

## **8.0 REFERENCES**

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### **Chapter 1: Purpose and Need for Action**

Air Force 2017. Interim Relocation of Two F-16 Squadrons Environmental Assessment. May.

Air Force. 2011. Recapitalization of the 49th WG Combat Capabilities and Capacities Environmental Assessment. July.

### **Chapter 2: Alternatives Including Proposed Action**

Air Force. 2011. Supplemental Report. Environmental Effects of Training with Defensive Countermeasures. October.

Air Force. 2007. New Mexico Training Range Initiative Environmental Impact Statement. February.

Air Force 1997. Environmental Effects of Self-Protection Chaff and Flares. August.

Air Force. 1996. F-16 Combat Aircraft Fundamentals. Multi-Command Handbook 11-F16, Volume 5. May.

Air National Guard Readiness Center. 2003. Deployment of Chaff and Flares in Military Training Airspace (Phase II) Environmental Assessment.

Arfsten, D.P., C.A. Wilson, K.R. Still, B.J. Spargo, and J. Callahan. 2002. Characterization of the Ecotoxicity of Five Biodegradable Polymers under Consideration by NAVAIR for Use in Chaff-Dispensing Systems. Naval Health Research Center Detachment (Toxicology), Wright-Patterson Air Force Base, Ohio.

### **Chapter 3: Affected Environment**

#### **3.1 Analysis and Approach**

Federal Aviation Administration (FAA). 2015. 1050.1F Desk Reference. Federal Aviation Administration Office of Environment and Energy. July.

U.S. Geological Survey. 2015. National Hydrography Dataset (High Resolution) Waterbodies for Colorado and New Mexico. Accessed at: <https://www.sciencebase.gov/catalog/item/4f4e48d3e4b07f02db54893c>. Accessed on: August 8, 2019.

#### **3.2 Airspace Operations and Management**

Air Force. 2017. Holloman Special Use Airspace Modifications, Holloman Air Force Base. October 20.

Air Force. 2016. Cannon AFB Letter of Agreement between 27 SOW and Ft Worth ARTCC. October 16

Air Force. 2014. Holloman AFB Letter of Agreement between Holloman and Albuquerque ARTCC. November 1.

Air Force. 2012. Air Force Instruction 13-201, Airspace Management. August 21.

Department of Defense (DoD). 2018. AP1B, Area Planning Military Training Routes. July 19.

DoD. 2017. Department of Defense Directive 5030.19, DoD Responsibilities on Federal Aviation. August 29.

Federal Aviation Administration (FAA). 2019a. FAA Order JO 7400.2M, Procedures for Handling Airspace Matters. February 28.

FAA 2019b. FAA Order JO 7400.10A, Special Use Airspace. February 16.

FAA. 2018a. FAA Order JO 7400.11C, Airspace Designations and Reporting Points. August 13.

FAA. 2018b. FAA Albuquerque Sectional Aeronautical Chart. October 11.

FAA. 2017. FAA Aeronautical Information Manual.

SkyVector. 2019. FAA Airport Data.

### **3.3 Acoustic Environment**

Center for Hearing and Communication. 2019. Common Environmental Noise Levels. Accessed via web at: [www.chchearing.org/noise/common-environmental-noise-levels/](http://www.chchearing.org/noise/common-environmental-noise-levels/) on May 28, 2019.

Centers for Disease Control and Prevention. 2019. Loud Noise Can Cause Hearing Loss. Accessed via web at: [www.cdc.gov/nceh/hearing\\_loss/what\\_noise\\_cause\\_hearing\\_loss.html](http://www.cdc.gov/nceh/hearing_loss/what_noise_cause_hearing_loss.html) on May 28, 2019.

Fidell, S., T.J. Schultz, and D.M. Green. 1988. A Theoretical Interpretation of the Prevalence Rate of Noise Induced Annoyance in Residential Populations, *Journal of the Acoustical Society of America*, 84(6).

Frampton, K.D., Lucas, M.J., and Cook, B. 1993. Modeling the Sonic Boom Noise Environment in Military Operating Areas. AIAA Paper 93-4432.

National Academy of Sciences. 1977. “Guidelines for Preparing Environmental Impact Statements on Noise.” Report of Working Group on the Committee on Hearing, Bioacoustics, and Biomechanics, National Research Council. Washington, D.C.

National Park Service (NPS). 2013a. Petroglyph National Monument: Acoustical monitoring 2010. Natural Resource Technical Report NPS/NRSS/NRTR—2013/687. National Park Service, Fort Collins, Colorado.

NPS. 2013b. Pecos National Historical Park: Acoustical monitoring 2010. Natural Resource Technical Report NPS/NRSS/NRTR—2013/707. National Park Service, Fort Collins, Colorado.

NPS. 2013c. Rio Grande Wild and Scenic River: Acoustical monitoring 2010. Natural Resource Technical Report NPS/NRSS/NRTR—2013/770. National Park Service, Fort Collins, Colorado.

NPS. 2013d. Montezuma Castle National Monument: Acoustical monitoring 2010. Natural Resource Technical Report NPS/NRSS/NRTR—2013/XXX. National Park Service, Fort Collins, Colorado.

Plotkin, K.J. 1996. PCBoom3 Sonic Boom Prediction Model: Version 1.0c. Wyle Research Report WR 95-22C. May.

Schultz, T.J. 1978. Synthesis of Social Surveys on Noise Annoyance, *Journal of the Acoustical Society of America*, pp. 377-405.

Undersecretary of Defense for Acquisition Technology and Logistics. 2009. Methodology for Assessing Hearing Loss Risk and Impacts in DoD Environmental Impact Analysis. June 16.

United States Environmental Protection Agency (USEPA). 1982. Report No. 550/9-82-105, Guidelines for Noise Impact Analysis.

### **3.4 Air Quality**

Federal Aviation Administration (FAA). 2009. Aircraft Engine Speciated Organic Gases: Speciation of Unburned Organic Gases in Aircraft Exhaust. Accessed at: [https://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/media/FAA-EPA\\_TSD\\_Speciated%20OG\\_Aircraft\\_052709.pdf](https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/FAA-EPA_TSD_Speciated%20OG_Aircraft_052709.pdf).

U.S. Environmental Protection Agency (USEPA). 2018. 2014 National Emission Inventory. Accessed at <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>

USEPA. 2016. National Ambient Air Quality Standards. Retrieved from <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Current as of December 20, 2016.

USEPA. 2004. Technical Support Document for Notice of Direct Final Rulemaking on Sulfur Dioxide (SO<sub>2</sub>) Redesignation Request and Maintenance Plan for Morenci, Arizona. Region 9. March.

USEPA. 2003. Approval and Promulgation of Implementation Plans; New Mexico; Redesignation of Grant County to Attainment for Sulfur Dioxide, Direct Final Rule. *Federal Register* Vol. 68, No. 181. September 18.

USEPA. 1972. Mixing Heights, Wind Speeds, and Potential for Urban Air Pollution Throughout the Contiguous United States. Georg C. Holzworth. January.

### **3.5 Natural Resources**

Arizona Game and Fish Department (AZGFD). 2012. Arizona's State Wildlife Action Plan: 2012-2022. Arizona Game and Fish Department, Phoenix, Arizona.

Bailey, R.G. 1995. Descriptions of the Ecoregions of the United States. Second Edition. Miscellaneous Publication No. 1391. U.S. Department of Agriculture Forest Service, Washington, D.C.

Best, T.L. and K.N. Geluso. 2003. Summer foraging range of Mexican free-tailed bats (*Tadarida brasiliensis mexicana*) from Carlsbad Cavern, New Mexico. *Southwestern Naturalist* 48:590–596.

Bowles, A.E. 1995. Responses of Wildlife to Noise. In: *Wildlife and Recreationists: Coexistence Through Management and Research* (R.L. Knight and K.J. Gutzwiller eds). Island Press, Washington D.C.

Bowles, A.E., Bowles, J. Francine, S. Wisely, J.S. Yaeger, L. McClenaghan. 1995. Effects of Low Altitude Aircraft Overflights on the Desert Kit Fox (*Vulpes macrotis arsipus*) and its Small

- Mammal Prey on the Barry M. Goldwater Air Force Range, Arizona, 1991-1994. U.S. Air Force Research Laboratory Report: AFRL-HE-WP-TR-2000-0101. February.
- Brown, D.E. 1994. *Biotic Communities: Southwestern United States and Northwestern Mexico*. University of Utah Press, Salt Lake City, Utah.
- Dick-Peddie, W.A. 1993. *New Mexico Vegetation: Past, Present, and Future*. University of New Mexico Press, Albuquerque, New Mexico.
- Hristov, N.I., M. Betke, D.E.H. Theriault, A. Bagchi, and T.H. Kunz. 2010. Seasonal variation in colony size of Brazilian free-tailed bats at Carlsbad Cavern based on thermal imaging. *Journal of Mammalogy*, 91(1):183–192, 2010.
- McCracken, G.F. 1996. Bats Aloft: A Study of High Altitude Feeding. *Bats Magazine* Volume 14, Issue 3, Fall 1996.
- New Mexico Department of Game and Fish (NMDGF). 2018a. County Federal/State Species Status for Chaves, Eddy, Lea, and Otero Counties. Accessed from the Biota Information System of New Mexico at: <http://bison-m.org/reports> on November 6, 2018.
- NMDGF. 2018b. BISON-M Species Booklet for Southwestern Willow Flycatcher. January.
- NMDGF. 2018c. BISON-M Species Booklet for Yellow-billed cuckoo. September.
- NMDGF. 2018d. BISON-M Species Booklet for Mexican Gray Wolf. September.
- NMDGF. 2018e. BISON-M Species Booklet for Jaguar. October.
- NMDGF. 2018f. BISON-M Species Booklet for Mexican long-nosed bat. October.
- NMDGF. 2017a. BISON-M Species Booklet for Least Tern. September.
- NMDGF. 2017b. BISON-M Species Booklet for Aplomado Falcon. June.
- NMDGF. 2017c. BISON-M Species Booklet for Piping Plover. September.
- Texas Parks and Wildlife. 2016. Mexican long-nosed bat (*Leptonycteris nivalis*). Accessed at: <http://tpwd.texas.gov/huntwild/wild/species/mexlongnose/> on December 16, 2018.
- U.S. Fish and Wildlife Service (USFWS). 2019a. Environmental Online Conservation System (ECOS) Species Profile: Least Tern. <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=8505>. Accessed February 11, 2019.
- USFWS. 2019b. ECOS Species Profile: Mexican Spotted Owl. <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=8196>. Accessed February 11, 2019.
- USFWS 2019c. ECOS Species Profile: Northern Aplomado Falcon. <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=1923> . Accessed February 11, 2019.
- USFWS 2019d. ECOS Species Profile: Piping Plover. <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=6039>. Accessed February 11, 2019.

- USFWS 2019e. ECOS Species Profile: Southwestern Willow Flycatcher.  
<https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=B094>. Accessed February 12, 2019.
- USFWS 2019f. ECOS Species Profile: Yellow-billed cuckoo.  
<https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=3911>. Accessed February 11, 2019.
- USFWS 2019g. ECOS Species Profile: Mexican Wolf.  
<https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=3916>. Accessed February 11, 2019.
- USFWS 2019h. ECOS Species Profile: Jaguar. <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=3944>.  
Accessed February 11, 2019.
- USFWS 2019i. ECOS Species Profile: Mexican long-nosed bat.  
<https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=8203>. Accessed February 11, 2019.
- USFWS. 2018a. New Mexico Ecological Services Field Office Official Species list for Special Use  
Airspace Optimization EIS for Holloman AFB; Consultation Code 02ENNM00-2019-SLI-0001.  
Generated on IPaC October 1, 2018.
- USFWS. 2018b. Arizona Ecological Services Field Office Official Species list for Special Use Airspace  
Optimization EIS for Holloman AFB; Consultation Code 02EAAZ00-2019-E-00002. Generated  
on IPaC October 1, 2018.
- USFWS. 2016. Endangered Species Facts, Piping Plover.
- USFWS. 2014a. Fact Sheet for the Interior Least Tern, *Sterna antillarum*.
- USFWS. 2014b. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the  
Western Distinct Population Segment of the Yellow-Billed cuckoo; Proposed Rule. Federal  
Register 79 (158) 48548 – 58652. August 15.
- USFWS. 2014c. Mexican Wolf. Accessed at:  
[https://www.fws.gov/southwest/es/mexicanwolf/natural\\_history.cfm](https://www.fws.gov/southwest/es/mexicanwolf/natural_history.cfm) on November 18, 2016.
- USFWS. 2013. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for  
Southwestern Willow Flycatcher; Final Rule. Federal Register 78 (2) 344-534. January 3.
- USFWS. 2012a. Mexican Spotted Owl Recovery Plan (*Strix occidntalis lucida*). September.
- USFWS. 2012b. Recovery Outline for the Jaguar (*Panthera onca*). April.
- USFWS. 2006. Endangered and Threatened Wildlife and Plants; Establishment of a Non-essential  
Experimental Population of Northern Aplomado Falcons in New Mexico and Arizona. Federal  
Register 71 (143) 42298-42315. July 26.
- USFWS. 2002. Final Recovery Plan Southwestern Willow Flycatcher (*Empidonax traillii extimus*).  
August.
- USFWS. 1994. Mexican long-nosed bat (*Leptonycteris nivalis*) Recovery Plan. September.

### **3.6 Land Management**

Bureau of Land Management (BLM). 2013. Tri-County Resource Management Plan and Environmental Impact Statement. April.

BLM. 2010. Socorro Field Office Resource Management Plan and Record of Decision. July.

Russell. 1992. Gila Cliff Dwellings, An Administrative History.

U.S. Forest Service (USFS). 2016. Draft Cibola National Forest Mountain Districts Management Plan. July.

### **3.7 Recreation Resources**

National Park Service (NPS). 2019. National Park Service Visitor Use Statistics. Accessed via <https://irma.nps.gov/Stats/> on April 11, 2019.

NPS. 2018. Carlsbad Caverns National Park: Things to do. Accessed via <https://www.nps.gov/cave/planyourvisit/things2do.htm> on November 12, 2018. Last updated October 5, 2018.

NPS. 2016. Gila Cliff Dwellings National Monument: Things to do. Accessed via <https://www.nps.gov/gicl/planyourvisit/things2do.htm> on November 13, 2018. Last updated December 28, 2016.

New Mexico Energy, Minerals and Natural Resources Department (EMNRD). 2018a. Brantley Lake State Park. Accessed via <http://www.emnrd.state.nm.us/spd/brantleylakestatepark.html> on November 12, 2018.

New Mexico EMNRD. 2018b. Living Desert Zoo and Gardens State Park. Accessed via <http://www.emnrd.state.nm.us/spd/livingdesertstatepark.html> on November 12, 2018.

New Mexico EMNRD. 2018c. Avalon Reservoir. Accessed via <http://www.emnrd.state.nm.us/spd/boatingweb/AvalonReservoir.html> on November 12, 2018.

New Mexico EMNRD. 2018d. Elephant Butte Lake State Park. Accessed via <http://www.emnrd.state.nm.us/spd/elephantbuttelakestatepark.html> on November 13, 2018.

New Mexico EMNRD. 2018e. Caballo Lake State Park. Accessed via <http://www.emnrd.state.nm.us/spd/caballolakestatepark.html> on November 13, 2018.

New Mexico EMNRD. 2011. Living Desert Zoo and Gardens State Park Management Plan.

New Mexico EMNRD. no date. Brantley Lake State Park Management and Development Plan.

U.S. Fish and Wildlife Service (USFWS). 2017. Bosque del Apache National Wildlife Refuge: Visitor Activities. Accessed via [https://www.fws.gov/refuge/Bosque\\_del\\_Apache/visit/visitor\\_activities.html](https://www.fws.gov/refuge/Bosque_del_Apache/visit/visitor_activities.html) on November 13, 2018. Last updated September 15, 2017. USFWS. 2012. National Wildlife Refuge Visitor Survey 2010/2011: Individual Refuge Results for Bosque del Apache National Wildlife Refuge.

USFWS. 2012. National Wildlife Refuge Visitor Survey 2010/2011: Individual Refuge Results for Bosque del Apache National Wildlife Refuge.

U.S. Forest Service (USFS). 2018a. National Visitor Use Monitoring Program Results Application. Accessed via <https://apps.fs.usda.gov/nvum/results> on October 29, 2018.

USFS. 2018b. Gila National Forest: Wilderness Areas. Accessed via <https://www.fs.usda.gov/detail/gila/specialplaces/?cid=stelprdb5039821> on November 13, 2018.

USFS. 2018c. Cibola National Forest and National Grasslands. Accessed via <https://www.fs.usda.gov/detail/cibola/home/?cid=stelprdb5414657> on November 13, 2018.

### **3.8 Socioeconomics**

New Mexico Workforce Connection. 2018a. Eastern Region Area Profile. <https://www.jobs.state.nm.us/vosnet/lmi/profiles/profileSummary.aspx?enc=Elzv7W1H4bwmL+k+/LJ5/djcZxSI2vf0zWuESGUQHrY=>

New Mexico Workforce Connection. 2018b. Southwestern Region Area Profile. <https://www.jobs.state.nm.us/vosnet/lmi/profiles/profileSummary.aspx?enc=Elzv7W1H4bwmL+k+/LJ5/djcZxSI2vf0zWuESGUQHrY=>

U.S. Census Bureau. 2019. American Factfinder. Housing Unit. Information available online through the American Fact Finder: <https://factfinder.census.gov/help/en/index.htm#glossary.htm>

U.S. Census Bureau. 2016. American Community Survey, 5-year estimates (2012-2016). Information available online through the American Fact Finder: <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Census Bureau. 2010. American Community Survey, 5-year estimates (2006-2010). Information available online through the American Fact Finder: <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Census Bureau. 2000. U.S. Decennial Census of 2000. Information available online through the American Fact Finder: <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Forest Service (USFS). 2016a. Visitor Use Report Gila National Forest, USDA Forest Service Region 3. National Visitor Use Monitoring.

USFS. 2016b. Visitor Use Report Cibola National Forest, USDA Forest Service Region 3. National Visitor Use Monitoring.

USFS. 2014a. Visitor Use Report Lincoln National Forest, USDA Forest Service Region 3. National Visitor Use Monitoring.

USFS. 2014b. Visitor Use Report Apache-Sitgreaves National Forest, USDA Forest Service Region 3. National Visitor Use Monitoring.

### **3.9 Environmental Justice**

Council on Environmental Quality (CEQ). 1997. Environmental Justice, Guidance Under the National Environmental Policy Act. December 10.

U.S. Census Bureau. 2016. American Community Survey, 5-year estimates (2012-2016). Table S0101. Information available online through the American Fact Finder:  
<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

### **3.10 Safety**

Air Force. 2011. Supplemental Report. Environmental Effects of Training with Defensive Countermeasures. October.

Air Force 1997. Environmental Effects of Self-Protection Chaff and Flares. August.

Air Force Safety Center (AFSEC). 2018a. F-16 Mishap History.  
<http://www.safety.af.mil/Portals/71/documents/Aviation/Aircraft%20Statistics/F-16.pdf>.  
Accessed November 9, 2018.

AFSEC. 2018b. BASH Statistics by Altitude.  
<http://www.safety.af.mil/Portals/71/documents/Aviation/BASH%20Statistics/USAF%20Wildlife%20Strikes%20by%20Altitude.pdf?ver=2016-08-22-120752-537>. Accessed November 9, 2018.

AFSEC. 2018c. USAF Wildlife Strikes by Operation.  
<http://www.safety.af.mil/Portals/71/documents/Aviation/BASH%20Statistics/USAF%20Wildlife%20Strikes%20by%20Phase%20of%20Operation.pdf?ver=2016-08-22-120754-583>. Accessed November 9, 2018.

AFSEC. 2018d. USAF Wildlife Strikes by Fiscal Year.  
<http://www.safety.af.mil/Portals/71/documents/Aviation/BASH%20Statistics/USAF%20Wildlife%20Strikes%20by%20Fiscal%20Year.pdf?ver=2016-08-22-120752-537>. Accessed November 9, 2018.

AFSEC. 2018e. Class A Mishaps by Fiscal Year.  
<http://www.safety.af.mil/Portals/71/documents/Aviation/BASH%20Statistics/Class%20A%20Mishaps%20by%20Fiscal%20Year.pdf?ver=2016-08-22-120752-567>. Accessed November 9, 2018.

Department of Defense (DoD). 2011. DoD Instruction 6055.07, Mishap Notification, Investigation, Reporting, and Record Keeping. June 6.

Holloman Air Force Base (AFB). 2016. 49<sup>th</sup> Wing Flying Safety, Holloman AFB. Safety Statistics. Email communication with D. Banwart, Cardno. December 21.

Short, Karen C. 2017. Spatial wildfire occurrence data for the United States, 1992-2015 [FPA\_FOD\_20170508]. 4th Edition. Fort Collins, CO: Forest Service Research Data Archive.  
<https://doi.org/10.2737/RDS-2013-0009.4>

### **3.11 Cultural Resources**

Ghost Towns. 2018. Ghost towns of New Mexico. Accessed online at:  
<http://ghosttowns.com/states/nm/nmcounty.html> on November 6, 2018.

National Park Service (NPS). 2018a. National Historic Trails. Accessed online at:  
<https://www.nps.gov/subjects/nationaltrailssystem/national-historic-trails.htm> on October 23.



- NPS. 2018b. Archaeology Program, list of National Monuments. Accessed online at: <https://www.nps.gov/archeology/sites/antiquities/MonumentsList.htm> on October 24.
- NPS. 2018c. Sites of Remembrance. Accessed online at: <https://www.nationalparks.org/connect/blog/honoring-sacrifices-they-made> on October 24.
- NPS. 2018d. Gila Cliff Dwellings National Monument, New Mexico. Accessed online at: <https://www.nps.gov/gicl/index.htm> on October 24.
- NPS. 2002. Fort Bayard Historic District National Register of Historic Places Registration Form. Signed May 21, 2002.

### **3.12 Hazardous Materials**

- Air Force. 2011. Supplemental Report. Environmental Effects of Training with Defensive Countermeasures. October.
- Air Force. 2006. Technical Order 00-105E-9 and STANAG 3896, Aerospace Emergency Rescue and Mishap Response Information.
- Air Force. 1997. Environmental Effects of Self-Protection Chaff and Flares Final Report. August.
- U.S. Environmental Protection Agency (USEPA). 2000. Hydrazine Summary, 302-01-2. Created April 1992, updated January 2000. Accessed at: <https://www.epa.gov/sites/production/files/2016-09/documents/hydrazine.pdf>.
- USEPA. 1997. Military Munitions Rule: Hazardous Waste Identification and Management; Explosive Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties. Federal Register 62(29): 6622-6657. February 12.
- Wright, M., A. Luers, R. Darwin, J. Scheffey, H. Bowman, R. Davidson, and E. Gogley. 2003. Composite Materials in Aircraft Mishaps Involving Fire: A Literature Review. June.

## **Chapter 4: Environmental Consequences**

### **4.1 Analysis and Approach**

*No references are provided in this section.*

### **4.2 Airspace Operations and Management**

- Air Force. 2018. Holloman Addendum Report. September 25.
- Air Force. 2017. Holloman Special Use Airspace Modifications, Holloman Air Force Base. October 20.
- Air Force. 2012. Air Force Instruction 13-201, Airspace Management. August 21
- Federal Aviation Administration (FAA). 2019. FAA Order JO 7400.2M, Procedures for Handling Airspace Matters. February 28.
- FAA. 2005. FAA Order 6050.32B, Spectrum Management Regulations and Procedures Manual. November 17.

### **4.3 Acoustic Environment**

- Committee on Hearing, Bioacoustics and Biomechanics. 1981. Assessment of Community Noise Response to High-Energy Impulsive Sounds. Report of Working Group 84, Committee on Hearing, Bioacoustics and Biomechanics, Assembly of Behavioral and Social Sciences. National Research Council, National Academy of Sciences. Washington, DC.
- Federal Interagency Committee on Urban Noise. 1980. Guidelines for Considering Noise in Land Use Planning and Control. June.
- Finegold, L.S., C.S. Harris, and H.E. von Gierke. 1994. Community Annoyance and Sleep Disturbance: Updated Criteria for Assessing the Impacts of General Transportation Noise on People. In *Noise Control Engineering Journal*, Volume 42, Number 1. pp. 25-30. January-February.
- Hershey, R.L. and T.H. Higgins. 1976. Statistical Model of Sonic Boom Structural Damage. FAA-RD-76-87. July.
- Schultz, T.J. 1978. Synthesis of Social Surveys on Noise Annoyance, *Journal of the Acoustical Society of America*, pp. 377-405.
- Sutherland, L.C. 1990. Assessment of Potential Structural Damage From Low Altitude Subsonic Aircraft. Wyle Labs. WR 89-16.
- U.S. Army Center for Health Promotion and Preventive Medicine. 2005. Operational Noise Manual An Orientation For Department of Defense Facilities. November.
- U.S. Environmental Protection Agency (USEPA). 1974. Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety. U.S. Environmental Protection Agency Report 550/9-74-004. March.

### **4.4 Air Quality**

- Air Force. 2011. Supplemental Report. Environmental Effects of Training with Defensive Countermeasures. October.
- Desert Research Institute. 2002. The Fate and Distribution of Radio Frequency Chaff. Prepared for Naval Research Laboratory, Washington, DC. 1 April. Accessed at [https://www.researchgate.net/publication/312275250\\_The\\_fate\\_and\\_distribution\\_of\\_radio-frequency\\_chaff](https://www.researchgate.net/publication/312275250_The_fate_and_distribution_of_radio-frequency_chaff).
- U.S. Environmental Protection Agency (USEPA). 2009. AP-42: Compilation of Air Emissions Factors, Chapter 15, Ordinance Detonation, Section 15.8, Signals and Simulators. July. Accessed at <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors>.
- USEPA. 2000. Aircraft Contrails Factsheet. September.

#### 4.5 Natural Resources

- Air Combat Command (ACC). 2008. Cumulative Analysis Report on the Effects of Military Jet Aircraft Noise on the Occupancy and Nesting Success of the Mexican Spotted Owl (*Strix occidentalis lucida*) 2002-2005. Langley Air Force Base, Virginia.
- Air Force. 2011. Supplemental Report. Environmental Effects of Training with Defensive Countermeasures. October.
- Air Force. 1997. Environmental Effects of Self-Protection Chaff and Flares Final Report. August.
- Air Force. 1994. Air Force Position Paper on the Effects of Aircraft Overflights on Large Domestic Stock. Approved by HQ USAF/CEVP. October 3.
- Barber, J.R., K.R. Crooks, and K.M. Fristrup. 2009. The costs of chronic noise exposure for terrestrial organisms. *Trends in Ecology and Evolution*. Volume 25, Number 3: 180-189.
- Beason, R. 2004. What can Birds Hear? *Proceedings of the Vertebrate Pest Conference*. Volume 21.
- Bleich V.C., R.T. Bowyer, A.M. Pauli, M.C. Nicholson, and R. W. Anthes. 1994. Mountain sheep (*Ovis canadensis*) and helicopter surveys: ramifications for the conservation of large mammals. *Biological Conservation*, Volume 70: 1-7.
- Bleich, V.C., R.T. Bowyer, A.M. Pauli, R.L. Vernoy, and R.W. Anthes. 1990. Responses of mountain sheep to helicopter surveys. *California Fish and Game*. Volume 76, Number 4: 197-204.
- Bowles, A.E. 1995. Responses of Wildlife to Noise. In: *Wildlife and Recreationists: Coexistence Through Management and Research* (R.L. Knight and K.J. Gutzwiller eds). Island Press, Washington D.C.
- Delaney, D.K., T.G. Grubb, and L.L. Pater. 1997. Effects of Helicopter Noise on Nesting Mexican Spotted Owls. Project Order No. CE P.O. 95-4. Holloman Air Force Base, New Mexico.
- Dooling, R and Popper, A. 2007. The Effects of Highway Noise on Birds. September.
- Dufour, P.A. 1980. Effects of Noise on Wildlife and Other Animals: Review of Research Since 1971. U.S. Environmental Protection Agency. Office of Noise Abatement and Control. July.
- Ellis, D.H., C.H. Ellis, and D.P. Mindell. 1991. Raptor Responses to Low-Level Jet Aircraft and Sonic Booms. *Environmental Pollution*, Volume 74, pp. 53-83.
- Habib, L., Bayne, E., and Boutin, S. 2007. Chronic industrial noise affects pairing success and age structure of ovenbirds *Seiurus aurocapilla*. *Journal of Applied Ecology*. Volume 22, pp. 176-184.
- Hristov, N.I., M. Betke, D.E.H. Theriault, A. Bagchi, and T.H. Kunz. 2010. Seasonal variation in colony size of Brazilian free-tailed bats at Carlsbad Cavern based on thermal imaging. *Journal of Mammalogy*, 91(1):183-192, 2010.
- Kempf, N. and O. Hüppop. 1997. The effects of aircraft noise on wildlife: a review and comment. *Journal für Ornithologie* (Germany). Volume 137: 101-113.

- Korschgen, C.E. and R.B. Dahlgren. 1992. Waterfowl Management Handbook. Prepared for the U.S. Fish and Wildlife Service. University of Nebraska, Lincoln, Nebraska. Available online at <http://digitalcommons.unl.edu/icwdmwfm/12>.
- Le Roux, D. and Wass, J. 2012. Do Long-Tailed Bats Alter Their Evening Activity in Response to Aircraft Noise? *Acta Chiropterologica*, Volume 14(1), pp. 111-120.
- LeBlanc, M., Lombard, C., Massey, R., Klapstein, E., and Lieb, S. 1991. Behavioral and Physiological Responses of Horses to Simulated Aircraft Noise. January.
- Manci, K.M., D.N. Gladwin, R. Villella, and M.G. Cavendish. 1988. Effects of Aircraft Noise and Sonic Booms on Domestic Animals and Wildlife: A Literature Synthesis. U.S. Fish and Wildlife Service National Ecology Research Center, Ft. Collins, CO, NERC-88/29. 88 pp.
- National Park Service (NPS). 2011. Annotated Bibliography, Impacts of Noise on Wildlife. Natural Sounds Program. Available online at [http://www.nature.nps.gov/naturalsounds/pdf\\_docs/wildlifebiblio\\_Aug2011.pdf](http://www.nature.nps.gov/naturalsounds/pdf_docs/wildlifebiblio_Aug2011.pdf).
- Pepper, C.B., M.A. Nascarella, and R.J. Kendall. 2003. A review of the effects of aircraft noise on wildlife and humans, current control mechanisms, and the need for further study. *Environmental Management*. Volume 32, Number 4: 418-432.
- Radle, L. 2007. The effects of noise on wildlife: a literature review. Available online at [http://wfae.proscenia.net/library/articles/radle\\_effect\\_noise\\_wildlife.pdf](http://wfae.proscenia.net/library/articles/radle_effect_noise_wildlife.pdf). March 2.
- The British Horse Society. No date. The Impact of Noise on Horses. Version 270318.
- Smith, D.G., D.H. Ellis, and T.H. Johnston. 1988. Raptors and Aircraft. In R.L. Glinski, B. Gron-Pendelton, M.B. Moss, M.N. LeFranc, Jr., B.A. Millsap, and S.W. Hoffman, eds., Proceedings of the Southwest Raptor Management Symposium. National Wildlife Federation, Washington, D.C., pp. 360-367.
- Spargo, B.J. 1999. Environmental Effects of RF Chaff: a Select Panel Report to the Undersecretary of Defense for Environmental Security. NRL/PU/6100—99-389, Washington, D.C.
- United States Fish and Wildlife Service (USFWS). 2018. Jaguar Recover Plan (*Panthera onca*). July.
- USFWS. 2015. Draft Revised Recovery Plan for the Wintering Range of the Northern Great Plains Piping Plover and Comprehensive Conservation Strategy for the Piping Plover in its Coastal Migration and Wintering Range in the Continental United States. Volume II. July.
- USFWS. 2002. Final Recovery Plan Southwestern Willow Flycatcher (*Empidonax traillii extimus*). August.
- Weisenberger, M.E., P.R. Krausman, M.C. Wallace, D.W. De Young, and O.E. Maughan. 1996. Effects of Simulated Jet Aircraft Noise on Heart Rate and Behavior of Desert Ungulates. *Journal of Wildlife Management*, Volume 60, Number 1, pp. 52-61.
- Workman, G.W., T.D. Bunch, L.S. Neilson, E.M. Rawlings, J.W. Call, R.C. Evans, N.R. Lundberg, W.T. Maughan, and J.E. Braithwaite. 1992. Sonic Boom/Animal Disturbance Studies on

PronghornAntelope, Rocky Mountain Elk, and bighorn sheep. Utah State University. Contract numberF42650-87-0349. Submitted to Hill Air Force Base, Utah.

#### **4.6 Land Management**

*No references are provided in this section.*

#### **4.7 Recreation Resources**

Manning, R., P. Newman, K. Fristrup, D. Stack, and E. Pilcher. 2009. A program of research to support management of visitor-caused noise at Muir Woods National Monument. *Park Science* Volume 26, Number 3, Winter 2009-2010.

Rapoza, A., E. Sudderth, and K. Lewis. 2015. The Relationship Between Aircraft Noise Exposure and Day-use Visitor Survey Responses in Backcountry Areas of National Parks. *The Journal of the Acoustical Society of America*, October 2015.

U.S. Department of Transportation. 2014. Human Response to Aviation Noise: Development of Dose-Response Relationships for Backcountry Visitors. Volume II: Results and AnalysesU.S. Fish and Wildlife Service (USFWS). 2017. Bosque del Apache National Wildlife Refuge: Visitor Activities. Accessed via [https://www.fws.gov/refuge/Bosque\\_del\\_Apache/visit/visitor\\_activities.html](https://www.fws.gov/refuge/Bosque_del_Apache/visit/visitor_activities.html) on November 13, 2018. Last updated September 15, 2017.

#### **4.8 Socioeconomics**

Fidell, S., B. Tabachnick, and L. Silvati. 1996. Effects of Military Aircraft Noise on Residential Property Values. 16 October

Nelson, J. 2003. Meta-analysis of Airport Noise and Hedonic Property Values: Problems and Prospects. July.

#### **4.9 Environmental Justice**

*No references are provided in this section.*

#### **4.10 Safety**

Air Force. 2011. Supplemental Report. Environmental Effects of Training with Defensive Countermeasures. October.

Air Force. 2006. Supplemental Environmental Impact Statement for Realistic Bomber Training Initiative.

Air Force. 1997. Environmental Effects of Self-Protection Chaff and Flares. August.

Arfsten, D.P., C.A. Wilson, K.R. Still, B.J. Spargo, and J. Callahan. 2002. Characterization of the Ecotoxicity of Five Biodegradable Polymers under Consideration by NAVAIR for Use in Chaff-Dispensing Systems. Naval Health Research Center Detachment (Toxicology), Wright-Patterson Air Force Base, Ohio.Federal Aviation Administration (FAA). 2014. FAA Advisory Circular – Aircraft Wake Turbulence, AC No. 90-23G. 10 February.

Federal Aviation Administration (FAA). 2014. FAA Advisory Circular – Aircraft Wake Turbulence, AC No. 90-23G. 10 February.

Holloman Air Force Base (AFB). 2015. Bird Aircraft Strike Hazard (BASH) Plan. 49<sup>th</sup> Wing Safety. November.

Short, Karen C. 2017. Spatial wildfire occurrence data for the United States, 1992-2015 [FPA\_FOD\_20170508]. 4th Edition. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2013-0009.4>.

U.S. General Accounting Office. 1998. Environmental Protection, DoD Management Issues Related to Chaff. September.

#### **4.11 Cultural Resources**

Battis, J.C. 1983. Seismo-Acoustic Effects of Sonic Booms on Archaeological Sites, Valentine Military Operations Area. Air Force Geophysical Laboratory. Report AFGL-TR-83-0304. Haber, J. and D. Nakaki. 1989. Sonic Boom Damage to Conventional Structures. HSD-TR-89. April.

Haber, J and Nakaki, D. 1989. Sonic Boom Damage to Conventional Structures. February.

Hershey, R.L. and T.H. Higgins. 1976. Statistical Model of Sonic Boom Structural Damage. FAA-RD-76-87. July.

Sutherland, L.C. 1990. Assessment of Potential Structural Damage From Low Altitude Subsonic Aircraft. Wyle Labs. WR 89-16.

#### **4.12 Hazardous Materials**

Air Force. 2011. Supplemental Report. Environmental Effects of Training with Defensive Countermeasures. October.

Air Force. 1997. Environmental Effects of Self-Protection Chaff and Flares. August.

### **Chapter 5: Cumulative Impacts**

AECOM. 2015. The Southern New Mexico-El Paso Texas Joint Land Use Study 2015.

Air Force 2019. Final Description of Proposed Action and Alternatives for Proposed Combat Air Forces Adversary Air. March 2019

Holloman Air Force Base, New Mexico

Air Force 2017a. Interim Relocation of F-16 Squadrons to Holloman AFB, NM EA. May.

Air Force. 2017b. Draft Environmental Assessment for Holloman Air Force Base F-16 Use in White Sands Missile Range R-5111 C/D Airspace. July.

Air Force. 2017c. Final Environmental Assessment for Addressing the Angel Thunder Personnel Recovery/Rescue Training Exercise in the Southwestern United States. May.

- Air Force. 2015a. Replacement of QF-4 with QF-16 Full-Scale Aerial Targets (FSATs) at Holloman AFB, NM EA. April.
- Air Force. 2015b. CATEX for F-16 Use of Talon MOA and R-5107E and F-5111A/B. August.
- Air Force. 2014. Installation Complex Encroachment Management Action Plan for Holloman AFB: Volume I and II Action Plan. June.
- Air Force. 2012. F-35A Training Basing EIS. June.
- Air Force. 2011. Recapitalization of the 49th Wing Combat Capabilities and Capacities Holloman AFB, NM EA. July.
- Air Force. 2007. Final Environmental Impact Statement for New Mexico Training Range Initiative.
- Air Force. 2006. Transforming the 49th Fighter Wing's Combat Capability, Holloman AFB, NM EA. August.
- Air Force. 1998. Proposed Expansion of German Air Force Operations at Holloman AFB, NM EIS. April.
- Air Force. 1997. Airspace Modifications to Support Units at Holloman AFB, New Mexico Environmental Assessment. June.
- Air National Guard Readiness Center. 2003. Deployment of Chaff and Flares in Military Training Airspace (Phase II) Environmental Assessment.
- Army. 2018. Fort Bliss Local Flying Area and Local Flying Rules (FB 95-1), Texas and New Mexico EA. February.
- Army. 2016a. White Sands Missile Range, New Mexico 2016-2046 Strategic Plan.
- Army. 2016b. High Altitude Mountain Environmental Training Strategy (HAMETS) in the Lincoln National Forest: Briefing.
- Army. 2014. Fighter Aircraft Use of Biggs Army Airfield EA. April.
- Army. 2012. Modification of Special Use Airspace Fort Bliss, Texas and New Mexico EA. August.
- Army. 2007. Defense Threat Reduction Agency Activities on White Sands Missile Range Programmatic EIS. March.
- Bureau of Land Management (BLM). 2017. Safford District Resource Management Plan 5-year Monitoring and Evaluation Report. September.
- BLM. 2014. Update to Reasonably Foreseeable Development Scenario for the BLM Pecos District. November.
- BLM. 2013. Tri-County Resource Management Plan and Environmental Impact Statement. April.
- BLM. 2010. Socorro Field Office Resource Management Plan and Record of Decision. July.
- BLM. 2008. Special-Status Species Record of Decision and Resource Management Plan. April.

- BLM. 1997a. Carlsbad Resource Area Resource Management Plan Amendment and Record of Decision. October.
- BLM. 1997b. Roswell Resource Area Office Resource Management Plan and Environmental Impact Statement. October.
- BLM. 1991. Final Safford District Resource Management Plan and Environmental Impact Statement. August.
- BLM. 1988. Carlsbad Resource Area Resource Management Plan. September.
- Catron County. 2007. Comprehensive Plan for Catron County, NM. March 2007.
- Chaves County. 2016. Comprehensive Plan for Chaves County, NM. July.
- Council on Environmental Quality (CEQ). 2005. Guidance on the Consideration of Past Actions in Cumulative Effects Analysis. June 24.
- CEQ. 1997. Considering Cumulative Effects Under the National Environmental Policy Act. January.
- Eddy County. 2008. Comprehensive Plan for Eddy County, NM. October.
- Federal Aviation Administration (FAA). 2016. FAA FORM 7711-1 Unmanned Aircraft System Certificate of Authorization.
- Graham County. 2016. Comprehensive Plan for Graham County, AZ. March.
- Grant County. 2017. Comprehensive Plan for Grant County, NM. June.
- Greenlee County. 2003. Comprehensive Plan for Greenlee County, AZ. March.
- New Mexico Department of Transportation. 2009. New Mexico Airport System Plan Update.
- New Mexico State University. 2018. Unmanned Aircraft System Test Center. Accessed at: <http://www.psl.nmsu.edu/The%20UAS%20Flight%20Test%20Center>. February 24, 2018.
- National Park Service (NPS). 2006. Carlsbad Caverns National Park Cave and Karst Management Environmental Assessment.
- NPS. 2002. Carlsbad Caverns National Park Resource Protection Plan.
- NPS. 1996. Carlsbad Caverns National Park General Management Plan.
- Next Era Energy. 2018. Borderlands Wind Project Plan of Development 2018. Submitted to BLM Socorro Field Office. June.
- Sierra County. 2017. Comprehensive Plan for Sierra County, NM. July.
- Town of Silver City. 2017. Comprehensive Plan for Town of Silver City, NM. September.



U.S. Environmental Protection Agency (USEPA). 2016. What Climate Change Means for New Mexico. August. Accessed at <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-nm.pdf>

U.S. Forest Service (USFS). 2016. Draft Cibola National Forest Mountain Districts Management Plan. July.

USFS. 1986a. Lincoln National Forest Land and Resource management Plan Environmental Impact Statement. September.

USFS. 1986b. Gila National Forest Plan. September.

## **Chapter 6: Other Considerations Required by NEPA**

*No references are provided in this section.*

## **Chapter 7: Best Management Practices and Mitigation Measures**

*No references are provided in this section.*

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