when that first capacity study came out in early 2000. So I'm just trying to figure out, this plan came up 30 years ago, and have we been updated. And if the numbers, the capacity analysis of the existing airport.

And my second question, already asked, how much does it cost? Where is the money coming from? And what is the financial fiscal impact of Clark County and our taxpayers' dollars?

MR. KESSLER: Very good. Very good questions, thank you.

So now, what we're going to do here, we're getting information for the scope. And what I'm going to invite you to do is, we have subject matter experts standing next to the boards. They can be able to respond to the questions -- answer your question. I don't have the answer to your specific question, because the county is deciding on how they're going to -- what they're going to fund, how they're going to fund it, that comes from Clark County.

UNIDENTIFIED SPEAKER: How much has been spent so far?

MR. KESSLER: I can't give you that answer because I don't know. I don't have a number for that.

What I'm going to invite you to do, we have a question over here. After that, we're going to invite everybody to come up and take a look at the --

UNIDENTIFIED SPEAKER: We have a few people.

MR. KESSLER: There are a few. Okay, go ahead.

UNIDENTIFIED SPEAKER: Thank you.

Your alternatives paper that you have from

2006, 2010, where is that available to see what you did?

MR. KESSLER: We did that back in -- I don't have it online any more. I have to go back and go get that. That was essentially -- it was a different proposal than -- but is similar but not identical to what the county is doing now.

UNIDENTIFIED SPEAKER: If you could find a way to put that back up on the website, be curious to see that, as a former county commissioner that served at that time. I don't recall ever seeing it.

So secondarily, did I miss it on your third or fourth slide? I didn't see SNWA and I didn't see water recommendation -- water rec on your list. Is there a reason?

MR. KESSLER: Not particularly. They're not excluded on purpose or anything like that. I understand they're the water provider. And what we're looking at here is agencies that have a specific action in order for something -- an approval action.

UNIDENTIFIED SPEAKER: No, no, no. You're not going to be able to build crap without water. And you have the aquifer -- Ivanpah aquifer, which is one component. And then SNWA owns the Jean Water

Authority, okay? So they should be part of that. And water rec is going to be the key element for the effluent that has to be moved in and moved out. So my argument is, they should be automatically added onto that list.

MR. KESSLER: Okay, thank you.

UNIDENTIFIED SPEAKER: And then thirdly, you're doing a public hearing in Primm. Who do you expect to have testify?

MR. KESSLER: Whoever wants to come.

UNIDENTIFIED SPEAKER: They don't live there. I mean, it's kind of -- I know it's an impacted area, but really, who are you talking to? The outlet mall?

MR. KESSLER: It can be whoever wants to come from Primm that wants to come. We'll find out tomorrow --

UNIDENTIFIED SPEAKER: It's just ironic. To me, this valley is going to be impacted far more than -- nobody that lives there, okay? So, it would have been nice to have another public hearing in a place where people are actually affected.

Have you looked at the Henderson airport opportunity to expand anything there? Because I didn't see in your list, what is causing this now to

be restarted? Is it passenger? Is it cargo? What is -- what is county aviation saying is the reason to restart this? So I think that that's got to be answered. Because we need to know what the problem is.

MR. KESSLER: That's good. Thank you.

MS. CHASE: Hi. My name is Eva Olivia Chase. And I know this may not -- I'm just going to make this one statement, then I want to address what we're doing.

I'm running for District 16, and I got to tell you, got a lot of questions about the legitimate reason for this airport.

But my question to you is this: I'm an environmentalist. I work at Shark Reef Aquarium at Mandalay Bay. Been there 16 years in the education department. And we have endangered animals there. Why are we going to impact the desert tortoise and its habitat?

I noticed on one of your slides, correct me if I'm mistaken, but there wasn't anything carved out for the protection of the animals that live there. As far as I'm concerned, animals don't need an airplane. They don't fly, except if maybe they're birds.

So I guess the point I'm trying to make is, I believe that we can have expansion without -- at the expense of our environment.

And where is the water coming from? We have to think about a balance. And I have -- I don't see a lot of balance in this proposal. I see it being more of a sprawl and one way.

So my question is: Do you have any provisions to protect the endangered animals that this airport might be impacting.

Thank you.

MR. KESSLER: Thank you for coming.

Down in the back, you've been very patient.

UNIDENTIFIED SPEAKER: Hi. I am curious about the range of alternatives. (Indiscernible) one of the things listed is, like, advanced technologies and possibly improving existing airports. That is a bit vague. I was wondering who I could talk to about that or where I could find more information on that.

MR. KESSLER: We have -- again, we can invite everybody to come up. We have boards.

We'll get to you in just a second.

Then what we'll do again, what we're doing

tonight is getting the scope of information. So far the comments have been very good comments tonight. I really appreciate that. The things we make sure we -- topics that we cover. So, thank you, very much, as far as explaining that.

UNIDENTIFIED SPEAKER: So I've heard a number of questions, and you referred to all the experts that are here. Would it be possible to pass the microphone amongst these experts? They may say, here, I'm tasked with this kind of question and therefore, we can all benefit, rather than kind of wander around and maybe go to the wrong person? Very minimal presentation by all the experts might be very helpful.

MR. KESSLER: I don't have a problem -- if you have a specific question we can go do that. So if you have a question, go ahead and raise your hand, give us your name, and then we can proceed on, we'll see what we can do with the response to the question.

Again, our goal again tonight is to get the scope of the EIS. Things that we need to evaluate in the document itself.

MS. BALEEN: My question -- my name is (indiscernible) Baleen (ph). And I want to ask you,

what type of environmental assessment has been completed in this project?

MR. KESSLER: We have not completed an environmental -- what we're doing, we're starting that now.

MR. LESLIE: We have a question over here. I see a few hands up.

MR. HYATT: Good evening. My name is John Hyatt. I was involved with the BLM for quite a while. I was on an advisory panel. And one of the things that came up at that point in time when this airport was first proposed was, that the Roach Dry Lake is dry today. It isn't always dry. And with climate change, we can see record amounts of water in that.

That -- that excavation that you showed which would serve both as a retention pond and as a source of dirt for the runways. People need to know that most of the earth there in Roach Dry Lake is what is colloquially known as puff dirt. It's not stable. And so to do this will involve one of the most massive earthmoving projects certainly in the history of Clark County, if not all of Nevada. And will cost a lot more than you think it will cost.

When this was first proposed, Randy

Walker, Air Force person -- director said, we can build that for 500 million. He said that the same day they were spending a billion to build Terminal 3. The Denver airport -- the new Denver airport was proposed at two and a half billion. 12 and a half billion later, they were still working and spending money on that.

Whatever you're proposing here for cost, you can multiply that by some integral figure and that will be more likely what it will cost. I don't see anybody really seriously talking about that. We need to be discussing these things.

Thank you.

MR. KESSLER: Over there. She had her hand up.

UNIDENTIFIED SPEAKER: Thank you.

I just wanted to reiterate the -- I wanted to reiterate that I'd like additional information regarding the need that Clark County is saying we have for this airport. Currently our airport travel is down this year. So not only what the scope is of the Environmental Impact Statement, but also, just what's causing the need for this.

How can we -- to reiterate, this was the same question, how can we evaluate our options if we

don't better understand what this need is? And if we're saying there's a future aviation need, what is that based on? Because we all know we cannot predict the future. So what facts is this based on so we can evaluate the options better?

MR. KESSLER: Thank you.

MR. LESLIE: Dave, maybe we'll catch that, and then people have signed up to give comments, so probably want to transition to that.

MR. KESSLER: Let's catch yours and then we'll transition.

UNIDENTIFIED SPEAKER: In addition to the issue of the quality of the -- of the dirt that's in that that has to be moved or done something with, when that lake, it's actually a dry lake, when it fills, and if the water will stay a couple weeks, little animals come up out of the -- from underneath. And I'm wondering who studies those? They -- a lot of them look like prehistoric fish of some type, and people don't realize that that's a habitat, really.

MR. KESSLER: Thank you.

Now we're going to go ahead and transition over to our boards. So I'm going to invite everybody to come up. If you have a question for

our panel -- our members that we have here, go ahead and raise your hand and we'll see what we can do to get an answer to your response -- response to your question.

UNIDENTIFIED SPEAKER: They're not here, but I would ask SNWA, or Las Vegas Valley Water department to question -- for those who believe in coincidences, there is a proposed tunnel for going underneath Sloan National Conservation Area. Allegedly -- or purportedly to be used for southern Henderson in the event of some sort of emergency.

But it's just funny that it's going to pop out near the 15, ten miles, 15 miles north of this project now. And they're not here to talk about the water situation in the valley right now.

And it's been reported in the RJ, we're looking at a critical low level next year. We're still talking about sprawl, like, who's, like -- is anybody paying attention? Perhaps there is a need, but maybe this needs to be delayed. Until we get a better fixture on the water situation. Who aren't invited to this meeting.

So I think it's really important that we keep this in mind in regards to air quality, quality of life that this is going to have. Got a lot of

county officials here who are responsible for that. You know, I occasionally have to go for work to the Kern freight area at McCarran -- Harry Reid. And it's busy in the morning. I know those vehicles are coming on the highway from around the valley to get frozen fish and flowers and other perishable goods, as well as FedEx and all our goodies for Amazon.

But all that extra traffic is going to be -- they're, like, creating a need that isn't needed. So they're going to be going down the 15, creating more traffic on the highway in the mornings, that right now, nobody's demonstrated there's a need.

And again, no water authority here to talk about our No. 1 diminishing resource. And you all are planning it, like, you know, it's 1975.

That is my comment.

MR. KESSLER: Thank you.

MS. YAN: Thank you. Hi, it's Minjia again.

I have a comment about the environmental impact categories, that board. In addition to the airport itself, I'm also curious about the surrounding commercial and residential land use lands based on the senate bill that designated the

green line. And how all of these developments impact our urban island effect. And I'm not sure whether urban heat is one of the environmental impacts on that bullet point. Because Las Vegas is one of of the fastest warming cities in the country. And it's actually disproportionately impact low income areas like here in east Las Vegas.

And I would also like to offer, if you want to do another meeting, I would like to help you and collaborate with you to do it in Chinatown. I think there's a lot of residents and taxpayers who want to be curious about where are we subsidizing all these infrastructure costs using taxpayer dollars. And why can't we upgrade our existing neighborhoods that's much needed to help.

Thank you.

MR. KESSLER: Thank you, very much.

Now I'm going to invite everybody to go ahead, get up, take a look at the different boards. And we'll get -- again, if you have a verbal comment, you can go ahead and talk to our -- give that to our court reporter. If you have a written comment, you can put that down or take it home and mail it to us later.

...

STATEMENTS TO COURT REPORTER

MR. BRADLEY: My name is Will Bradley. I'm a lieutenant colonel retired from the United States Army. One of my jobs in the Army was as a safety specialist in both ground and air operations, and I'm currently a professional pilot.

This is my personal opinion that I'm giving today. I see many problems for safety with this new airport as it's described at the current location. From pilot safety air operations, we don't like -- most pilots, I'm speaking for myself, do not like parallel runways so close to a busy interstate. It creates confusion, light pollution. It can create crashes on the highway when people are looking at low-flying planes over the highway. In fact, on the way here today, I passed a three-car pileup probably from distracted driving.

The runways at the new location are the same designation, 1 Left and 1 Right as the runways at Harry Reid airport. That's going to create confusion among pilots. And overlapping air traffic, which will be -- we see as very hard to manage with increased visibility on midairs that have been happening lately.

So we ask that the -- or I ask that the

parallel runways as they're laid out now are further from the interstate, further east from the interstate, and they're angled differently so they do not have the same numbers as the parallel runways at Reid. So I suggest Runway 2 and Runway 3, not 1 Left and 1 Right.

The distance, without public transportation, getting pilots who probably live in Vegas proper to get to the airport to originate these flights, it adds to our fatigue. A lot of times there's early morning departures. Any time you make a pilot drive further than normal, it can add to fatigue for a 35 mile drive from our homes to the new airport. But that can be mitigated with public transportation, of which there is not a plan that I've seen to do so.

I'm also against the project where it's planned. I can't believe, with living in America, that we cannot make this happen at a current airport, like North Las Vegas. But I'm afraid some politics got involved. So my question is: Was the fix in? Were the consultants told, we're going with this new site, make it work. Or were they truly given a choice to make the best choice based on economics, and these other air operations? Because

everything -- nothing is as important as safety. Because we do realize the county and city are in competition. So if they made this airport North Las Vegas, that would benefit the city, because Fremont casinos are closer to the North Las Vegas airport.

So, just some concerns that I'd like for the committee to look at. That's it. Thanks.

MS. CARTER: My name is Janet Carter. J-a-n-e-t C-a-r-t-e-r. I live in Las Vegas, the city of Las Vegas.

I travel frequently through the airport here. I'm at the airport traveling at least once a month, more like twice or three times.

I'm not sure that I really see the need for this new airport. In terms of use and in terms of crowds and everything else. There are ways it could be better designed, but I'm not sure I've seen the need. So I want to look at that carefully.

But putting that aside, I think there's three issues that need to be addressed. And none of them, to me, have been properly addressed in what I've heard today. So I want to make sure that the scoping looks at them.

The No. 1, of course, is water. Water has -- is a huge issue in this city. We do not have

the water that some people think we may. People see that we have water coming from the dam and assume it's all coming to us. It does not. Less than five percent of the water that comes through that dam comes to the city of Las Vegas.

We've been very lucky to conserve water and to be where we're at. But it's not going to last forever, and the water supplies -- the lake is going down, the water supplies, the aquifers may be affected. And that's a huge concern with me.

My second concern is wildlife. The only wildlife I saw mentioned in that scoping comment -- proposal, was burros and wild horses. How about the tortoises? What about the other wildlife? There's many endemic species in the area. How will they be affected?

But finally, my biggest concern is transportation. We heard a lot of talk about increasing the I-15 interchange, but we heard nothing about I-15 itself. I-15 is already overcrowded. It's already a parking lot at times. Particularly with people coming from California. There's a new ballpark going in right by I-15, that people coming from California may be going to that airport, would probably be going to games there.

Along with the ballpark that already exists. What will this do in terms of traffic? What will traffic from the airport do? Is there going to be -- how is that going to be handled?

Ideally, we need high-speed rail going back and forth. If we don't have some way to -- if we can click into the Brightline, fine. If we don't, how are we going to get people from that airport to the other airport, for example? Or from that airport to downtown without causing a huge increase in the already overcrowded highway 15 traffic.

That's the issue, is we need -- we need public transportation for a lot of reasons, not the least of which is controlling air pollution. But just in terms of the volume of traffic itself. I don't believe I-15 as it exists today can handle the traffic from another airport with all the increased proposed growth and all the increased traffic that's coming from other factors, such as the new ballpark, there's a university there, et cetera, et cetera, et cetera.

There's a lot going on there in terms of traffic that needs to be looked at. And there needs to be accessible, frequent, and usable public

transportation that needs to be addressed in the scoping comments. That needs to be addressed. Is the need for mitigating the effect on I-15 traffic, as well as creating alternative means of transit to preserve the air environment, to preserve air quality in the valley. Because this will impact air quality in the valley.

That's my concern. Is transit and specific -- the I-15 corridor. Not just the interchanges, the whole road, all the way up to downtown Las Vegas.

That's all I have to say.

MR. SPOTLESON: Vinny Spotleson, V-i-n-n-y S-p-o-t-l-e-s-o-n. I live in Las Vegas at 89123.

My scoping comments are in the omission of Southern Nevada Water Authority and the Clark County Water Reclamation District. They should be cooperating agencies because there is not water in Primm.

If this airport was built, the well would come up dry. So right now, Southern Nevada Water Authority is planning on -- and it has planned on bringing a pipeline down to Primm. And they would be asking the Clark County Water Reclamation District to pump sewage out of that valley.

My understanding is that Clark County Water Reclamation District does not think it's feasible to pump uphill for 30 miles raw sewage back into the valley. But also, that this cannot be built if that doesn't happen.

So what is the situation around water? What's the plan for water? And how could this project even happen if that's not all figured out? And then, of course, the associated costs that go with all of the water infrastructure. And is the FAA paying that? Is Clark County paying that? Et cetera.

Thank you.

MS. CHASE: Eva Olivia Chase. I am Olivia Chase. And I am a candidate for Nevada State Assembly District 16 in 2026. I had 27 percent of the vote, or 665 votes in the democratic primary in 2024. And I'm a progressive democrat, a U.S. Air Force veteran, college graduate, and a fully transitioned transwoman.

Now, I work in the education department at Mandalay Bay at Shark Reef Aquarium. I've been in Vegas almost 18 years.

For me, I believe we need to protect the environmental integrity of the proposed area for the

new airport. We have -- we have species that depend on that area for their survival. I also have concern, where is the water going to be coming from. We are in extreme drought, and Lake Mead is shrinking rapidly. So that is a concern.

Also, what about any type of transit, public transit that could go out there? I don't think there are any proposed RTC routes. And there's not a rail that would go out to any existing new airports. Harry Reid is good airport. It's being added onto. And unless we get a surge in some type of tourism, and it's down by 15 percent, I don't really see a need for another airport.

So if I had the opportunity to go to Carson City representing District 16, I would probably be opposing a new airport until other factors were considered to make it more viable.

Las Vegas already has other airports. We've already got those. Maybe we should -- putting our -- maybe expand on the existing airports rather than putting an airport 30 miles away from Las Vegas. That makes more sense. So all it does is create more urban sprawl, which is not a good idea.

And the other thing about a new airport

would be, it would have to -- how many passengers would it accommodate? So, there's a lot of studies that need to be done, but we really need to protect our land and have a balance of development and environmental concerns moving forward.

MS. GUINCHIGLIANI: Chris Guinchigliani. G-i-u-n-c-h-i-g-l-i-a-n-i.

I submitted written comments, but I was just finding out that there was a site selection study done in 2005 by the county and the airport environs. I'd like -- it's not on the website any longer, so it needs to be included or maybe something that can be put up on a site that we could look at.

Because we need to know, did they talk to Nellis? Was Nellis Air Force Base a possibility to be able to work in conjunction? Was Laughlin looked at? Were there other areas other than Ivanpah that Randy Walker first identified in 2001? So, trying to find where that documentation was would be very helpful.

In addition to that, again, the impact, what are we trying to fix? No one's really identified the problem, at least to the constituents or to the public. What is it we're trying to fix?

Is it more passenger capacity? Is it commercial? Is it both?

What alternatives? How have we looked at our -- majority of people, 80 percent used to be -- came from California. Are there other alternative transit plans that we can maybe look at that would be less expensive that wouldn't trigger another airport being needed, if we can move that majority of that base in a different way.

Simply adding two runways. It's -- it mushroomed from a projected $2 billion back in '05 or '6, to 7.7 billion already, and that was in 2010. What's it going to be for this other potential layout? And then who's on the hook? Is it bonding? What are the public going to have to pay on that part of it? Because the airport cannot capture fees until after it's built, then they can align that in with what they charge airlines. But they can't do it on the front end, they have to wait until it's actually in play. And then they have to be competitive with other airports around the U.S.

I guess FAA weighed in, saying that they think it's going to be close to capacity, and that's maybe what's triggering it again. But again, we have not seen any documentation on that.

(End of public comments.)

MR. KESSLER: I'd like to ask if anyone else has not had the opportunity to speak concerning the scope of the information to be included in the draft of the EIS/RMPA. The gentleman back in the back.

I'm going to go like this, because the gentleman in back, I know I'm not seeing anyone. But in all seriousness, I'll remind everybody, if you feel that you're unable to provide comments today verbally, we'll be accepting written comments until Friday, September the 5th, 2025. You can e-mail them to us here at the e-mail address at the top SNSAEIS@landrumbrown.com. You can also mail them to the address as well. We ask that you send them to us by Friday, September the 5th, 2025.

I want to thank everybody for their comments tonight. The public meeting for scoping for the EIS/RMPA for the proposed Southern Nevada Supplemental Airport is now concluded.

Thank you.

(Proceedings concluded at 7:00 p.m.)

REPORTER'S CERTIFICATE.

STATE OF NEVADA)
) ss
COUNTY OF CLARK)

I, Tracy A. Manning, a duly commissioned Certified Court Reporter, Clark County, State of Nevada, do hereby certify:

That I reported the taking of the proceedings, at the time and place aforesaid;

That I thereafter transcribed my said shorthand notes into typewriting and that the typewritten transcript of said proceeding is a complete, true and accurate record of statements provided by the parties at said time to the best of my ability.

I further certify that I am not a relative, employee, or independent contractor of counsel of any of the parties involved in said action; nor a person financially interested in the action; nor do I have any other relationship with any of the parties or with counsel of any of the parties involved in the action that may reasonably cause my impartiality to be questioned.

IN WITNESS WHEREOF, I have hereunto set my hand in the County of Clark, State of Nevada, this 5th day of August 2025.

Tracy A Manning

Tracy A. Manning, CCR 785

IN RE: SOUTHERN NEVADA SUPPLEMENTAL AIRPORT

PUBLIC SCOPING MEETING

Taken on Thursday, July 31, 2025

At 6:10 p.m.

At 31900 South Las Vegas Boulevard

Primm, Nevada

Job No. 61270, Firm No. 116F

Reported by: Tracy A. Manning, CCR 785

SPEAKERS:

DAVID KESSLER: Environmental Protection Specialist for the Airports Division of the Federal Aviation Administration

STEPHEN LESLIE: Acting Deputy District Manager for the Bureau of Land Management

STATEMENTS:

Carol Kruep

Vinny Spotleson

Robert Scholes

Mark Silverstein

THURSDAY, JULY 31, 2025

MR. KESSLER: All right. Good evening, ladies and gentlemen. My name is Dave Kessler. I'm an Environmental Protection Specialist from the Airports Division of the Federal Aviation Administration, Western Region, in Los Angeles. I'd like to welcome you to our third public scoping meeting that the FAA and Bureau of Land Management, or BLM, as the Joint Lead Agencies, or JLA, are conducting today for the draft Environmental Impact Statement, or EIS, and Resource Management Plan Amendment, or RMPA, for the proposed Southern Nevada Supplemental Airport Project.

These public meetings are being conducted to collect comments from the public, local interest groups, and government agencies concerning the scope of the EIS/RMPA. The JLA is preparing this EIS/RMPA in accordance with federal legislation known as the National Environmental Policy Act of 1969 as amended, or NEPA. And the Ivanpah Valley Airport Public Lands Transfer Act of 2000. The JLA announced a notice of intent to prepare the EIS/RMPA in the May 19, 2025 issue of the Federal Register.

As I mentioned, the FAA and the BLM are

joint lead agencies in the preparation of the draft EIS/RMPA. The FAA is the administrative lead for the JLA.

The proposed project includes a transfer of land from the BLM to Clark County for the proposed airport itself, a noise compatibility area around the airport, and for the management of flood waters in the area.

The county's proposal also includes construction of the new interchange and modification of another interchange on Interstate 15 for the new airport.

Therefore, the JLA has invited the Federal Highway Administration, the Nevada Department of Transportation, to be cooperating agencies in preparation of the EIS/RMPA.

The JLA has selected Landrum & Brown as the third-party consultant to assist us in preparing this EIS/RMPA.

I would like to take this opportunity to make sure that everyone understands that no decisions will be made today regarding the proposed project. Our job is to listen to what you have to say about the scope of the information to be included in the draft EIS/RMPA. In other words,

it's your turn to talk to us.

Public scoping is a critical part of the federal environmental review process, and we value your input in helping us identify issues that need to be addressed in this EIS/RMPA.

When the draft EIS/RMPA is distributed for review, the U.S. Environmental Protection Agency, or USEPA, will publish a notice of availability of the draft EIS/RMPA in the Federal Register. These types of notices are usually published in the Federal Register on Fridays.

Following publication of the draft EIS/RMPA for comment, the next step in the federal environmental disclosure process is holding a public hearing on the adequacy of the information disclosed in the draft EIS/RMPA. The public hearing will be held during the public comment period of the EIS/RMPA. The notice of availability for the draft EIS and the time, date, and location of the hearing, will be published in the local newspaper. The JLA will provide at least 30 days' notice to the public of the public hearing.

After the public hearing has been held and the comment period has ended, we will then correct and revise the EIS/RMPA as necessary, based upon the

comments received. The JLA will also prepare responses to the comments we receive, and include them in the final EIS/RMPA.

When the final EIS/RMPA is published, the EPA will publish another notice of availability of the document in the Federal Register.

Following the BLM's protest period and governor's consistency review, the JLA will issue a record of decision.

Today, we are asking for your comments concerning the scope of the EIS/RMPA. The JLA will prepare the EIS/RMPA in accordance with its own written internal guidance to comply with the National Environmental Policy Act, or NEPA.

We have a presentation that I'm going to show you to help describe the proposed project and the federal environmental disclosure process.

After the presentation, you'll have an opportunity to speak to the JLA, subject matter experts, and representatives from Clark County by the presentation boards that we have here in the room.

We also have a court reporter that will listen and record your comments concerning scope of the EIS/RMPA. That will be after the presentation.

So I'm going to go ahead and start the slide show now.

So, this is me, I'm David Kessler with the FAA. Here on stage with me is Steve Leslie. Steve Leslie is the acting Deputy District Manager for the Bureau of Land Management. I presume that since we're relatively close, everyone can see the agenda here. So we have introductions. We're going to talk about the roles and responsibilities, the background, the environmental impact categories, and we're going to evaluate, and then the process and the schedule for the EIS/RMPA.

So, the role and responsibilities.

The FAA, as I mentioned, FAA and the BLM are Joint Lead Agencies for the preparation of the EIS/RMPA. We're -- the FAA is the lead, and we're going to prepare the document consistent with National Environmental Policy Act. We'll also coordinate, both agencies will coordinate and seek comments from federal, state, and local and tribal nations of information that we need to disclose in the EIS/RMPA. We have to ensure compliance with NEPA, the Federal Land Policy and Management Act, and other special purpose laws. We then evaluate the proposed project and reasonable alternatives,

including the no action alternative.

The BLM is going to evaluate the need for a Resource Management Plan Amendment, or RMPA, to modify the Visual Resource Management class in order to evaluate and establish the Ivanpah Transportation Facilities Corridor under Public Law 107-282. This will require amending the existing 1998 Las Vegas Resource Management Plan. Steve will talk about this in a few minutes. Then finally, the FAA and the BLM will issue -- prepare and issue a Record of Decision or ROD.

We have two cooperating agencies. The two cooperating agencies are the Federal Highway Administration and the Nevada Department of Transportation. The reason for this is under the FAA Act of -- Reauthorization Act of 2024, that cooperating agency has to have a specific approval action for that. In this case here, there's -- the action is a new interchange and modification of an existing interchange on Interstate 15 to service the new airport. That's why Federal Highway Administration and Nevada Department of Transportation are both cooperating agencies for this EIS/RMPA.

The consulting team report -- of Landrum &

Brown, report to the JLA. They work under the supervision of the JLA, and conduct environmental impact analysis and they support our coordination with different state and local agencies. They assist us in preparing the document itself. They also help us with meetings just like this one here, set up the meeting. And they provide us with subject matter experts on the various topics that we have to deal with field work.

The Clark County Department of Aviation, or CCDOA, they are the owner of the proponent of the proposed project. They own and operate Harry Reid International Airport, North Las Vegas Airport, Henderson Executive Airport, Jean Airport, and Overton Perkins Field.

They provide the JLA with supporting planning, design, and other information that will go into preparing the EIS/RMPA. The CCDOA is also a participating agency with the JLA in preparing the EIS/RMPA.

We have 12 identified participant agencies, and I'm going to go ahead and read this for those that might be -- again, we have -- this slide is on the boards we have here so you'll be able to take a closer look at it after the

presentation. So we have National Park Service, U.S. Wildlife Protection Agency, U.S. Fish and Wildlife Service, Nevada Department of Wildlife, Nevada Department of Environmental Protection, Nevada Division of Forestry, Nevada State Historic Preservation Office, the Nevada Division of Natural Heritage, the Regional Transportation Commission of Southern Nevada, the Clark County Department of Environment and Sustainability, Clark County Regional Flood Control District, and the Clark County Department of Aviation.

So, this gives us a little bit of history of where we are. So, we started where we did -- I'm going to do my best not to zap Steve with a little dot here. So I'll try this here. And I didn't get him, so that's good.

We started out here in the lower left corner, the Ivanpah Valley Public Airport -- Ivanpah Valley Airport Public Lands Transfer Act, or Public Law 106-362, which was enacted in 2000. What that did is, that then gave the BLM the authority to convey approximately 6,000 acres of land that is mostly in the Roach Dry Lake to Clark County under Public Law 106-362. So the actual 5,752 acres, that is what was conveyed to Clark County for the airport

itself.

So, there are a number of resolutions, a couple of other acts in here, and in 2006, the next thing I want to bring to your attention, 2006, some of you may remember, well, wait a minute, didn't we do this a long time ago? Yes, we did. What that was, was the JLA issued a Notice of Intent to prepare the EIS in 2006. From 2006 to 2010, the JLA published -- prepared and published a Purpose and Need working paper and an alternatives working paper. We did that in 2008.

And then due to the effects of the great recession, Clark County asked us to suspend the EIS at that time in 2010. In the ensuing time, the new act here, the 2015 National Defense Authorization Act, Public Law 113-291. What that did, that also conveys some parcels of land to the airport or to the -- to Clark County upon successful completion of a Record of Decision.

In 2018, county conducted a lot more planning efforts that brings us to here. I want to point your attention, you might be able to see it, folks back there, in the lower right-hand corner, the Senate Bill 19, I'm going to show you that in my slide here. That conveyed -- not conveyed, that

created a township around the noise compatibility area to give Clark County land use (indiscernible) of that area.

Where we are in 2024, we restarted the environmental process by selecting Landrum & Brown to assist us in preparing the EIS/RMPA.

On May 19th of this year, here in the upper right, May 19th, we issued the Notice of Intent. You'll also see in another slide the Notice of Cancellation. We had to cancel this process that we had only suspended, then formally turn the old process off and start the new process (indiscernible).

So, Clark County's preliminary purpose, and you'll notice that preliminary right here, that is to accommodate the future aviation demand in the Las Vegas metropolitan area, while meeting FAA airport design standards, and to protect the airspace from obstacle encroachment and provide for safe and efficient flight procedures.

The need for Clark County -- need that they described to us is insufficient facilities to accommodate future aviation demand in the Las Vegas Metropolitan area and comply with Public Law 106-362. Preliminary, what the county has to do,

they have to give us a formal Purpose of Need under the 2024 FAA Authorization Act that the FAA and BLM have to accept and approve.

FAA's purpose is to fulfill our statutory mission to ensure the safe and efficient use of navigable airspace in the United States. And I've given you, if somebody wants to look it up, the citation here, 49 U.S.C., Section 47101(a)(1). Our need is to ensure that the airport provides -- the new airport provides for safe and efficient use of the air transportation system pursuant to the FAA Act of 1958 and meets, as I mentioned earlier, FAA airport design standards, and also, our need is to comply with Public Law 106-362.

Now, I'm going to turn this over to Steve. He's going to describe the BLM's purpose.

MR. LESLIE: Thanks, Dave.

So, the BLM's purpose is to convey the identified lands in support of the development of the Southern Nevada Supplemental Airport. And our need is described by those three public laws that Dave has described earlier in the presentation, that describe the land transfer back in 2000, the (indiscernible) compatibilities, and any additional lands for flood control.

We also have a need to be in compliance with the Federal Land Policy and Management Act of 1976. And further, we will evaluate the need for the Resource Management Plan Amendment, to modify the original Resource Management class specific to the transportation and utility corridor identified between the proposed airport and Las Vegas valley on the east side of I-15.

So, thank you.

MR. KESSLER: This slide here, this describes our cooperating agencies purpose, the Federal Highway Administration and NDOT. The Federal Highway -- I'm going to go ahead and read this, because it might be difficult to read down there. The FHWA's purpose is to fulfill the FHWA's statutory mission to ensuring that America's roads and highways continue to be among the safest and most technologically sound in the world, as set forth under 23 U.S.C., that stand for United States Code, Section 111.

The need is to ensure that the proposed new interchange and modifications of the existing interchange on I-15 associated with the airport meets FHWA standards and also comply with 23 -- Title 23, Code of Federal Regulations - Highways.

For NDOT, their purpose is to provide, operate, and preserve a reliable and sustainable transportation in the State of Nevada that enhances safety, quality of life, and economic development through innovation and collaboration.

Their need is to ensure your airport and the proposed new interchanges and modifications to the existing interchanges, and potential modifications to Interstate 15 associated with the proposed supplemental airport, are in accordance with Nevada Revised Statutes Section 408.210 and 408.423 in the Nevada Administrative Code.

We have a range of alternatives that we've identified so far, that includes the no action alternative. Other modes of transportation similar to intercity bus that you see right here, air traffic command strategies, enhancement of existing airports, including the use of advanced technologies. We also have the alternative construction of the new airport.

Now, we've got -- again, don't worry too much about how you may be able to see this. I have boards around the room that you'll be able to see more closely.

So, we're taking a fairly high altitude

view here. We have Lake Mead over here to the east, Las Vegas in here, we have Henderson -- or the North Las Vegas Airport, Harry Reid International Airport, Henderson Airport, Jean Sport Aviation Field, and down here, this yellow parcel right here where my laser pointer is, that is the 6,000 acre -- approximately 6,000 acre site of the new airport.

So again, one thing I want to make sure that everybody understands, this is a supplemental airport, in addition to Harry Reid International. This is not a replacement airport. It's located -- it's about 35 miles southwest of downtown Las Vegas on the east side of I-15. About six miles south of Jean. And again, this is the acreage here that was conveyed from the BLM to CCDOA. Again, we commonly call it the 6,000 acre parcel.

Little bit closer few. What I want to show you, there's a couple things here, we'll get into different items that we have here that I mentioned to you.

I want to draw your attention here to this nice green line here. This is from Senate Bill 19, State Senate Bill 19. This creates a township that will provide Clark County with land use authority as far as any development within that area.

Inside of that green line, you see the black line, the dashed line. This is an area that's identified under Public Law 107-282 as a noise compatibility area. And that's approximately 17,000 acres.

The two interchange -- I'll show you, this square down here for the new interchange, up by Jean for modifications to the existing interchange. And I'll show you, again, what I want to show you, this light blue area here, this light blue area and this light blue area, these are that other -- that -- the defense act that I mentioned to you. This would, upon completion of the Record of Decision and a positive determination, the positive decision, that would convey these parcels to Clark County in the event it's needed for additional flood control measures.

Close up -- closer up view. What we have here are two runways, two parallel runways. This one here is approximately 15 -- proposed to be 15,000 feet long. This one here, approximately 12,000 feet long. The gray areas in here are taxiways and aircraft parking aprons. These black lines here, these are the concourses. Right up in here, the terminal, and parking and then the roadway

that gets back (indiscernible).

I want to draw your attention to this area right here. This is a flood basin that's called the North Basin. The intent for that is to build up a platform, an earthen platform here with soil from this area. It will be at least 25 feet deep. And the purpose of this is when it rains, water can come down (indiscernible) it will then be contained in here so the airport can manage the flood waters. That's the key thing, they can manage the flood water. There are also two basins on the airfield itself. They are also to be used to manage waters that would occur onto the platform itself.

Now, we're going to talk about the different environmental impact categories that we're going to include. The FAA and the BLM have, as I mentioned, our own internal guidance on how to do that. And it identifies the different environmental resources that we look at. This is in combination of both the FAA and BLM's environmental impact categories combined into one.

So we have aviation emissions and air quality. Biologic resources, including fish, wildlife, and plants. That also includes special status species, including threatened and endangered

species. Department of Transportation Act, Section 4(f). Parks and other recreation resources. Farmlands. Fuel and fire management. Geology and mineral resources. Hazardous materials and solid waste and pollution prevention. Historical, architectural, archeological, and cultural resources. Land use and realty. Natural resources and energy supply. National historic trails. Noise and noise compatible land use. Recreation. Socioeconomics and children's environmental health and safety risks. Soils, vegetation, nonNative, and noxious weeds. Visual effects, including light emissions and Visual Resource Management. Water resources, including wetlands, floodplains, surface water, and groundwater. And finally, also, wild horses and burros.

Now, in the process I'm going to have Steve describe to you the RMPA process.

MR. LESLIE: All right. Thank you, again, Dave.

So, Resource Management -- we're talking about a Resource Management Plan. That is the plan that provides the framework for the BLM's management of public lands under the principles of multiple use and sustained yield. And that is mandated under the

Federal Land Policy and Management Act.

In the case of southern Nevada and the Las Vegas field office, that land is the 1998 Las Vegas Resource Management Plan.

And so a Resource Management Plan Amendment is identified by -- there is a need to modify management or to accommodate a project that may result in the change of scope of resource uses or a change of the decisions that were made in the approved plan.

So, in the case of this project, we are evaluating the need to modify the visual resource management class. And again, that is specific to the potential future development within that established transportation utility corridor. Those are the lands that are not being conveyed, but would remain BLM lands for consideration of that future development.

Some of the important elements to highlight about the planning process, including the planned amendment process. Similar to the National Environmental Policy Act, we follow an interdisciplinary approach to that. We provide meaningful involvement -- provide for meaningful involvement of our federal, state, county, local,

and tribal governments. Provide opportunities for meaningful public participation, such as this public meeting and during the scoping process. It is prepared in compliance with the National Environmental Policy Act (indiscernible) together with the Environmental Impact Statement. It includes the development and review of the planning criteria.

And Dave mentioned earlier, there is a protest period on the planning decisions, as well as the governor's consistency review to allow the governor's office the opportunity to identify any concerns or conflicts with state and local plans.

I want to highlight that plan amendment is only approved when there is a Record of Decision that is signed that specifically adopts that amendment.

So, these are the preliminary planning criteria that the BLM has identified. And these are required in order to lay the groundwork for an effects analysis in the National Environmental Policy Act document. There is also a poster back there that has these three on there. And we identify these to help avoid unnecessary data collection and analysis in the process. And really

ensure that the amendment that is considered is catering to a specific issue and resources.

So these preliminary criteria have been identified early in the scoping process, but I do want to say that they can be modified and we can also identify additional criteria if we make that determination during this scoping process.

So with that, I'm going to turn it back over to Dave to finish up the rest of the presentation.

MR. KESSLER: Thank you, Steve.

All right. Now, we're -- here's the process. This is the environmental process.

So as I mentioned, we started this particular process on May 19, 2025. We issued a notice of cancellation, notice of intent. Again, notice of cancellation, that ended the process that we started in 2006. So a nice bright line between that process and now -- and the process we're starting right now.

So we're right -- as it says right here, we have a massive sign that says we are here. So we're conducting the public and agency scoping. We had -- we've had the agency scoping meeting, we had a virtual public scoping meeting, we had an

in-person scoping meeting in east Las Vegas last night, and we're having this one here tonight.

Scoping does not just stop tonight. That's something I really want to bring to your attention. Scoping does not stop tonight. We're accepting scoping comments all the way through Friday, September 5th, 2025. So don't feel, oh, I have to have it done tonight. No, you can take your time, send us a letter, e-mail. I'm going to give you that information here in just a moment.

So after we get scoping done, what we do next is we prepare the draft document itself. The draft EIS/RMPA. We get that done, we're going to publish the notice of availability. And I mentioned (indiscernible) will publish the notice in the Federal Register. We will publish, make sure it's published in the local newspapers as well. Then we start a comment period. In this case, the comment period is going to be 90 days long.

We're going to do that, then we're going to conduct a public hearing no sooner than 30 days after we publish the documents. 30 days' notice of the public hearing.

After the public hearing, after the comment period is over, we will then prepare the

final EIS/RMPA. Another notice in the Federal Register, and then (indiscernible). Then, as Steve mentioned, the BLM protest period, the governor's consistency review, and then issue a Record of Decision.

Now, this is the schedule. So, as I said, here's where we started, May 19, here's where we are right now, and this is where we're going. Here at the end of July, last day of July. We'll go ahead and again, I have the slide up so if you need to get another picture, there's another slide.

So this time period here, this nice bar here, that's preparing the document itself. There's field work to be done, other preparing -- research that we have to do, and get the documents. So we're looking to -- we're aiming for the ready to publish in June of 2027. So about two years from now is when we're anticipating being able to publish.

30 days later, (indiscernible) public hearing workshop in July. We're looking to complete everything, get the final document published in March of 2028. Begin the protest period and governor's consistency review in March, and then by May issue a recommended decision. So that's our schedule. That's our anticipated schedule, where we

think we're going to be at this point here.

So now, how to comment. You can give us verbal comments tonight. That would be great. Again, on the scope of the EIS that we did include. Again, comments are due -- we like them due by September 5th. You can give them to us in person today verbally. We have a court reporter over there. I'll have her wave. She was waving. And then the court reporter -- I'm going to ask -- we've got a sign-up sheet to get with the court reporter. We want to make sure that we have a person's comment associated with their name to get the comments associated with the right person.

Again, you can write on comment forms on the tables. You can -- those are forms. You can also mail them, if you want to mail them back. You can e-mail them to us if you want to do it. snsaeis@landrumbrown.com You may also mail them to us at SNSA EIS/RMPA, Landrum & Brown, Incorporated, 4445 Lake Forest Drive, Suite 700, Cincinnati, Ohio. Zip code is 45242. You can -- I also encourage you to you take a look from time to time at our EIS website, snvairporteis.com. So we will post this presentation on the website. We'll do that probably some time next week.

Now, JLA contact. That's me, Dave Kessler. Joanie Guerrero is here in the room. So she's also here. Again, our project e-mail snsaeis@landrumbrown.com. So that's the way you can e-mail if you have something you need to e-mail to us. You can do that. That's our contact information.

Now, we're going to invite you to proceed to the presentation boards, where the JLA, subject matter experts, and representatives from Clark County are available to answer questions you may have. As I mentioned earlier, we have a court reporter available who will listen and record your verbal comments concerning the scope of the EIS. We'd like to ask you to sign up, as I mentioned, on the sign-up sheet. We do that, we'll call your name in order to make sure you get your opportunity. We ask that you limit your verbal comments to three minutes. If your comment exceeds that amount of time, we ask that you follow up with a written comment. We have the comments station where the comment forms are there, and pens are available. You can write your comments today, you can take them home and complete them on your own time. Fold them up, mail them in before September 5th, 2025. And if

you prefer, you can e-mail them, as I -- the e-mail address we have on the screen.

I want you to understand, a verbal comment is just as important as a written comment. I also want you to understand, if somebody's a little uncomfortable speaking in front of a group, that's just fine. Not a problem. Written comment is just fine. So, again, comments are due on scope 5:00 p.m. Pacific daylight time, Friday, September 5th.

So with that, I'm going to encourage you to take a look at the boards and provide some comments. I'll leave that up here today so you can take a look at that. Again, same thing on the boards around the room.

STATEMENTS TO COURT REPORTER

MS. KRUEP: Carol Kruep, K-r-u-e-p.

My major concern for this airport is what the flight paths are going to be and how they're going to impact Henderson Executive Airport flight paths and Harry Reid's. Henderson Executive Airport is -- has expanded and is currently expanding.

I live in Sun City Anthem in Henderson. We have noticed, people I've been speaking with, a large increase of airplanes, private jets, from Henderson's Executive Airport flying over Sun City

Anthem. Also, flying quite low. They come in from the south, swing over Sun City Anthem, turn, and then they land on -- going south on the executive airport's runway in order to get the winds right. But they're flying so low and so many of them. And I'm concerned that -- what this airport is going to do to the flight paths.

Same thing with Harry Reid. We have some Harry Reid's airport -- or planes going over Black Mountain. And I can tell that they're Southwest Airlines flying so low. How is this going to impact those flights?

This community is almost 8,000 homes. We've been there since, goodness, these plans were before these airports were there. Not Harry -- not Reid. And it's, like, everybody's ignoring the fact that people live here. And these airplanes are just more frequent, too low, and making lots of noise. That's my biggest concern.

MR. SPOTLESON: Vinny, V-i-n-n-y, Spotleson, S-p-o-t-l-e-s-o-n.

What I would like the scoping to look at is a layer of analysis of what happens if dead pool hits Lake Mead. Meaning that Lake Mead gets below the water level where they stop sending water down

river. There would be financial effects, there would be tourism impacts, but there would also be water supply impacts from that. So I'm hoping they'll look at that in the study. That's all.

MR. SCHOLES: Robert Scholes, S-c-h-o-l-e-s.

Robert Scholes, New Market Advisors, FAC Committee, State of Nevada. What I would like to pose for questions are, what processes or thought processes have taken place thus far in the planning process of this project in regards to truck parking and logistics parking for air cargo users, truck traffic generated from trips to the airport, and how we can offset those kind of needs for driver rest areas and related trucking services. Gas stations and tire services for blowouts. I guess that's it.

MR. SILVERSTEIN: Mark Silverstein.

So, my question -- one question is about the SNWA, and if the water, the potable water from them, will be an interbasin transfer. Whether the water will be processed as wastewater on site or will it be pumped over the hill and back to the wastewater treatment plant, the water reclamation district. Because that seems to me like a lot of energy needed to power the sewage over the hill

to -- and otherwise, use it as gray water and process it on-site for other uses at the airport. That's one question I have.

The other is, there is currently, the county and local other jurisdictions are conducting what's called a 208 Water Quality Management Plan. The last one was done in 2008. It's supposed to incorporate all projected water uses for the next horizon, which may be 10, 12 years. I don't know how long.

Are the consultants or the county or anybody hooking up with this -- I think the water reclamation district is overseeing it, or coordinating it. But, are the water issues for the airport being incorporated into that plan? It's a safe -- it's either a Clean Water Act requirement or a Safe Drinking Water requirement. I don't know.

Again, so what is being done for wastewater management? Will something called rapid infiltration basins be used at all? If so, I'm not sure that the subsurface geology would account for that, if there would be any place for it to infiltrate. That's a question I have.

And has there been an assessment of the amount of construction water needed for the project?

Because that will be water that won't be processed, that will just be used for dust control and other purposes, I guess.

How are they managing the shutdown and possible still operation of one of the three Ivanpah solar projects? There's a blinding issue with the -- or an issue with the pilots with the mirrors. That would be an issue for visual impacts to the pilots. Is that being addressed?

And there's a 25-foot storm water basin being proposed. When I was down there one time doing my fieldwork as a -- as the county's -- as the airport's environmental planner looking at ponded water out there, at the abandoned cattle pond that's currently on the BLM land, there was water in it, and I was swarmed by mosquitos. So, is vector control something that's being evaluated for that?

And I guess that's it. One more thing.

So, the town site that has been approved in Senate Bill 13, Nevada State Senate Bill 13 -- 19. 19. It's confusing as to how that would be managed. How it would be managed is confusing to me, how that would be managed relative to the fact that it's federal land and it's not being transferred to the county, it's just being managed

for the land use. What jurisdiction does the state and the county have to manage the land use when it's still federal land? It's something that's a question I have.

(End of public comments.)

MR. KESSLER: If I can have your attention for just a moment, please. If there's anyone else that has not had the opportunity to speak or give information concerning the scope of the information in the draft EIS, please speak up now.

Not seeing anyone, I'll remind you that today, that everyone who was unable to provide verbal comments today, we will be accepting written comments until Friday, September 5, 2025. You can e-mail them or mail them to the address here on the screen.

I want to thank everyone for your comments today. The public meeting for the EIS/RMPA proposed Southern Nevada Supplemental Airport is now concluded. Thank you.

(Proceedings concluded at 8:01 p.m.)

REPORTER'S CERTIFICATE.

STATE OF NEVADA)
) ss
COUNTY OF CLARK)

I, Tracy A. Manning, a duly commissioned Certified Court Reporter, Clark County, State of Nevada, do hereby certify:

That I reported the taking of the proceedings, at the time and place aforesaid;

That I thereafter transcribed my said shorthand notes into typewriting and that the typewritten transcript of said proceeding is a complete, true and accurate record of statements provided by the parties at said time to the best of my ability.

I further certify that I am not a relative, employee, or independent contractor of counsel of any of the parties involved in said action; nor a person financially interested in the action; nor do I have any other relationship with any of the parties or with counsel of any of the parties involved in the action that may reasonably cause my impartiality to be questioned.

IN WITNESS WHEREOF, I have hereunto set my hand in the County of Clark, State of Nevada, this 5th day of August 2025.

Tracy A Manning

Tracy A. Manning, CCR 785

Attachment E Scoping Comments

Attachment F Topical Responses

Many commenters identified the same or similar issues. The following are topical responses to each issue mentioned by multiple separate commenters. The topical responses are organized by subject matter.

Topic	Comment Summary	Response
Scoping	Primm, Nevada was not a good location to conduct an in-person scoping meeting to obtain public input	The Joint Lead Agencies (JLAs) will consider locations other than/or in addition to Primm for future in-person public meetings.
Scoping	How can I attend the virtual scoping meetings and obtain copies of the scoping materials?	The FAA along with the BLM, as JLAs, provided information on how members of the public attend the virtual scoping meetings in various online and printed publications including the Federal Register, Las Vegas Review-Journal, and the Las Vegas Business Press. The JLAs also made a recording of the virtual public scoping meeting available on the EIS/RMPA website: https://www.snvairporteis.com/public-participation/ Further, the JLAs have also prepared a Coordination Plan, as required by the FAA Reauthorization Act of 2024 (Public Law 118-63) which is available on the EIS/RMPA website: https://www.snvairporteis.com/reports-documents/.
Coordination	The City of Henderson requested to be a cooperating agency	Under Public Law 118-63, "[a] Federal agency required to make an approval or take an action for a project" must be treated as a cooperating agency. The City of Henderson does not require a specific approval action; therefore, the JLA invited the City of Henderson to be a participating agency.
Coordination	The Las Vegas Valley Water District (LVVWD) requested to be a participating agency	The JLA invited the LVVWD to be a participating agency and they accepted.
Coordination	Commenters suggested that coordination efforts should occur with Nellis Air Force Base (NAFB)	The FAA has considered the NAFB airspace in airspace studies for the proposed Southern Nevada Supplemental Airport (SNSA). The NAFB has been added to the EIS/RMPA notification list.
Coordination	Commenters suggested that coordination efforts should occur with Nevada Army National Guard (NVANG)	NVANG has been added to the EIS/RMPA notification list.
Coordination	Commenters suggested that coordination efforts should occur with the University of Nevada Seismological Laboratory (regarding the proximity of the southern Walker Lane Belt of tectonism).	Information on the southern Walker Lane Belt of tectonism will be collected and coordination with the University of Nevada Seismological Laboratory regarding geology/mineral will occur as applicable.

Topic	Comment Summary	Response
Coordination	Commenters suggested that coordination efforts should occur with the Natural Resources Conservation Service (regarding reseeding of native plants and shortages of seeds)	The Natural Resources Conservation Service will be coordinated with to obtain information related to soils, vegetation, noxious weeds, and invasive non-native species mitigation, as applicable.
Coordination	Commenters suggested that coordination efforts should occur with the Clark County Water Reclamation District (CCWRD) regarding water infrastructure and water reclamation services	The JLA invited the CCWRD to be a participating agency and they accepted.
Coordination	Commenters suggested that coordination efforts should occur with the Southern Nevada Water Authority (SNWA), Lahontan Regional Water Quality Control Board (regarding groundwater and surface water across state lines)	The JLA invited the SNWA to be a participating agency. SNWA consists of a 7-member elected official governing board, one of them being LVVWD. SNWA deferred to LVVWD, as it is a member agency of SNWA.
Coordination	Commenters suggested that coordination efforts should occur with the Federal Transit Administration (to facilitate eligibility for federal transit funding)	The Proposed Project does not include development of transit infrastructure. Clark County Department of Aviation (CCDOA) is the project sponsor of the proposed SNSA and is responsible to secure funding for the SNSA and does not intend to see funding from the Federal Transit Administration. This comment will be provided to the CCDOA.
Coordination	Commenters suggested that coordination efforts should occur with the National Association for Industrial and Office Parks	The National Association for Industrial and Office Parks were added to the EIS/RPMA notification list.
Coordination	Commenters suggested that coordination efforts should occur with the Regional Transportation Commission of Southern Nevada (RTC).	The RTC is a participating agency.
Coordination	How can commenters receive notifications throughout the EIS/RMPA process?	The JLA maintains the EIS/RMPA website (www.snvairporteis.com) to keep the public informed on the progress of the EIS/RMPA and the public can request notifications through the process through the aforementioned webpage. Further, the Coordination Plan, available on the website under the Reports and Documents Tab, identifies the various organizations and governmental agencies that have been invited to work with the JLA as cooperating and participating agencies in the preparation of the EIS/RMPA. The EIS/RMPA will include an appendix on public and agency participation.

Topic	Comment Summary	Response
Proposed Project	Several commenters suggested integrating transit options and connectivity to Harry Reid International Airport (LAS) into the project along with accommodating a future tie-in to the Brightline West high-speed rail project	At the same time as the DesertXpress EIS was underway, CCDOA prepared its draft Airport Layout Plan (ALP) for the proposed SNSA to include an ability to accommodate a spur line from DesertXpress into the passenger terminal. Following the completion of the DesertXpress EIS, funding was not available. The proposed rail project was subsequently sold to Brightline West. Brightline worked with the FRA to update various NEPA documentation and secure funding. The Brightline West project is currently under construction. The CCDOA and Brightline West have not expressed interest in using the railroad as a transit option. The JLA does not have any authority to require passenger rail service by a private railroad operator to and from the airport. Thus, while the suggestion of including railroad access is noted as a scoping comment, it is not reasonably foreseeable and will not be included in the EIS/RMPA. Therefore, no analysis will be included in the EIS/RMPA.
Proposed Project	One commenter asked to consider the benefits of developing a multimodal inland port in conjunction with the Proposed Project	A multimodal inland port is outside the scope of the EIS/RMPA, as the CCDOA and the JLA do not have the authority to implement a multimodal inland port. Therefore, no analysis will be included in the EIS/RMPA.
Proposed Project	A commenter also questioned the size difference between the Proposed Project site and LAS.	The size required for the SNSA is determined by CCDOA to accommodate the aviation facilities needed.

Topic	Comment Summary	Response
Purpose and Need	Commenters questioned the need for the proposed SNSA given a recent decrease in tourism and the uncertainty of the local economy. Commenters also asked for information regarding the passenger forecasts and airport capacity to better understand the need for the project, including clarifying if the Proposed Project is needed primarily to accommodate commercial passenger flights, cargo operations, or a mix of both.	CCDOA is the proponent of the proposed SNSA. CCDOA has determined that there is a need for additional airfield capacity to serve commercial aircraft operations for the Las Vegas metropolitan area. The County has prepared a Feasibility Study, which provides the underlying assumptions for the proposed SNSA. The JLA's responsibility is to independently evaluate the CCDOA's proposal consistent with the National Environmental Policy Act of 1969 (NEPA), as amended and the Ivanpah Valley Airport Public Lands Transfer Act of 2000 (Public Law 106-362). The JLA will disclose the County's purpose and need as well as the purpose and needs of the JLA and Cooperating Agencies in the Purpose and Need section of the EIS/RMPA.
Alternatives	Some commenters suggested other alternative locations for the proposed SNSA, including the Moapa Paiute Reservation and sites outside of the Ivanpah Valley	The Alternatives chapter of the EIS/RMPA will examine alternative sites outside of the Ivanpah Valley, including the Moapa Paiute Reservation.
Alternatives	Commenters also proposed a smaller airport footprint to limit environmental disturbance and noted the land area for LAS is significantly smaller than that proposed for the SNSA	The size required for the SNSA is determined by CCDOA to accommodate the aviation facilities needed.
Alternatives	Commenters expressed strong support for the consideration of transit-focused alternatives that integrate Brightline West high-speed rail, dedicated bus rapid transit, and other mass transit options to the proposed SNSA in the opening phase and not delayed until later	The CCDOA and the JLA do not have any authority to require passenger rail service by a private railroad operator to and from the airport. At this time, the CCDOA has not proposed mass transit options as part of the Proposed Project. Therefore, no analysis will be included in the EIS/RMPA.
Alternatives	Commenters also suggested the consideration of conservation-oriented alternatives that would avoid white-margined penstemon habitat altogether and restrict new flights over the Mojave National Preserve and Avi Kwa Ame National Monument (NM)	In accordance with NEPA, analysis of the no action alternative will be included in the EIS/RMPA. FAA considered airspace above the Mohave National Preserve and sacred locations in designing conceptual flight procedures for the Proposed Project.
Alternatives	A commenter asked for an explanation of how the alternatives comply with various federal laws, regulations, and policies with respect to the desert tortoise and its habitat	A Biological Assessment for the desert tortoise will be prepared during the EIS/RMPA process and will address alternatives, federal laws, regulations, and policies.

Topic	Comment Summary	Response
Alternatives	Some commenters strongly urged consideration of a "no-build" alternative, citing regional water scarcity, presence of endangered species, and questionable demand for the proposed SNSA	In accordance with NEPA, analysis of the no action alternative will be included in the EIS/RMPA.
Aviation Emissions and Air Quality	The U.S. Environmental Protection Agency (USEPA) provided multiple comments on how the air quality analysis should be conducted for the proposed SNSA, including what emission sources should be evaluated and which agencies should be consulted in the development of the air quality analysis methodology. They also emphasized that the proposed SNSA could become Nevada's second-largest source of ozone precursors, which would be located upwind of Las Vegas, which is currently in nonattainment of the USEPA's 2015 8-hour ozone standard. They requested a robust air quality modeling methodology and an analysis of conformity with State and Transportation Implementation Plans. They also requested the implementation of green design, minimization, and mitigation measures into the proposed SNSA and the modeling of these measures in the air quality analysis.	The USEPA's recommendations will be incorporated, as applicable, into the Air Quality Protocol. The JLA will coordinate the Air Quality Protocol with the USEPA and Clark County Department of Environment and Sustainability (CCDES) Division of Air Quality (DAQ) prior to implementation.
Aviation Emissions and Air Quality	Other commenters, including the USEPA, raised the topic of the lack of transit options to and from the proposed SNSA site, and the associated air quality impacts of increased automobile traffic.	Air quality impacts of increased automobile traffic to and from the proposed SNSA site will be analyzed as applicable in the EIS/RMPA.
Aviation Emissions and Air Quality	Other commenters further inquired about dust mitigation and technical methodologies/modeling tools for an air quality analysis that would capture this potential air quality impact.	The EIS/RMPS will include an air quality analysis based on the Air Quality Protocol which will be coordinated with the USEPA and CCDES DAQ prior to implementation.
Aviation Emissions and Air Quality	Commenters stated that the EIS/RMPA must consider the impacts of the Proposed Project on climate. One commenter noted the loss of carbon sequestration that would occur from the development of the proposed SNSA in the desert. Another commenter requested that the JLA conduct a climate audit of the Proposed Project's impacts.	The EIS/RMPS will include a greenhouse gas analysis as applicable based on the Air Quality Protocol which will be coordinated with the USEPA and CCDES DAQ prior to implementation.

Topic	Comment Summary	Response
Aviation Emissions and Air Quality	Also, a commenter asked if the EIS would address urban heat islands and the disproportionate effects to low-income populations in Las Vegas	Urban heat islands are outside the scope of the EIS/RMPA. In addition, the EIS/RMPA will not address environmental justice due to the revocation of Executive Order 12898 and the CEQ NEPA implementing regulations (effective April 11, 2025).
Biological Resources	Commenters specifically requested the EIS/RMPA address direct, indirect, and cumulative impacts to biological resources, including the desert tortoise, white-margined penstemon, Great Basin Desert and Mojave Desert burrowing owls, desert bighorn sheep, and migratory birds.	A Biological Assessment (BA) for the desert tortoise will be prepared during the EIS/RMPA. Relevant studies will be reviewed during the preparation of the BA. JLA will engage in formal Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS). Potential impacts to BLM sensitive species and state listed species will be addressed in the EIS/RMPA.
Biological Resources	Regarding the desert tortoise, commenters noted that the Proposed Project is located in the Eastern Mojave Recovery Unit, the substantial decline in the desert tortoise population, the ineffectiveness of mitigation such as translocation, the loss of desert tortoise habitat and population connectivity, concerns with direct, cumulative and indirect impacts (e.g. noise, dust, urban heat island, drought, etc.) to the desert tortoise and the need for avoidance. Commenters cited several relevant desert tortoise studies and provided suggestions for mitigation.	A BA for the desert tortoise will be prepared during the EIS/RMPA. Relevant studies will be reviewed during the preparation of the BA. JLA will engage in formal Section 7 consultation with the USFWS.

Topic	Comment Summary	Response
Biological Resources	Commenters noted that the white-margined penstemon is a sensitive plant that exists only in the Mojave Desert and requested the JLA analyze the direct, indirect, and cumulative impacts to this plant and its habitat. They indicated that the white-margined penstemon is protected by the BLM through the designation of Area of Critical Environmental Concern (ACEC) and is advancing through a petition to be protected under the Endangered Species Act. One commenter stated that the EIS must contain adequate baseline information through surveys and an alternative that completely avoids the white-margined penstemon habitat. The same commenter indicated that translocation and salvage are not suitable mitigation for perennial plants with deep taproots like the white-margined penstemon.	Impacts to BLM sensitive species, including the white-margined penstemon, will be addressed in the EIS/RMPA. Avoidance, minimization, and mitigation will be discussed, as necessary. The commenter's opinion on potential translocation and salvage as a mitigation measure is noted.
Department of Transportation, Section 4(f) and Section 6(f) of the Land and Water Conservation Fund Act	Commenters raised concerns about potential impacts to natural quiet, recreation, and visual resources and wilderness character of federal public lands including: • Ivanpah Area of Critical Environmental Concern • Mojave National Preserve and Avi Kwa Ame NM (including the Clark Mountains and New York Mountain designated wilderness areas) • Lake Mead National Recreation Area (NRA) (including the associated wilderness areas) • Sloan Canyon National Conservation Area • Castle Mountains NM • Death Vally National Park • Old Spanish National Historic Trail	All noted resources will be considered when developing the study area and analysis of Department of Transportation, Section 4(f) resources, recreation, and historic resources in the EIS/RMPA.
Geology and Mineral Resources	A commenter indicated the proposed SNSA site is located within the Ivanpah Valley, which straddles the Eastern California Shear Zone, east of the San Andreas Fault Zone, and south of the Garlock Fault Zone; furthermore, the proposed runways would be nearly perpendicular to the oblique extensional faulting in the area	Comments will be considered when analyzing Geology and Mineral Resources impacts in the EIS/RMPA.

Topic	Comment Summary	Response
Geology and Mineral Resources	Another comment noted that the Roach Dry Lake is composed of “puff dirt” which is not stable, and the Proposed Project would involve the most massive amount of earthmoving for a project in the history of Clark County	Comments will be considered when analyzing Geology and Mineral Resources impacts in the EIS/RMPA.
Hazardous Materials, Solid Waste and Pollution Prevention	Commenters raised questions about hazardous materials management, construction waste, and borrow pits for soil excavation.	Hazardous materials management, construction waste and borrow pits will be analyzed in the EIS/RMPA.
Hazardous Materials, Solid Waste and Pollution Prevention	The USEPA promoted green waste management and pollution prevention strategies. They suggested composting 100 percent of all food waste from terminal restaurants, airline kitchens and any planned off-site hotels, and incorporating reuse measures, such as collecting magazines and newspapers from airplanes and sending them to local schools	Pollution prevention plans and pollution prevention planning measures will be discussed in the EIS/RMPA.
Historic, Architectural, Archaeological, and Cultural Resources	The U.S. Department of Interior (DOI), Lake Mead provided the following information and recommendations: • On August 12, 2024, Lake Mead NRA executed Voluntary Agreements with air tour operators where the operators agreed to not fly over portions of Avi Kwa Ame NM and Spirit Mountain out of respect for Tribal Nations and recognition of this sacred space. • Additional historic properties that hold significance to Tribal Nations remain within Avi Kwa Ame NM, Lake Mead NRA, and its immediate surrounding landscape. • Extant Tribal Nations regularly visit and maintain spiritual and traditional practices at Avi Kwa Ame NM and Spirit Mountain. • The Old Spanish National Historic Trail intersects the planning area, requiring analysis under the National Trails System Act.	Tribal government representatives were directly notified of the Proposed Project through an email distributed July 24, 2025. JLA will consider DOI information and recommendations in identifying the area(s) of potential effects (APE) and in assessing the potential for adverse effects. Note: BLM and NPS Agencies both fall under the administrative purview of the DOI.

Topic	Comment Summary	Response
Historic, Architectural, Archaeological, and Cultural Resources	The DOI also recommended the FAA and BLM consult with affiliated Tribal Nations under Section 106 of the National Historic Preservation Act and consider their sacred air space when drafting flight paths to avoid or minimize visual, auditory, atmospheric, and cumulative impacts	Tribal government representatives were directly notified of the Proposed Project through an email distributed July 24, 2025. FAA considered airspace above sacred locations in designing conceptual flight procedures for the Proposed Project.
Historic, Architectural, Archaeological, and Cultural Resources	Another commenter noted the proposed SNSA site is within Nuwuvi (Southern Paiute) Tribal Territory. The commenter asked if any of the federally recognized or unrecognized tribes of the area been consulted.	Tribal government representatives were directly notified of the Proposed Project through an email distributed July 24, 2025, which included the Southern Paiute Tribes.
Land Use and Realty	Commenters requested the EIS/RMPA discuss how each proposed alternative complies with the management structure of the current land management plan for the area, including management of adjacent/nearby lands.	Land management plans in relation to the alternatives will be addressed in the Land Use and Realty section of the EIS/RMPA.
Land Use and Realty	In addition, commenters asked to clarify Nevada Department of Transportation (NDOT) and Federal Highway Administration (FHWA) commitments for use of NDOT right-of-way.	The FHWA and NDOT are Cooperating Agencies for the EIS/RMPA and thus will provide input on commitments for use of NDOT right-of-way. Brightline West High Speed Rail Project Owners are also coordinating with NDOT, FHWA and Clark County Department Aviation are/have been coordinating with each other regarding the integration of the proposed train route and NDOT's (I-15) ROW role.
Land Use and Realty	Several commenters asked that the EIS/RMPA address land use impacts from the 2023 Nevada Senate Bill 19 and address the Airport Environs Overlay District Land Transfer section of the Southern Nevada Public Land Management Act of 1998	Land management plans in relation to the alternatives will be addressed in the Land Use and Realty section of the EIS/RMPA.
Land Use and Realty	One commenter asked about the future operation of Jean Airport with the opening of the proposed SNSA.	The CCDOA is expected to close Jean Airport prior to the start of operations at SNSA, as needed for safe and efficient aircraft operations.
Land Use and Realty	Concerns about urban sprawl were also raised	Land use plans will be discussed in the EIS/RMPA.

Topic	Comment Summary	Response
Natural Resources and Energy Supply	The USEPA suggested incorporating a chapter into the Draft EIS/RMPA to address measures to maximize efficiency, energy use, and green building design for facilities, landscaping, and transportation infrastructure, including: • Use electric, hybrid, and compressed natural gas options for all surface and support vehicles. • Consider using biodiesel from food vendors at the airport. • Implement an incentive program for airlines to adopt sustainable practices, such as minimizing use of diesel. • Install solar cells on the roof of parking garages and terminals and consider installing additional solar fields to power the airport.	A separate chapter on measures to maximize efficiency, energy use, and green building design for facilities, landscaping, and transportation infrastructure is not required by FAA or BLM NEPA requirements and will not be included in the EIS/RMPA. A pollution prevention discussion will be included as part of Hazardous Materials, Solid Waste and Pollution Prevention section of the EIS/RMPA. If required, the JLA will consider pollution prevention mitigation measures.
Natural Resources and Energy Supply	A commenter asked how much energy would be required by the proposed SNSA, including how much energy would be required to transport wastewater from the proposed SNSA to the wastewater treatment plant.	Quantification of the energy needed to support operation of the Proposed Project, including the energy needed to transport associated wastewater, will be included as applicable in the Natural Resources and Energy section of the EIS/RMPA.
Noise and Noise-Compatible Land Uses	Commenters raised concerns about noise impacts on nearby communities and recreation areas	A noise analysis, including supplemental noise analysis for Section 4(f) properties (including, but not limited to, noise sensitive areas within national parks; national wildlife and waterfowl refuges; and historic sites including traditional cultural properties) where a quiet setting is a generally recognized purpose and attribute in accordance with Appendix C of FAA Order 1050.1G will be included in the EIS/RMPA.
Noise and Noise-Compatible Land Uses	Commenters specifically asked that the EIS/RMPA address impacts to the natural quiet resources and residences within the Mohave National Preserve, Avi Kwa Ame NM, and the Castle Mountains NM	A noise analysis, including supplemental noise analysis for Section 4(f) properties (including, but not limited to, noise sensitive areas within national parks; national wildlife and waterfowl refuges; and historic sites including traditional cultural properties) where a quiet setting is a generally recognized purpose and attribute in accordance with Appendix C of FAA Order 1050.1G will be included in the EIS/RMPA

Topic	Comment Summary	Response
Noise and Noise-Compatible Land Uses	In addition, commenters requested evaluations of noise/vibration impacts on biological resources including the big horn sheep, owls, the desert tortoise, and migratory birds, and address noise compatibility measures with respect to desert tortoises and their habitat within the proposed Noise Compatibility Area	Direct and indirect impacts to biological resources will be assessed as applicable and a desert tortoise Biological Assessment will be included in the EIS/RMPA.
Socioeconomics and Children's Health and Safety Risks	Some commenters argued the proposed SNSA would create jobs and economic diversification in the region, while others questioned whether benefits outweighed environmental and water costs	Socioeconomic impacts of the Proposed Project including changes in economic activity and employment will be assessed as applicable in the EIS/RMPA.
Socioeconomics and Children's Health and Safety Risks	Other commenters inquired about the economic impacts of the Proposed Project, raised concerns about public financing, fairness, and long-term taxpayer liability, and noted that the induced sprawl would strain infrastructure and housing affordability.	Socioeconomic impacts of the Proposed Project including changes in economic activity, employment, and housing will be assessed as applicable in the EIS/RMPA.
Soils, Vegetation, Noxious Weeds, and Invasive Non-Native Species	Commenters noted the risk of introducing invasive species and indicated that limited supplies of native plant seeds could be an issue	Risk for introduction of invasive species and discuss preventative measures such as planting available native seeds will be assessed as applicable in the EIS/RMPA.
Surface Transportation	The USEPA and other commenters stressed the need to integrate public transit (high-speed rail and bus rapid transit) from Las Vegas to the proposed SNSA.	The CCDOA and the JLA do not have any authority to require passenger rail service by a private railroad operator to and from the airport. At this time, the CCDOA has not proposed mass transit options as part of the Proposed Project. Therefore, no analysis will be included in the EIS/RMPA.
Surface Transportation	Commenters requested the EIS/RMPA analyze impacts resulting from airport employee and passenger automobile trips and justify the decision to delay incorporation of transit into the first phase of airport design and operation.	Impacts of increased automobile traffic to and from the proposed SNSA site will be analyzed as applicable in the EIS/RMPA.
Surface Transportation	In addition, concerns were expressed about the increased traffic on I-15 and the lack of planned public transportation to and from Las Vegas.	FHWA and NDOT are cooperating agencies on the EIS/RMPA. Traffic analysis included in the EIS/RMPA will follow FHWA and NDOT requirements and guidelines.

Topic	Comment Summary	Response
Visual Effects (Light Emissions and Visual Resources/Visual Character)	Commenters noted the proposed SNSA's proximity to public lands and national recreation areas (e.g., Sloan Canyon, Lake Mead NRA, Mojave Desert landscapes) and raised concerns about impacts to viewsheds and night skies. They expressed concern that visual impacts would degrade outdoor recreation and local tourism opportunities.	Visual effects assessments of viewsheds and night skies will be assessed in the EIS/RMPA.
Water Resources	Multiple commenters questioned whether there is sufficient water availability for the proposed SNSA. They cited water scarcity, the existing drought, and the low water levels of Lake Mead and the Colorado River.	Quantification of the water needed to support operation of the Proposed Project will be included in the Natural Resources and Energy section of the EIS/RMPA.
Water Resources	Commenters asked how much water would be required to construct (including dust mitigation) and operate the proposed SNSA and what will be the source of that water	Quantification of the water needed to support operation and construction of the Proposed Project will be included in the Natural Resources and Energy section of the EIS/RMPA.
Water Resources	Another commenter encouraged the JLA to coordinate with Clark County and other local jurisdictions who are updating the Clean Water Act Section 208 Water Quality Management Plan which will incorporate projected water uses for the planning horizon.	The JLA invited the CCWRD, LVVWD, and the SNWA to be participating agencies on the EIS/RMPA. CCWRD and LVVWD accepted. SNWA deferred to LVVWD, as it is a member agency of SNWA.
Water Resources	The LVVWD requested to engage as a participating agency, noting the project will require new infrastructure for both temporary construction water and long-term operational supply. They highlighted Southern Nevada's water reuse requirements (return-flow credits to Lake Mead) and restrictions on consumptive water use.	The JLA invited the LVVWD to be a participating agency on the EIS/RMPA and LVVWD accepted.
Water Resources	Commenters asked how wastewater would be processed (pumped back to a wastewater treatment plant or treated onsite).	The CCDOA's Proposed Project will be described in detail in the EIS/RMPA. The CCDOA has proposed to pump the wastewater back into a wastewater treatment plant.

Topic	Comment Summary	Response
Water Resources	The USEPA and other commenters flagged concerns about development in the Roach Dry Lake floodplain, flood control infrastructure needs, and potential groundwater contamination. Recommendations included flood modeling, collaboration with the Clark County Regional Flood Control District, and vector species control for detention basins.	The Clark County Regional Flood Control District is a participating agency on the EIS/RMPA. Floodplain and groundwater impacts will be assessed in the EIS/RMPA. Vector species control would be addressed in the design phase. The design of the detention basin will consider Federal Aviation Administration, Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants on or near Airports, February 21, 2020.
Water Resources	One commenter noted a Nevada Bureau of Mines and Geology 2010 report which states construction of a major airport facility in the Ivanpah Valley may have a significant impact on local drainage and floodplain management concerns.	Nevada Bureau of Mines and Geology 2010 report will be reviewed when analyzing floodplain impacts.
Water Resources	Commenter encouraged coordination with the Lahontan Regional Water Quality Control Board regarding groundwater and surface water across state lines)	JLA will coordinate, as necessary, with the organization.
BLM Land Use Planning Criteria	The Desert Tortoise Council provided feedback on Planning Criteria	The BLM will consider the feedback from the Desert Tortoise Council when preparing the EIS/RMPA.