



TECHNICAL APPENDIX

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Appendix A - Memorandum of Agreement

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MEMORANDUM OF AGREEMENT REGIONAL PLANNING ORGANIZATION FOR THE PURPOSE OF CONDUCTING A JOINT LAND USE STUDY

This Memorandum of Agreement is entered into on the ___ day of _____, 2012, by and among the following New Mexico Counties: County of Dona Ana; the County of Otero; the County of Lincoln; the County of Sierra; the County of Socorro; the County of El Paso Texas; collectively "the Counties") the City of Alamogordo New Mexico; the City of Las Cruces, New Mexico; and the City of El Paso, Texas, (collectively "the Cities"); Ft. Bliss, Holloman AFB, and White Sands Missile Range (the concurring parties who will advise and assist).

WHEREAS, White Sands Missile Range has had significant changes to its test and evaluation mission with the addition of the Network and Advance Brigade Combat Team Modernization (ABCTM) testing; and

WHEREAS, adjacent land use may place military testing missions at odds with some development efforts; and

WHEREAS, wind and solar generation of electricity is a rapidly growing industry across New Mexico and Texas, and placement of energy farms and their associated transmission lines may negatively affect training and testing capabilities; and

WHEREAS, Fort Bliss was transformed through the Base Realignment and Closure (BRAC) process and Army Transformation from an installation with an Air Defense mission to a major maneuver and training installation supporting the 1st Armored Division; and

WHEREAS, noise studies done by the Operational Noise Management Program, in association with BRAC and Grow the Army Environmental Impact Statements, indicate that significant noise levels from new tank gunnery ranges will affect several areas in New Mexico and Texas; and

WHEREAS, Holloman AFB has experienced a major restructuring of its mission, losing the F-22 weapon system and gaining F-16, MQ-1 Predator, MQ-9 Reaper and Eurofighter weapons systems; and

WHEREAS, the Air Force is evaluating beddown of a F-35 training mission and expanding MQ-9 activities; and

WHEREAS, Spaceport America is being developed along the western boundary of the WSMR extension area; and

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WHEREAS, New Mexico and Texas possess some of the most open land available in the United States, but there is little chance the trend toward economic growth, cultural sprawl, and efforts to harness alternate sources of energy will slow or cease; and

WHEREAS, for several years, Holloman AFB, White Sands Missile Range, Fort Bliss, the Bureau of Land Management, the New Mexico State Land Office, Doña Ana County, the City of Las Cruces, and Otero County have participated in military coordination meetings, the purpose of which is to coordinate “land use planning” efforts; and

WHEREAS, in recent months, White Sands Missile Range, Holloman AFB, and Fort Bliss have engaged in economic sustainability planning sessions; and

WHEREAS, Holloman AFB, White Sands Missile Range, and Fort Bliss have requested a regional Joint Land Use Study (JLUS) aimed at ensuring the long-term viability of the three military installations in southern New Mexico and El Paso County; and

WHEREAS, a JLUS is a collaborative planning process designed to identify existing and potential land use conflicts that have the potential to impair the military's mission and impact the public health and safety confronting both the civilian communities and the military installation; and

WHEREAS, the purpose of the JLUS program is to encourage cooperative land use planning between military installations and the surrounding communities so that future civilian growth and development are compatible with military testing, training, and operational missions; and

WHEREAS, the Counties and the Cities intend to work closely with Holloman AFB, Fort Bliss, and White Sands Missile Range in supporting their military missions while addressing potential land-use planning issues and other encroachment factors by establishing a Regional Planning Organization.

NOW THEREFORE, the parties agree to the following terms and conditions for a Regional Joint Land Use Study, to wit:

1. The parties shall establish a Regional Planning Organization (RPO) for the purpose of conducting the regional Joint Land Use Study.
2. The RPO shall consist of a Policy Committee (RPOPC) and a Technical Committee (RPOTC). The RPOPC will consist of 16 members, with one representative from each of the counties; one representative from each of the cities, one representative each from White Sands Missile Range; Holloman AFB; and Ft. Bliss; the New Mexico State Land Office; the Bureau of Land Management respectively; and two members of the Military Base Planning Commission. The

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RPOPC will be co-chaired by the Chairs of the Board of County Commissioners- Dona Ana County and Otero County. Nine (9) members of the RPOPC will constitute a quorum. Each party will select a primary and alternate representative. The Director, Office of Military Base Planning and Support, State of New Mexico will be an ex-officio member of the RPOPC. Membership on the RPOPC will be for the duration of the Joint Land Use Study. The RPOPC will meet quarterly or subject to the call of both Co-Chairs. Meetings will be held at alternate locations as determined by the members and will be open to the public. Meetings can be held electronically, but every effort will be made for members to attend personally.

3. The RPOTC will consist of 16 members, with representation from the following counties: Lincoln, Dona Ana, Otero, Sierra, Socorro, and El Paso; Las Cruces, Alamogordo, and El Paso; White Sands Missile Range (Chief of Staff), Holloman AFB; Ft. Bliss; the Bureau of Land Management; the New Mexico State Land Office; the New Mexico Spaceport Authority; and the Director of New Mexico Office of Military Base Planning and Support. The RPOTC will be co-chaired by the Otero County Manager and the Chief of Staff, White Sands Missile Range. Members of the RPOTC will be those representatives of each party who have the skills and expertise to fulfill the objectives of the Joint Land Use Study. Each party will select a primary and alternate member. Nine members will constitute a quorum. Membership on the RPOTC will be for the duration of the Joint Land Use Study. At a minimum, the RPOTC will meet quarterly, though more frequent meetings might be required during the early phases of the Study. Opportunities for various stakeholders and the general public to contribute to the Study will be provided throughout the planning process.

4. The County of Dona Ana will serve as fiscal agent for the Regional Planning Organization. The duties of the fiscal agent, on behalf of the Regional Planning Organization, are as follows: apply for a Department of Defense Office of Economic Adjustment grant for the purposes of executing a Joint Land Use Study; administer the grant; issue a Requests for Proposals; review Proposals; and interview (if required) and select a professional services team. All purchasing activities performed by the fiscal agent associated with procurement of professional services for the RPO will involve appropriate representation from the parties to this agreement.

5. The RPOPC shall establish and adopt operational and procedural guidelines to govern the execution of the Southern New Mexico & El Paso County Joint Land Use Study.

6. The RPOTC will consider, review, and make recommendations to the RPOPC regarding legislation, resolutions, joint powers agreements, orders, policies, and ordinances which might be required in order to address issues identified during the Joint Land Use Study. The RPOPC shall consider, approve, modify or deny recommendations of the RPOTC.

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7. Except as specifically set forth herein, the parties retain all budgetary and legislative functions, except as specifically delegated to the RPOPC or the RPOTC by this agreement.

8. Budget: The RPOPC shall establish a budget for its operation. All budgets must be approved by the parties to this Agreement prior to becoming effective as the parties deem necessary. Each of the parties hereto agrees to pay the following proportions of the required 10% non-Federal contribution ("local match") either through a cash contribution, staff time dedicated to the project, or a combination thereof:

Dona Ana County: 20%

Otero County 15%

Lincoln County 5%

Socorro County 5%

Sierra County 5%

El Paso County 5%

The City of Alamogordo 15%

The City of Las Cruces 20%

The City of El Paso 10%

9. Any changes, modifications, or alterations to the matters addressed by this MOA shall only become effective upon approval by all parties and shall be incorporated as a written amendment to this Agreement.

APPROVED

CITY OF ALAMOGORDO

By: _____

Title: _____

CITY OF EL PASO

By: _____

Title: _____

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CITY OF LAS CRUCES

By: _____

Title: _____

OTERO COUNTY

By: _____

Title: _____

DONA ANA COUNTY

By: _____

Title: _____

LINCOLN COUNTY

By: _____

Title: _____

APPROVED

SOCORRO COUNTY

By: -----

Title: _____

SIERRA COUNTY

By: _____

Title: _____

EL PASO COUNTY

By: _____

Title: _____

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THE CONCURRING PARTIES

WHITE SANDS MISSILE
RANGE

By: _____

Title: _____

FT. BLISS

By: _____

Title: _____

HOLLOMAN AFB

By: ----

Title: _____

Appendix B - Stakeholder Interview List

Appendix B – Stakeholder Interview List

Southern New Mexico El Paso JLUS Stakeholder Interview List		
Organization	Name	Position
New Mexico Office of Military Base Planning and Support	Hanson Scott	Director, Office of Military Base Planning and Support
NM State Land Office	Sunalei Stewart	Deputy Land Commissioner
	Don Britt	Asst. Commissioner of Commercial Resources Division (Policy Cmte. Member)
	Thomas Leatherwood	Director of Commercial Resources Division
	Margaret Ambrosino	Urban and Regional Planner, Commercial Resources Division
Bureau of Land Management	Bill Childress	Regional Director
	Eddie Guerrero	NM International Border Advisor
Spaceport	Bill Gutman	New Mexico Spaceport Authority, Technical Operations Manager
Fort Bliss	Brian Knight	Chief, Conservation Branch
	John Kipp	DPW-E
	Vicki Hamilton	Chief, Environmental Division
	John Barrera	NEPA Manager
	Yvette Waychus	DPW-E
	Wayne Julius	Mission Support Element
	Ray Null	Alternate - Mr. Julius
	Eric Wolters	Observer
	Benny Steigel	Fort Bliss Airspace Manager
	Jean Offutt/Donita Kelly	Fort Bliss PAO
White Sands Missile Range	BG Gwen Bingham	Commanding General
	Bill Gilbert	Interim Executive Director
	Dan Hicks	Chief of Staff
	COL James Winbush	White Sands Test Center Commander

Appendix B – Stakeholder Interview List

Southern New Mexico El Paso JLUS Stakeholder Interview List		
Organization	Name	Position
	Greg DeVogel	Chief, Plans and Operations
	Frank Chavez	WSMR TC-Range Operations
	Richard Wyman	Regional Spectrum Manager
	Bob Brennan	WSMR Airspace Manager/Range Operations
	Danny Medina	Range Commander's Council Rep for Sustainment and Encroachment
	Cathy Giblin	WSMR-Test Operations, Environmental Engineer
	Janice Bridges	Range Operations (Real estate contracts)
	CDR Derek Scott	US Navy Detachment Officer in Charge
	COL Leo Pullar	White Sands Garrison Commander
	Garry Lambert	Director, TRADOC Analysis Center
	Jeffrey Thomas	Director, Defense Threat Reduction Agency (DTRA)
	Gary Giebel	Army Research Lab
	Sean O'Brien	Army Research Lab
Holloman AFB	Jim Iken	Deputy Director for Installation Support Holloman AFB
	Adam Kusmak	49 CES/CEA, Chief Asset Management Flight
	Juan Lavarre de Perez	Holloman Airspace Manager (new)
	Brent Hunt (for Dale Osborn)	49 CES/CEA
	Will Urick	Holloman Range Manager (Oscura, Red Rio, Centennial)
	Mr. Tom Fuller	Holloman PAO
Doña Ana County	Dan Hortert	Director, Community Development
	Dr. David Garcia	District 2
	Karen G. Perez	Chair, District 3

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Southern New Mexico El Paso JLUS Stakeholder Interview List		
Organization	Name	Position
	Wayne Hancock	District 4
	Leticia Duarte Benavidez	District 5
City of Las Cruces	Paul Michaud	Senior Planner
	David Weir	Community Development Director
	Vincent Banegas	Community Development Deputy Director
	Christine Logan	Economic Development Administrator
El Paso County	Sergio Lewis	County Commissioner Precinct 2
	Oswaldo "Ozzie" Del Rio	Commissioner's Admin Assistant
	Ernesto Carrizal	Director, County Public Works
	Kevin McCary	Assistant County Attorney
	Gilberto Saldana	Senior Civil Engineer
	John Colquitt	Colquitt Real Estate Company
	Bobbi Wright	Colquitt Real Estate Company
City of El Paso	Matthew McElroy	City Development
	Carl Robinson	City of El Paso
	Aaron Wolfe	Beto O'Rourke, US Representative
	Cindy Ramos	CEO, El Paso Hispanic Chamber
	Steve Dunigan	Planning and Zoning Director, Ruidoso Downs
Lincoln County	Becky Brooks	Executive Director, Ruidoso Valley Chamber of Commerce
	Curt Temple	Planning Director, Lincoln County
	Steve Dunagan	City of Ruidoso Downs
	Ronny Rardin	County Commissioner
Otero County	Pamela Heltner	County Manager
	Bobby Jones	Resident and landowner

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Southern New Mexico El Paso JLUS Stakeholder Interview List		
Organization	Name	Position
	Randy Rabon	Resident and landowner
City of Alamogordo	Susie Galea	Mayor
	Marc South	Planner
	Mike Espiritu	Alamogordo Chamber/Otero County Economic Development
Socorro County	Delilah Walsh	County Manager
	Holm Bursum	County Commissioner
Sierra County	Jan Porter Carrejo	County Manager
	Mark Klaene	Observatory Engineer
	Sabrina Flores	Lincoln National Forest

Appendix C - Summary of Public Meeting Input

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APPENDIX A – ROUND #1 PUBLIC MEETING COMMENT SHEETS



➤ We welcome your comments!

Land use cannot be planned without 1) a thorough study of aquifers (by modeling) & recharge study completely through the region & 2) a serious consideration of climate warming.

INFORMATION

WEBSITE:

<http://www.snmejntlanduse.com>

CONTACT:

Daniel Hortert

Doña Ana County

danielho@donaanacounty.org

575-525-6113



 We welcome your comments!

My husband and I would like to
see the military work with BLM / San Zia
more to establish the much needed infrastructure.

INFORMATION

WEBSITE:

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Doña Ana County

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575-525-6113



We welcome your comments!

When any of the military units are conducting maneuvers (especially at night) ~~could~~ on the mesa north of Ruidoso - could you please notify our Regional Sierra Blanca airport? Many people call them to ask about what is going on.

Thanks -

Kathryn Monte

Lincoln City, Commissioner

INFORMATION

WEBSITE:

<http://www.snmepjointlanduse.com>

CONTACT:

Daniel Hortert

Doña Ana County

danielho@donaanacounty.org

575-525-6113



➤ We welcome your comments!

ALAMOGORDO is The MILITARY operations we SUPPORT with out
Holloman AFB, WSMR, & FT BLISS ALAMOGORDO will be
a GHOST Town. As a RESIDENT OF ALAMOGORDO
& A US CITIZEN I SUPPORT our MILITARY.

INFORMATION

WEBSITE:

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Daniel Hortert
Doña Ana County
danielho@donaanacounty.org
575-525-6113



➤ We welcome your comments!

To promote regional development, we need a road through
WSMR From Spaceport to Alamogordo/Tularosa area.

Growth at WSMR & Ft Bliss has caused substantial growth at
Las Cruces & El Paso & cities are outgrowing available water supplies.
Thus, they are demanding more water from our area. We don't have
any extra to give away.

INFORMATION

WEBSITE:

<http://www.snmepjointlanduse.com>

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Daniel Hortert
Doña Ana County
danielho@donaanacounty.org
575-525-6113

szigdog@gmail.com



➤ We welcome your comments!

Open road from Tularosa to
I-25 in winter or
whenever possible.

INFORMATION

WEBSITE:

<http://www.snmejlanduse.com>

CONTACT:

Daniel Hortert

Doña Ana County

danielho@donaanacounty.org

575-525-6113



➤ We welcome your comments!

Military Operations, both present and future, are a positive aspect of the area. Military personnel add to the economic development and growth of the community in a more substantial way than any other single entity. Please do not let a few complaints hinder what could be a good & functional relationship between the military and surrounding communities, businesses and citizens. Thanks.

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CONTACT:

Daniel Hortert

Doña Ana County

danielho@donaanacounty.org

575-525-6113



➤ We welcome your comments!

As a small business owner in Alamogordo I know the importance of our Military. I have seen to many times a vocal minority impact the greater good of the silent majority. We are a military community & Region, the economic impact of the military is paramount to the growth of the entire study Area.

WEBSITE:

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CONTACT:

Daniel Hortert
Doña Ana County
danielho@donaanacounty.org
575-525-6113



71 We welcome your comments!

I do ~~contracting~~ contracting work on Holloman Air Force Base and am concerned that lower funding or a repriorization of where training or missions occur would directly effect my job and the economic standing of the community. ~~The~~ I have never noticed Any aviation noise, other than sonic booms, any even those don't bother me or my animals.

INFORMATION

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CONTACT:

Daniel Hortert

Doña Ana County

danielho@donaanacounty.org

575-525-6113



➤ We welcome your comments!

As a local business owner in Otero county military families often frequent my business. I would like to see growth in the military installations in the area because I believe it would greatly help support local businesses.

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CONTACT:

Daniel Hortert

Doña Ana County

danielho@donaanacounty.org

575-525-6113



➤ We welcome your comments!

The aviation noise doesn't bother me. I have lived in other areas of the country with less military presence and have experienced more aviation noise in those areas than here.

INFORMATION

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CONTACT:

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Doña Ana County

danielho@donaanacounty.org

575-525-6113

milled 98@hotmail.com

6/12/13 6:15 - The military only gets small fraction of total budget. Most ~~of~~ ^{go to educ. and} ^{entitlement} ^{programs,} military. Sun Zia will hire temporary employees and the energy is going to Calif.



We welcome your comments!

I have property in the Northern Extension ^{over} of WSMR which has involuntary land lease and evacuation required for military missions associated with the military installations. I'm concerned how Sun Zia ^{towers} will impact me personally. Will private landowners be reimbursed or paid for right of way easement? Is eminent domain possible? Will what happened to John Prather happen to private landowners? Are private

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landowners likely to be affected in contract payments by budget shortfalls? (Northern Extension area WSMR) and contracts ^{which are} ^{involuntary}

***Inconvenience of evacuation is appreciated.

The postcards notifying of mandatory evacuation is appreciated.



➤ We welcome your comments!

Concerned about the Red Sands Motorcycle + ATV area (BLM) to stay open and useable at all Times, on the approved trails. We the Prairie Dogs Motorcycle Club have only this area to ride + permit once a year for a national race. P.D.M.C. Pres. Donald LeRoy Harris LeRoy-2up 18005@hotmail.com. My great grand Father was murdered Aug 22 1915 in Orgrande, I want my grandchildren to be able to walk in that area

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CONTACT:

Daniel Hortert

Doña Ana County

danielho@donaanacounty.org

575-525-6113

From:

Sent: Thursday, June 20, 2013 11:07 AM

To: Drake, Liz

Subject: Re-Open Engle to Tularosa

I wasn't able to attend the meeting, but I feel you should be aware of an issue that has come up several times in the last few years.

It would really benefit the communities of T or C, Spaceport America, Williamsburg, Elephant Butte, plus Hillsboro, on the West End and Tularosa, Alamogordo, Ruidoso, Mescalero, Cloudcroft, Roswell, Holloman, plus WSMR on the East End if the road was re-opened between Engle and Tularosa through Rhodes Canyon. Much of it is already paved and security could be accomplished with state of the art fences, aerial, satellite, infrared, etc. Even if the road could be opened during the weekends, it would help to have a road across the lower third of New Mexico. Also as the Spaceport and WSMR collaborate more and more, it would provide a more direct supply route, equipment route, payload route, and space vehicle route.

Thank you,

Ms. Liz Drake
Urban Planner
AECOM
404-965-9672
liz.drake@aecom.com

September 23, 2013

RE: Southern New Mexico – El Paso, Texas Joint Land Use Study (JLUS) questions / concerns.

CC: Mr. Ronny Rardin, Otero County Commissioner, Ms. Susan Flores, Otero County Commissioner,
Ms. Pamela Heltner, Otero County Manager, + more - see list

Ms. Drake,

I have a few questions about the fiscal impact on rural residents (me), the study scope and the integrity of this “study”. Since Department of Defense (DoD) activities are the heart of this study, my questions focus on DoD activities (present and future). I expect a written response from a knowledgeable DoD representative addressing each of my concerns. Please no generalities or platitudes. I want this letter and these questions made part of the so called “Southern New Mexico – El Paso, Texas Joint Land Use Study”, with copies distributed to committee’s, subcommittees, meetings, panels, etc as necessary to insure my concerns are addressed completely. Further I want to be included on all communications within this “study”.

I require your mailing address for USPS delivery and your FAX number, not just an email address.

As I understand it the present representation and control entities for this “study” is as follows:

Fully Represented on the “Joint Land Use Study” are:

<u>Name</u>	<u>Entity Type</u>
Dofia Ana	County Government
Otero	County Government
Lincoln	County Government
Socorro	County Government
Sierra	County Government
El Paso	County Government
Alamogordo	City Government
Las Cruces	City Government
El Paso	City Government
Fort Bliss	Department of Defense
White Sands Missile Range	Department of Defense
Holloman AFB	Department of Defense
New Mexico State Land Office	State Government
Bureau of Land Management	Federal Government
New Mexico Office of Military Base Planning & Support	State Government
New Mexico Spaceport Authority	State Government Appointed Panel

Not Directly Represented (or represented at all) on the “Joint Land Use” Decisions Are:

Rural residents in Otero County
Rural residents in Lincoln County
Rural residents in Socorro County
Property owners in the affected rural areas.
People with limited internet access such as rural poor and elderly.

As you can see, arguably, most of the proposed negative impact falls on those not directly represented. Excluding these citizens in the study raises questions about the validity, and intentions of the “study”. In my

view this “study” enables tyranny of the majority (see John Adams 1788). My individual rights should not be subject to a public vote, especially without representation. My rights are important, I demand they be respected.

As you must know the term “Joint Land Use Study” is prevalent across the United States, wherever there is a significant Department of Defense presence. Indeed, obviously, DoD developed the JLUS as a tool to counter private property rights. Review of the results of these many “studies” shows that they are a precursor to control of private property through zoning (or similar regulation). The private property use loss (or taking) is usually justified by touting the money brought in to local government coffers, the enrichment of a few citizens through DoD money and the need for security (military might). Property is taken by the aforementioned “tyranny of the majority” not by willing sellers.

A “Joint Land Use Survey” almost always uses a word such as “balance” or “balanced” in talking about private property takings. Normally (for most people) this would mean that both of the parties in a bargain gave/took something and the deal was balanced. For example, the Department of Defense would promise not to expand and take more property rights and the private property owners would limit their property use to facilitate DoD operations. That would be balanced (well sort of).

That is not what the “Joint Land Use Survey” process is about. Yes, the private property rights are taken, but the DoD makes no promise not to take more next year or the year after. Effectively the “Joint Land Use Survey” is a one way street toward the DoD. It is primarily for their benefit (minimize their costs). Secondly, a few people and various government entities enrich themselves. DoD already owns huge areas of the United States and huge areas of airspace. Most of New Mexico is owned by various government agencies (Yet, as a side note, Federal payment in lieu of taxes (PILT) keeps decreasing every year. PILT payments to counties for federal land within their borders, even at its highest rate is lower than the rate private landowners have to pay in property taxes (yes DoD / USFS / BLM have a say in PILT)). Little land area is left for private ownership. Never-the-less DoD wants more. How much is enough? Is there a limit? The mechanism for “taking” is often a “memorandum of understanding” rather than proper due process. MOU are very difficult (impossible) to change for private citizens. Effectively due process is eliminated.

“Balance” is a fiction. For example, in 1995/1997 we “gave” the German's the right to fly LOW over our homes (DoD took our rights). In Weed, NM in 2007 we gave up property rights to allow low supersonic flight over our homes (DoD took rights using a bogus FONSI document). Yes, Alamogordo, El Paso, Las Cruces are enriched (\$\$\$), but what has the DoD ever “given” to Weed/Sacramento/Pinon (leave out the “security” argument please)? The property owners affected received nothing except sonic booms, noise and crashed German aircraft. The claimed positive economic impact was miniscule for us, while the loss was significant. The stated reason the USAF wanted the right to fly supersonic over my house in 2007 was to base the F-22. The F-22 is now leaving. Will the USAF restore my rights? Or will they keep the supersonic corridor over my house? I bet I'll have a long wait if I expect any “balance”. This is “tyranny of the majority”. It is one way only. JLUS is not a fair or reasonable process. That is why DoD started it, to reduce their costs. It is not about military preparedness, it is about money.

With that preface in mind, a small community that is “offered” (forced into) a “Joint Land Use Survey” by government (see above list of JLUS “Partners” for the government players) must ask itself “What do they want to take from us now?” That is my fact finding mission; What does the DoD want from me? From the Pinon, Weed, Sacramento Communities this time? What will they take from my family?

My questions are simple. I just want to know what the scope of my property loss might be. It would be refreshing to get forthright, honest, complete answers. Here are my questions:

1. Is Night (or day) Joint Training planned, now or in the future, in the Lincoln National Forest (Southern Sacramento Mountains)? This training is typically (not limited to) combat simulations with soldiers traveling over the forest, it could include helicopters, aircraft and simulated combat (pyrotechnics), possibility maneuvering military vehicles. This kind of DoD activity has become common on USFS land (for example, the Cibola National Forest). Since I reside in the USFS (LNF) this kind of activity by DoD is likely to NEGATIVELY affect my quality of life, negatively affect the value of my property, negatively affect my livestock and hurt my business operations. It will reduce environmental quality.

DoD owns huge areas of New Mexico already. What is the limit? (Will it be the knock on your door?) Will a MOU limiting DoD use of USFS land be drafted? If not why not?

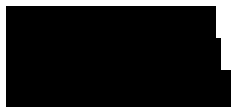
2. Are any limits on residential development possible (limitations on dwelling densities for example)? If so why? My property was purchased for my enjoyment and for my economic benefit. Limiting my rights further (over and above existing State/county rules) deprives me of these rights. Using a Memorandum Of Understanding reduces my representation for zoning changes.
3. Are any limits on Wind Energy Farms (wind turbines) possible (including allowing DoD to review permits)? If so why? My property was purchased for my economic benefit. One of the few money making uses for land in this area is solar and wind energy development. The Country needs green energy. Preventing my use, including by the use of bureaucratic red tape, hurts me and deprives me of my property rights. DoD is not part of the local government.
4. Are any limits on "tall structures" (antennas/wind/solar/etc), over and above the existing, longstanding, FAA requirements, possible? If so why? These structures are used for both solar and wind energy. I purchased my property with the anticipation of that use. These structures are also used to facilitate communications (cell, television, satellite, etc). The Pinon/Weed/Sacramento area lacks a robust communication infrastructure. We have limited cell coverage, limited broadcast television coverage, etc. Many residents rely on satellite and radio for communications. I purchased my property anticipating using communication structures. Limiting my right to improve communications and develop energy for my economic benefit affects me, my business, my family.
5. Are any limits on power transmission lines possible (needed for Wind Energy)? If so why? Power transmission infrastructure is critical to development of wind and solar energy. Transmission lines that are "required" to be located far away from the solar/wind generating facility effectively prohibit solar/wind development.. No solar/wind facility can exist without proper support from a transmission line. Imposing limits on transmission lines imposes limits on solar and wind energy development. This problem affects the entire Weed/Pinon/Sacramento area.
6. Are any limits on Solar Arrays possible? If so why? DoD complains about "reflections" from solar panels (see numerous JLUS). They are not joking. They have suggested that property owners use solar panels of DoD's selection. No consideration of the cost, availability or quality for these special panels. Other solar energy companies do not have to meet DoD requirements. These are my competition. Increasing my costs to develop solar on my property makes me uncompetitive. In fact requirements and bureaucratic red tape (DoD "review") may make solar impossible (economically). This effectively is the same as taking my right to develop my property. If retro fitting became the "law" (through a MOU) the impact to the Weed/Pinon/Sacramento area will be devastating.
7. Unmanned Aerial Vehicles are surveying Communities in the Southern Sacramento Mountains (as "training"). Private information is collected. Are any limits put on this data collection? Who is it shared with? I have an expectation of privacy and I should be secure against unreasonable searches for myself, my houses, my papers, and effects. UAV should not use technology to invade and take my rights. Will a MOU limiting DoD invasion of privacy and the use of this information be drafted? If not why not?
8. Are more UAV flights planned? What increase (% or number)? Noise / pollution will increase by how much? The increase in UAV affects the quality of life, rights under the Fourth amendment, my safety and the environment. DoD offers no limits for these issues, rather is looking to facilitate large increases in drone use at the expense of rural residents.
9. Are there any UAV "no fly" areas to protect private property and privacy (not those zones required for DoD operations)? If not why not? Are these areas designated by law or whim? Where are these areas? Will a MOU limiting DoD use be drafted?
10. DoD owns/controls most airspace in Otero County (FAA is very accommodating for the DoD). Are new Unmanned Aerial Vehicle Access routes being considered? Where? What altitude? What private property will be affected? What USFS land is affected? What hours of operation? Will a MOU limiting DoD routes be drafted? If not why not?
11. Are any, new, specific laws planned to protect private property rights from DoD encroachment? If not why not? If so what are the likely laws in general terms? Include planned MOU that limit expansion of DoD.
12. Are any, new, noise increases possible (average, peak, etc) in the Southern Sacramento Mountains? This would include noise from Army/USAF/German AF, etc (Multiple Branches and Multiple Countries). It would include UAV, aircraft, helicopters and ground operations. Are any limits on these increases to be set? Are any limits on future expansion to be set? If not why not?

13. Are any limits on radio spectrum use possible (through the FCC or not). Are any compatibility/allocation/use issues related to radio frequency interference, radio frequency spectrum possible? If so what spectra is impacted? This question includes requirements for blanking/jamming RF (SATCOM Etc). What are the possible frequency spectrum interference strategies anticipated by DoD? As I stated above the Pinon/Weed/Sacramento area lacks a robust communication infrastructure. Limited cell coverage, limited broadcast television coverage, etc. Many residents rely on satellite for communications. In addition, two way radio is used extensively by private citizens (MURS, GMRS, FRS, Amateur). Otero County uses VHF and microwave frequencies for emergency services. GPS is used for economic benefit. GPS is used for emergency services (for example emergency medical evacuation by helicopter). I purchased my property anticipating using various radio communications. In fact I use EVERY one of the above radio spectrum areas. In addition, I already must accept the existing limits imposed by DoD for the area around WSMR. Now will there be more interference from DoD? Limiting my right to improve communications for my economic benefit and my family's safety affects me and my business. Will a MOU limiting DoD be drafted? If not why not?
14. Relative to frequency spectrum impedance, are any limits possible in the construction of buildings or other facilities that block or impede the transmission of signals from antennas, satellite dishes, or other transmission/reception devices in the Southern Sacramento Mountains? Imposing further regulation on building can only hurt development. Requiring property owners to meet DoD's changing requirements destroys the value of their holdings. Will a MOU limiting DoD building control be drafted? If not why not? Will DoD change requirements next year and again the year after and again two years later? What limit is there?
15. Are there any service reductions possible for GPS (degradation, jamming, etc)? (see my comments above for both economic and public safety uses of GPS)
16. Are any increases/changes in trash dumped on public/private land possible? Examples include flares, pyrotechnic, shell casings, debris, etc. This could be from any DoD activity in the Southern Sacramento Mountains. Will a MOU limiting DoD dumping be drafted? If not why not?
17. Is there any possibility that DoD water use/pollution will increase in the Southern Sacramento Mountains?
18. Is there any possibility that aquifers in the Southern Sacramento Mountains will be impacted by future DoD operations (explosions, sonic booms, heavy vehicle operation, etc)?
19. Are any limits on the use of lighting by residents possible? If so why? My business and personal safety require outdoor lighting. Limiting or requiring "permission" for lighting will negatively affect my operations. At the minimum, loss of lighting rights will add cost and reduce safety for me, my business, and my family.
20. Are any limits on "gathering facilities" (arenas, etc) possible? If so why? Our area has a rich history of public gathering. Limiting the right to gather, and to have facilities to gather, is an important right. Traveling "somewhere else" will cost me, and stifles my freedom.
21. How does our rural life specifically impact the military's ability to conduct their missions and how are the rural communities and population "encroaching" on the military facilities? Please detail the specific "encroachments" feared by DoD. If none are listed then no JLUS is needed.
22. When will those impacted in the Southern Sacramento Mountains be allowed equal representation in these private property rights discussions (JLUS)?

Thank you for seeing that our Southern Sacramento Mountains Communities have answers to these questions. I hope that we do in fact see a "balanced" plan in which we have had equal representation in its formulation, and our rights are honored and protected.

Sincerely,

Walt Coffman
Kathleen Henderson



The Weed Community and Surrounding Areas of the Southern Sacramento Mountains

Mission Statement

To preserve, protect, enhance and defend the health, safety, economic well being, and cultures of the Southern Sacramento Mountains.

Driving Principles

1. The natural, and historical conditions and uses of the southern Sacramento Mountains are the economic base and foundation for our way of life.
2. Ranching, small business, lodging, camps, recreation, hunting, astronomical observation, entrepreneurship and current and future renewable energy production exemplify our economic base.
3. The survival of this base is dependent upon the maintenance of a quiet, rural grassland and forest environment.¹
4. Private landowners' have the right to use their private lands freely within the law without unwarranted government intrusion.
5. Support of the United States military with the understanding that our guaranteed freedoms, health, safety, economy and way of life are not restricted nor negatively impacted.

¹ Quiet in the mountains is far different than urban quiet. Quiet means "silence", the ability to hear the sounds of nature without the intrusion of man-made noise. This is the foundation for our way of life and economic success

Ms. Liz Drake
Urban Planner
AECOM
(404) 965-9672
liz.drake@aecom.com

Sept 23, 2013

Initial questions presented at the 9-23-13 meeting.

Dear Ms. Drake,

Below are a few of our initial questions. We expect to send additional questions to you, in writing, after the meeting. We ask that all questions be answered in writing and mailed to me at the address listed below.

- 1- What is the objective of this JLUS study?
- 2- What kind of restrictions can/will the DoD place upon our properties?
- 3- Our understanding is that in order to participate in your survey online access is required. Our area includes a high percentage of elderly and/or low income that does not have a computer or internet access. How will you account for this and assure their voice is heard? Not including these citizens in the study raises questions about the validity of the study.
- 4- How was the data collected on the Southern Sacramento mountain communities/surrounding areas and subsequently analyzed?
- 5- Without the involvement of anyone from those communities/area in the collection of that data how can you consider the data legitimate and how does it meet the requirements of the study as set forth by the DoD?
- 6- Why was this study initiated? By this we mean, what "permissions" is the DoD seeking given the results of the study (what do they want to take from/do to us without our permission?)
- 7- Given the huge impact past DoD activities have on our communities/area, how can you insure our rights and concerns will be protected by you and the DoD?
- 8- If we disagree with the findings what resources are available to us to affect change before anything is implemented?
- 9- The recommendations of the JLUS must insure future flexibility so as the missions/technology and projected uses change, there is guaranteed reassessment and public input before any proposed changes occur. How is your study addressing this issue and assuring its enactment?
- 10- We have not yet seen your on line survey but understand that it will be used to help

determine what permissions will be granted the military in Otero County. In order for any survey of this nature to be valid, fair and balanced, it must include both cause and effect. In other words, if we are asked to vote on allowing A to occur, it must also state what the effects of A will be and on whom. Does your survey account for both the cause and effect of the decisions? If not, why not? Does your survey allow for a cause vote with the effects of that vote to be suffered by those who do not want that permission granted?

11- Is night or day joint training planned, now or in the future, in the So Sac mts? This is typically combat simulations, soldiers traveling over forest at night, can include helicopters, aircraft and simulated combat (pyrotechnics), possibly vehicles. This has become common on USFS land (Cibola National Forest) and could involve many countries.

12- Are any limits on wind energy farms (turbines) possible? If so, why?

13- Are any new laws planned to protect the rights of private property owners from encroachment? If not, why not?

14- Are any limits on radio spectrum use possible? Are any compatibility/allocation/use issues related to radio frequency interference, radio spectrum possible?

15- Are any new noise increases possible (average/peak/type etc) in the So Sac Mts?

16- Are there any UAV “no fly” areas to protect private property and privacy? If not why not?

17- Are there any limits on solar, tall structures or power transmission lines possibly needed for wind energy?

18- Since there is no representation of rural areas and rural property owners on any JLUS committee, how will the JLUS meet the 1994 Presidential Order - “Environmental Justice”- regarding future military activity in defining and addressing any/all adverse human health, safety, environmental and economic impacts especially on rural, low income, elderly populations in Weed, it’s surrounding communities and the Southern Sacramento Mountains?

19 - What regulations, policies and laws will be made to?

- a) Reduce encroachment on our properties, health, safety and economy?
- b) Hold Holloman and other military users accountable for adhering to those laws, regulations and policies?

20- It has been our experience that studies done by the military/DoD/Federal Govt selectively include/exclude data and use questionable modeling and data analysis that result in outcomes clearly predetermined to be favorable for the military at the expense of private property owners and local residents. How will this process be any different, especially given we have been excluded in this process to date and surveys are to be conducted on line further excluding residents in our area who do not have wireless or computer access ?

21- Otero County public meeting, June 12, 2013, recognized supersonic noise over the Sacramento Mountains as a compatibility factor to address. Past military studies regarding noise have been inadequate at best if not completely dishonest. (Averages do not represent what actually occurs) How will this study be any different in addressing this issue?

22- Low flying aircraft over our homes and property present a devastating risk to our health, safety, quality of life and economic wellbeing. How will this study account for this risk and recognize our rights to be free from this encroachment?

23- Who conducted the radio frequency spectrum interference investigation/ survey and how was it performed? Where are the study results?

24- Was the FCC or any other spectrum authorities involved in the local RF data collection and analysis? If so who and what is the contact information of the individuals involved? Generic information is not acceptable.

25- How does our mountain life/personal lives specifically impact the military's ability to conduct their missions and how are the rural communities and population "encroaching" on the military facilities?


26- Exactly what polices, zoning restrictions and/or legislation is being targeted for revision as a result of this study?

27- What are the resources available, at no cost, to the individual and group property owners to rebut and legally force reassessment of the survey results?

28- Exactly how do rural communities stand to benefit from actions taken as a result of this survey and how is this, in a "balanced way", equitable to the rural communities and residents compared to that of the military and "urban" communities?

We thank you in advance for your written response to these initial questions.

Respectfully,


John Bell
Weed Community Association President
PO Box 482
Weed, New Mexico 88354

cc: Safe Skies Coalition

Attachment: Weed Community Association Mission Statement

Weed New Mexico Community Association &
Safe Skies Coalition
PO Box 482
Weed, NM 88354

Date: October 24, 2013

RE: Southern New Mexico/El Paso, Texas Joint Land Use Study - JLUS

Dear Ms Drake,

We are writing to request direct rural representation on all committees related to the JLUS.

As you know, to date all committee members are from urban areas, government entities or elected officials. There is **no** appropriate rural representation on any of the JLUS committees.

We find this disturbing and unacceptable but not unusual. The rural areas are generally the areas that suffer the consequences of decisions made by the DoD through loss of freedoms, drastic effects on our health and safety as well as our economic well being. The best way to continue this pattern of assuring harm is done to those of us living and working in rural areas impacted by decisions made by the DoD is to eliminate us from adequate and direct representation.

Appropriate rural representation should have occurred at the onset of the JLUS process. It clearly did not. The lack of appropriate rural representation demonstrates, once again, the intention of the DoD to take rural citizen's rights and freedoms and to continue to cause us harm.

If the contention is that the County Commissioners represent rural residents on the JLUS committees, then the Commissioners should have also been representing all others areas of the counties including cities and urban areas, resulting in no need for anyone else on the committees. Since this was and is not the case, those other areas (urban, government, city etc.) are given special privilege for their special interests at the expense of the rural populations.

The demographics speak volumes.

	Population	Sq miles
Otero County	66,041 (rural-53%)	6,613 (more than 99% rural)
Alamogordo	31,500 (urban-47%)	21 (less than 1 % of the land area)

Your contention that one person can represent the interests of people living in 99% of the land area of Otero County and understand their needs, interests and wishes for this study in the time frame allowed is simply not reasonable or fair for us or for the Commissioner who is representing us for this study.

Your study information states that the DoD/AF bases and activities are continually being encroached upon by civilian activities and "sprawl". We find this narrow and simplistic view

very disturbing and self serving for the DoD since it is not us, in the rural areas, that are encroaching on the military but rather the military that are encroaching on rural communities, without our consent, doing harm to our health, safety, economic well being and way of life. This is simply a sanctioned form of government taking from its citizens without their permission.

We expect that the rural areas of the counties included in the JLUS have appropriate direct representation on **each** of the JLUS committees. This representation for each county is to include

- 1- A rancher elected by the local cattleman's association
- 2- A small business owner appointed by the local community association
- 3- A local rural property owner appointed by the local community association
- 4- An "at large" rural representative who has special interest in this process appointed by the local community association.

Failure to include appropriate direct rural representation (as outlined above) on each JLUS Committee and opening all information and decisions made to date by those committees without direct rural representation for review and change based upon new input, will be interpreted by our communities as JLUS, and those associated with JLUS, granting special privilege to special interests. These special interests support encroachment by the military into rural areas and discount and marginalize the health, safety and economic interests of those of us living and working in rural areas.

We request a written response within ten (10) days of your receipt of this letter.



John Bell
Weed Community Association President
and for the
Safe Skies Coalition

cc: Commissioner Flores
Commissioner Rarden
Commissioner Harrel
County Manager Hiltner

RE: Validity of the Southern New Mexico-El Paso, Texas Joint Land Use Study.

Date: November 25, 2013

From: E. Kazor
PO Box 436
Weed, NM 88354

Ms. Drake,

My husband and I own property in the Weed/ Mayhill New Mexico area. We have chosen to spend our retirement in the Southern Sacramento Mountains. We spent years researching and traveling hundreds of miles before deciding to purchase property in the Weed/Mayhill area. The Weed/ Mayhill area offers what we are looking for; a place of solitude and quiet, a rural setting, and a spirit of community. Since 1999 we have worked hard and invested our retirement funds and sweat equity to improve our property and make it "home".

I have very serious concerns regarding the JLUS, what has taken place to date and what will be generated as a result of the study .

On October 23, 2013 at the Public Meeting in Weed you presented a Power Point show explaining the JLUS process. A question and answer session followed that presentation. A number of your responses to the questions have caused serious concerns about the current JLUS process.

1. Recognition by AECOM of Invalidity of Survey

A statistically invalid survey will be used to make very important decisions regarding the health, safety and economics of our communities.

At the Public Meeting you encouraged area residents to complete an "on-line" survey. At the same time you acknowledged the survey is statistically invalid !!! Did everyone in the "study area" receive the same information....that the survey is invalid ? If not, does this not then skew the results of the survey even more ? How many people at the October 23rd meeting will not fill out the survey because we were told it is invalid? How many people, who have not been told the survey is invalid, will complete the survey? Probably more. Will this not also skew the results ?

In reading other JLUS, the surveys play a key role in JLUS recommendations.

2. Survey is not “Area Specific” but generalized

During the Public Meeting it was clarified that the survey is not “area specific” but generalized. Given that policy development and zoning regulations may be based on the results of JLUS and the survey, explain how results of a generalized survey address the specific economic requirements of a particular area . By applying generalized findings (findings from both urban and rural survey responders) to specific situations (e.g. potential zoning rules for rural areas) questions the validity of the JLUS.

3. The survey is “on-line”

Numerous people from rural areas will be excluded from taking the survey. Urban residents and those with access to computers will represent most of the survey respondents. Based upon survey results, data and recommendations will be skewed in favor of more populated urban areas.

Many elderly and rural residents do not have access to computers or wireless communication. Some may not know how to submit a survey “on-line”. Many of these people are located directly under military training routes (MTR’S) or flight zones. Doesn’t “on-line” methodology marginalize rural and elderly citizens living under military training routes who will be directly impacted by future plans of the military?

4. Failure to recognize the Relationship between the Environment and Economy

When asked if there would be any demographic or economic assessment of our rural communities or consideration of Environmental Justice your response was “We will certainly look at the environment and natural resources issues. But we don’t tie them to a particular demographic or economic status or the characteristics of communities.” This statement and position is very short cited. Only half of the picture is painted by only addressing the environment and not assessing the impact that environment has on rural as well as urban economies.

The environment generates the economy of a community and the economy of a community creates the environment. When working with communities, the environment and economies go hand in hand. By not considering the interdependence of the environment and economy and, at the very least, establish an economic baseline (through proper assessment) of urban AND RURAL communities that will be impacted by the JLUS , suggests an invalid study.

5. No Rural Landowners on JLUS Committees

Shouldn’t those that will be directly impacted by the recommendations and decisions of the JLUS be “at the table” ? While it the urban areas have their own representatives, there appears to be no one who owns property or a ranch in the Weed/ Mayhill/ Pinon/ Sacramento area “at the table”. Our communities are located directly under the fly zones of Holloman AFB. The health, safety, environment and economy of Weed/ Mayhill/Pinon/Sacramento NM will be

directly impacted by JLUS and the subsequent decisions based on JLUS. Yet we do not have a voice in those decisions. Why ? This lack of proper representation lends credence to the creation of an invalid JLUS.

6. Recognition of Rural Economic Development

Moving in to the 21st century, rural landowners and ranchers are faced with many new and unique challenges. Drought, dependence on unreliable grid systems, economic opportunities to gain footing in renewable resources sector and so forth require a new economic paradigm.

Rural natural resource development will play a very significant role in providing a source of consistent revenue for the State of New Mexico and the creation of state wide employment opportunities. The job opportunities would more reliable and permanent then the current situation in which area employment is unstable and is at the mercy of the DoD, it's ever changing missions and the Federal Government's inconsistent budgeting for military spending. "Dependence on the military leaves the County's economy subject to the vagaries of the US Government's plans (Otero County, JLUS Partner Briefing; Maps and Reports; SNEPPTX-JLUS; 2013).

The State of New Mexico recognizes the huge economic potential of rural natural resource development . For example the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) estimates that

"The New Mexico Wind Energy Center will bring more than \$40 million dollars into rural De Baca and Quay counties over 25 years. This includes \$450,000 per year in payments in lieu of taxes to be made to the county governments and school districts; about \$ 450,00 per year in payments in lease payments to landowners; and an estimated \$500,000 in salaries for the permanent jobs to be created."

and

" New Mexico has the potential to produce many times its own electrical consumption, which puts it in a position to EXPORT (my emphasis) wind electric power."

(Ref: www.emnrd.state.nm.us/ECMD/RenewableEnergy/wind.html)

The above cited reference states the EMNDR'Wind Power Project

" ...has provided studies and report of the potential economic benefits of wind power to five counties: Eddy, **OTERO**, Quay, Lea, and Coffey. "

Will this data be considered in the JLUS ?

Similar data concerning State wide economic benefits of solar power is available through the EMNRD

In studying the composition of the JLUS Committees, it appears that the Committees are

composed of urban, governmental officials and urban planners. Rural Development or the NMEMNRD is not represented. Not only is this a short sighted situation it is not a balanced one. This situation is contrary to JLUS stated goal of a "balanced" study.

7. President Executive Order 12898 of February 11, 1994 Environmental Justice

During the Public Meeting there was a question of JLUS defining and addressing any/all disproportionately high and adverse human and health and environmental effects (including economic) on the low income, and elderly population of Weed, Sacramento, Pinon and Mayhill. In other words, Environmental Justice. Your response was " We will certainly look at the environment and natural resource issues. But we don't tie them to a particular demographic or economic status or characteristics of a community." "Disparate impacts" are an environmental concern. It is recognized by current researchers and ecologists that humans are part of the environment. Humans (in this case the military) impact the environment and humans (in this case the rural elderly and low income residents) are impacted by the environment. To separate humans from the environment is baffling given current environmental and ecological philosophies.

Future Concerns

Looking "downstream" I have concerns as the JLUS develops.

1. Only positive impacts of military will be presented.

It has been the experience of the residents of Weed, Mayhill, Pinon, and Sacramento N.M. that studies involving the DoD result in findings that are favorable to the military.

The F-22 EIS stated "Findings of No Significant Impact" (FONSI). However, the F-22 and the flight zones created as a result of the F-22 have significant negative impacts on our communities. The FONSI was and remains a false conclusion.

In the F-35A Training EIS the citizens of Weed, Sacramento, Mayhill and Pinon expressed serious concerns regarding the health safety and economic impact the F-35 would have on our communities if Holloman was chosen as the basing site for the F-35. That EIS minimized our concerns by not properly addressing our questions or assessing our communities. Our concerns were labeled as an "annoyance" in the Final F35 EIS. The positive impacts to Alamogordo were emphasized. The negative impacts to our communities were minimized or not addressed.

Will the JLUS be comprehensive and balanced by evaluating both the positive and negative impacts the military will have on not only urban areas but RURAL areas as well ?

2. Future Environmental Impact Statements

How will the results of the JLUS affect future Environmental Impact Statements ? Will the results and recommendations of JLUS be used as a method to by-pass or abbreviate any future NEPA /EIS processes ? Will a statement be found in JLUS stating that the JLUS document is not

to be used as a “short cut” to the NEPA process ?

3. National Environmental Policy Act (NEPA) and Noise Control Act of 1972

Congress declared through the NEPA that it is the responsibility of the Federal Government to “..improve and coordinate Federal plans, functions programs and resources to the end that the Nation (among other directives) attain the widest range of beneficial uses to the environment without degradation, risk to health and safety, or other undesirable and unintended consequences.” (attached : NEPA Policy Act)

The Noise control Act of 1972 declared that it is a policy of the United States to promote an environment for all Americans free from noise that jeopardizes their health and safety.

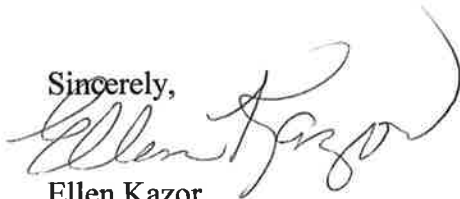
While it is recognized that the JLUS makes only recommendations, not policies, will the JLUS recommend the military adhere to NEPA Policies and the Noise Control Act when designing, implementing and evaluating plans, programs etc that impact urban and **rural** areas ?

I expect this letter to be entered into the Southern New Mexico-El Paso Texas Land Use Study as public comment.

I look forward to your written response to each of the concerns and questions I have expressed in this letter.

Thank you.

Sincerely,



Ellen Kazor
PO Box 436
Weed, New Mexico 88354

cc: US Senator Martin Heinrich, US Senator Tom Udall, US Rep. Steve Pearce, NM Senator Ron Griggs, NM Rep William Gray; Commissioner Tommie Herrell; Commissioner Susan Flores; Commissioner Ronny Rardin; Otero County Manager Pamela Heltner

**Weed Community Association
PO Box 482
Weed, New Mexico 88354**

Re: Southern New Mexico-El Paso, Texas Joint Land Use Study (JLUS)

November 28, 2013

Ms Drake,

As per your request of 9/23/13 the Weed Community Association and the Safe Skies Coalition are sending you the data showing that the DoD, Air Force and agencies contracted by the military have, for the most part, refused to recognize and properly address the concerns of our communities.

We believe that our health, safety and economic well being are compromised as the DoD seeks to maximize their use of lands and air space that surrounds us..

Options exist that would meet the needs of the Air Force and preserve the health, safety and economy for our communities. However, the Air Force has refused our requests to have a meaningful dialog with our communities.

Since you stated you and your company are a neutral party, we are sending you material with the hope that the JLUS study will result in recommendations that protect the health, safety and economic well being of residents of the Southern Sacramento Mountains.

Organization of attachments

Section I:

Mission Statement of the Weed Community and Surrounding Areas of the Southern Sacramento Mountains

Section II : History

The history documents continued and expanding encroachment of the military upon private property owners in the eastern Sacramento Mountains.

Section III : On the Ground

The data titled "On the Ground" illustrates the damage done to the residents of the Sacramento Mountains by the USAF and German AF. The military has demonstrated an unwillingness to address issues of residents' health, safety, and economic well being.

Section IV : Economics and Population

This section reflects data gathered in 2011 by a community member. Since requests for a valid and reliable socio/economic study of the Weed, Mayhill, Sacramento and Pinon area has not been done by any official entity, these are the most accurate figures we have.

Section V: Literature and Data

This section cites some of the research and the literature citations that were presented to the military through 2012 F-35 EIS NEPA process. This information was discounted by the DoD EIS the contractors and military. We believe this data is still very pertinent to the current JLUS. Refer to the Final F-35 Environmental Impact Statement to substantiate these claims, especially the section "Responses to Letters". New data is presented as it relates to the current JLUS process. More data is available but to present more in this document would be overwhelming.

I and the members of the Safe Skies Coalition expect this document to be entered into the Southern New Mexico- El Paso, Texas Joint Land Use Study and become a permanent part of the record.

Sincerely,



John Bell, President
Weed Community Association
and for
Safe Skies Coalition

Cc: Commissioner Ronny Rardin, Commissioner Susan Flores, Commissioner Tommie Herrell
U.S Senator Tom Udall, U.S. Senator Martin Heinrich, U.S Congressman Steve Pearce
N.M. Representative William Gray, N.M. Senator Ron Griggs, Otero County Manager
Pamela Heltner

The Weed Community and Surrounding Areas of the Southern Sacramento Mountains Mission Statement

To preserve, protect, enhance and defend the health, safety, economic well being, and cultures of the Southern Sacramento Mountains.

Driving Principles

1. The natural, and historical conditions and uses of the southern Sacramento Mountains are the economic base and foundation for our way of life.
2. Ranching, small business, lodging, camps, recreation, hunting, astronomical observation, entrepreneurship and current and future renewable energy production exemplify our economic base.
3. The survival of this base is dependent upon the maintenance of a quiet, rural grassland and forest environment.¹
4. Private landowners' have the right to use their private lands freely within the law without unwarranted government intrusion.
5. Support of the United States military with the understanding that our guaranteed freedoms, health, safety, economy and way of life are not restricted nor negatively impacted.

¹ **Quiet in the mountains is far different than urban quiet. Quiet means "silence", the ability to hear the sounds of nature without the intrusion of man-made noise. This is the foundation for our way of life and economic success**

History of Holloman with Weed, Sacramento, Mayhill and Pinon Communities

The following is a brief account of the history rural residents and ranchers of the South Sacramento Mountains and ranchers, once located in now the White Sands Missile Range, have with the DoD and Holloman Air Force Base. Given the time frame of the JLUS, it is difficult to capture more facts. Additional facts are scattered throughout numerous archived documents.

This history documents the encroachment of the military upon area private property owners and ranchers.

1940's- During WWII the Army/military ran off many ranchers who lived in the area that became the White Sands Missile Range. Many of the ranchers said they were told by the military officials that this was a temporary situation and that the military would return these private properties back to the ranchers after the war. Acting in good faith, some of these ranchers left their furniture, dishes, and personal items in their homes thinking they would be gone for only a short period of time. That was over 70 years ago and the ranchers have never been allowed to return to their properties.

One of these homes was the McDonald Ranch house. This home has not been restored by the Army, the Department of Energy or the National Park Service but has not been returned to the McDonald family (ref: Tina Prow, White Sands Ranchers Take Aim With Figures For Their Losses, Feb 1984: McDonald Ranch. Wikipedia.)

Late 1950's and early 1960's - The military forced ranchers off their private lands to create McGregor Missile Range. One of these ranchers, John Prather, owned several thousand acres of private land on what is now the McGregor Missile Range. Mr. Prather refused to sell or leave his ranch so the military decided to run him off. Mr. Prather called the newspapers and television stations and invited them to witness the military carry out their threats. The military backed down several times. Friends and neighbors took Mr. Prather food and supplies so he could stay on his ranch and defend his property rights. The military was unable to remove him until he became sick and then died. John Prather is a folk hero among many people.(ref: NM Farm and Ranch Museum/Porter, Irving and multiple other sources).The Prather family still maintains a strong and respected presence in the Sacramento Mountains.

Currently - Many of the ranching families in the Weed and Pinon area are descendants of these ranch families. These families feel strongly that the Army/military have taken advantage of them, their families, friends and neighbors over the past 60-70 years. Sixty to seventy years later some ranch families have still not been reimbursed for private property taken from their families by the military. As a result of this history, there is a lot of distrust and even animosity between the ranching families and the military.

Ranchers feel they have not been properly represented in the past. They insist that ranchers and other business people that live in the Southern Sacramento Mountain area be appointed to serve on the JLUS committees.

1991- DoD based the German AF at Holloman and allows them to fly at 500 feet traveling at 520 mph over the Sacramento Mountains. Ranchers filed suit in Federal Court. The ranchers

lost.

1997- German AF doubles the number of planes and sorties impacting the communities and ranches in the Sacramento Mountains with a proportional increase in very low and fast jets flying over our homes and properties.

December 2, 1998 - "Germans reject U.S. jurisdiction over training flights" ODESSA, Texas (AP)- The German Air Force says the United States has no court jurisdiction to restrict it's Luftwaffe pilots from low-level training missions in West Texas.

The Luftwaffe responded last week to a lawsuit filed by a coalition of ranchers in U.S. District Court. The plaintiffs claim the low-level flights endanger people and livestock.

Near-collisions have been reported with civilian aircraft as well as spooked horses throwing cowboys and people being bowled over by powerful downdrafts the planes create at low altitudes.

Defendants in the lawsuit include both the Luftwaffe and the U.S. Air Force, which is training German pilots at Holloman Air Force Base in Alamogordo, N.M.

No date has been set for the lawsuit to be tried.

Plaintiff Kaare Remme told the Odessa American that the Luftwaffe's claim to diplomatic immunity is "just crazy".

"What are we supposed to do ? Let a foreign power operate here illegally? Do we have to call Border Patrol ?"asked Remme.

Remme said the German Air Force claim to immunity runs counter to the Holloman "bed-down" agreement it signed in which it agreed to abide by the laws and regulations of the U.S. Air Force before beginning operations in the United States in 1991.

2007- DoD/ USAF established a new, low altitude supersonic corridor over Weed/Pinon. Only the very legal minimum was done to inform rural residents. A request to extend the F-22 Draft EIS review period so that residents could be informed of DoD/AF actions was denied. Finding of "No Significant Impact" (which is untrue) by the DoD/Air Force allowed supersonic flight at low altitude over rural residents.

2008- Holloman AFB intentionally creates sonic booms over communities even though such activity is forbidden by USAF regulations. "The 49th Fighter Wing has developed a plan using T-38 aircraft to conduct supersonic flights to familiarize the local communities to sonic boom noise caused by supersonic flights" Lt. Col Linda Haseloff, Holloman AFB Public Affairs 3/8/2008.

2009-2012- F-22's based at Holloman result in increased numbers of supersonic flights and sonic flights over our communities. Sonic booms increase in numbers and intensity to include focused

sonic booms. Area residents experience the detrimental effects of intense and numerous sonic and focused sonic booms.

2010 - Local residents resist F-35 basing at Holloman. A basing of F-35's at Holloman would have resulted in hundreds of F-35 flying supersonic speeds at low altitudes above our homes and properties. The F-35 is extremely noisy.

The F-35 Final EIS states that F-35's flying over our homes and properties at supersonic speeds and at altitudes of 300 feet be only an "annoyance" to spite facts to the contrary.

No assessment was done of the Weed/Sacramento/Mayhill/Pinon areas concerning impacts of the F-35 prior to the conclusion of "annoyance".

That EIS stands today and is the reference document for future basings of the F-35 at Holloman.

2011- Drones are placed at Holloman. No considerations of impacts to rural residents and only the legal minimum was done to inform rural residents. Our communities were not informed of any EIS

2013- A Joint Land Use Survey is started (the DoD is a major financier and instigator). This is a method to abbreviate the EIS process and enable DoD encroachment activities in rural Otero County.

The Weed Community Association and The Safe Skies Coalition request representation on JLUS committees of private property owners and ranchers that live in the Weed, Sacramento Mayhill and Pinon areas.

On The Ground

Listed below are some of the detrimental and life threatening effects the citizens of Weed, Sacramento, Pinon and Mayhill have endured due the Air Force, it's activities and it's continued encroachment into our rural lives. The list is far from complete but serves to demonstrate the fact that our health, safety and economic well being are continually jeopardized by military activities over our communities on a daily basis.

These facts will not be found in any of the DoD's data. The DoD/AF chooses to ignore these facts.

German Air Force (GAF)

The GAF has (and continues) to fly very low and very fast over rural people while they work or use public lands. The planes often fly at 500 feet above the ground and 550 mph. This startles people and livestock. There are documented cases of the GAF "buzzing" homes at less than 200 feet above a home. This is illegal. The GAF has a poor safety record with plane crashes in our area (as well as Germany). Since the 1990's the GAF has terrorized local ranchers, homeowners livestock and visitors to our area.

As a result of sonic booms

A husband (an experienced heavy equipment operator) and wife were moving large boulders. A sudden sonic boom caused the operator to almost loose control of the equipment swinging the boulder dangerously close to the wife, who was helping. The wife was almost hit by the boulder. Had she been hit she would have died. The wife was so frightened and stressed by the experience that she was bed bound and unable to participate in social activities for some time after that.

An owner of a horse reported her horse charged into a barbed wired fence when frightened by a sonic boom. The horse sustained numerous injuries. Expensive vet bills expenses were incurred by the owner,

A farrier was almost kicked and trampled by a horse when the horse was startled by a sudden sonic boom. The farrier was able to jump free without injury.

A house ridden by a very experienced rider suddenly reared up when hit by a sonic boom. The rider was almost sent falling off backwards. Had the rider been inexperienced, serious injury would have occurred This rider often guides inexperienced young campers on horseback rides throughout the mountains. Fortunately, the rider was alone at the time. An inexperienced rider would have suffered very serious injuries.

A horse owner watched as his three horses charged into a barbed wired fence when they were startled by a sonic boom.

One rancher reports an unusually high number of cows aborting. The rancher suspects the

increased rates are due to the increased frequency and intensity of sonic booms over his ranch. Studies cited in the F-35A Training Basing Environmental Impact Statement (Appendix B- pg 32) supports this experience. Result: Loss of income.

A wife of a US military veteran (Viet Nam) reports her husband is so fearful that he “goes for his guns” when he is exposed to sonic booms.

A spiritual and health spa owner provided services to military personnel. Some of the service personnel experienced PTSD and came to the spa seeking emotional and spiritual healing. Sudden sonic booms impeded the healing process.

The owner of a retreat center reported clients would not return because of sonic booms. As a consequence of the sonic booms, income has been lost..

Community elders experience true fear when exposed to sonic booms.

Numerous reports of the cracking of sheet rock in a number of homes.

September 29, 2009

From a resident of Weed, New Mexico as reported to Holloman AFB PR

“Today my business was subjected to eleven (11) sonic booms between 2:15 PM and 3:00 PM (Yes, 45 minutes and 11 BOOMS!). Wow !!! Please , just picture yourself at work in a quiet setting, concentrating, then suddenly a building shaking boom hits you. Again, and again, and again. Every three minutes for 54 minutes. How would that affect you ? How could you conduct business?”

February 16, 2010

Same resident as above. As reported to Holloman AFB, PR

Location- Rural Sacramento Mountains.

Time: 6:55 PM (“shake the house” 2 BOOMS together

6:56 PM (mild Boom)

6:56+ PM (“shake the house” BOOM)

6:58 PM (mild BOOM)

March 5, 2010

Seven, terrorizing, earth shattering sonic booms within ten minutes:

Here are just a few results of this episode.

Pictures falling off of walls

Livestock stampeding

Pets cowering under furniture

Citizens fearful for their lives

One citizen was so frightened while the walls of the building she was in shook, that she was crying out "When will they stop ? Why are they doing this to us?"
One citizen almost lost control of her vehicle after the fifth the sonic boom.
Citizens were fearful and felt terrorized !!!

When these and other facts were presented to the Holloman Base Commander at a public meeting (as a result of legislators' direction), his response was "Submit a claim".

Many residents of our community reported symptoms associated with PTSD after this experience. Fear of not knowing when the next round of sonic booms would occur and fear of how destructive the booms would be pervaded the community for days. For some residents, this fear endured for weeks.

At first Holloman denied any knowledge of this incident. Later we were told that there was a chance a for a space craft landing at Holloman and that last minute changes to flight scheduled had to be made. The pilots in charge of the flights that day chose to fly over our communities and chose maneuvers that resulted in the terrorizing sonic booms.

When pressed about these incidents, Holloman's PR stated "The mission comes first."

Focused Sonic Booms

Focused booms defined: Very intense sonic booms caused by sudden maneuvers or directional changes of aircraft flying at supersonic speed. The quick maneuvers cause excessive pressures and noise that far exceed a "normal", "thunder-like" sonic boom. People, animals, and properties under the focused booms experience detrimental effects of increased over pressures and extreme increase (five to ten times!) in the severity in sonic boom noise.

A property owner experienced concussion-like forces when exposed to a focused boom while working in a ditch. He was unable to function for some time after the exposure.

At the same time the wife of the above property owner was in their home and experienced what felt like an implosion on their new home. Windows flexed and she felt that their home was going to fall in around her. She experienced momentary compressive forces.

Another property owner experienced a similar flexing windows in his home.

A resident was using a table saw when he was exposed to a focused sonic boom. The startled response experienced by resident resulted in a piece of wood being caught in the table saw at an improper angle. The wood was launched into the wall behind the owner. At the same time the spouse, experiencing the same focused sonic boom forces, thought that a hot water heater blew up in their shop. The husband thought the boom was caused by a water heater blowing up in the house. No injuries were sustained but nerves were unraveled and lasted for some time after the focused sonic boom

Economics and Population as of 2011

There are over 600 residents in Weed, Sacramento, and Pinon and many more in Mayhill.

There are three recreational camps within a ten mile radius of Sacramento. 10,486 campers and counselors were served. Sixty percent of this number were under the age of 18 and 400 of the campers were disabled. The camps also serve as a respite for active military personnel. One camp alone will serve close to 50,000 meals in 2013.

Sonic booms and focused sonic booms are detrimental to the health and safety of the campers.

Emergency call systems used by the local and regional EMS Services depend on radio frequencies.

There are 21 businesses in Weed, 14 in Sacramento and 10 in Pinon. Many of these businesses require the use of wireless communication in order to survive.

Four of these establishments are astronomy . The astronomy businesses require wireless communication in order to conduct national and international research, to provide distance education to students nationwide and to access the skies. Sensitive and expensive instruments and equipment are being used by the astronomers. The instruments and equipment are susceptible to damage from sonic boom and electromagnetic interference. Thus research and education are compromised at a very expensive price.

There were a number of Bed and Breakfast, retreat centers and spas. One had to close due to the noise and stress clients endured due to sonic booms.

In the late 1980's (pre -F-35 and pre Drone technology) the U.S. Navy, in it's EIS re: Supersonic Operating Area at Fallon AFB Nevada recognized that some residents living under MOA's may be so severely affected by sonic booms that they would be required to relocate. (895 F.2d 1416 *Bargen vs. DoN, FAA, EPA*).

Data from Literature

Below is just a very small sample of the data that supports our concerns regarding the health, safety, and economic welfare of the communities of Weed, Sacramento, Mayhill and Pinon.

More data is available upon request

The Environment

Carefully read the **National Environmental Policy Act Sec. 101[42 USC 4331]**. A copy is attached. While we are aware that the JLUS Committee cannot require actions, we would like a recommendation to include the DoD/AF "adhering to NEPA law for rural as well as urban citizens."

Sonic Booms

1. In November 2005, the Israeli Air Force began using sonic booms over the Gaza Strip as a military tactic to "instill fear into terrorists". A joint petition submitted by Israeli and Palestinian medics on Nov 2nd "demanded an end to the tactic that was said to be "...terrorizing the civilian population of Gaza..." The petition further added "The psychological damage caused by sonic booms amounted to 'collective punishment' noting that the Israeli Air Force no longer flew over residential areas at speeds exceeding the speed of sound due to the stress it caused." www.americanintifada.com/2005

2. As of March 22, 2009: Israel warplanes carried out sonic booms in the skies of Gaza Strip Sunday afternoon, causing wide-spread panic witnesses said.(AFP, date: 11-13-05)

3. On March 5, 2010 our mountain communities experienced seven earth shattering, house shaking sonic booms within ten minutes. Refer to "On the Ground" for details

4. October 20, 2013- Two current studies: The first shows "...a statistically significant association between exposure to aircraft noise and risk of hospitalization for older people living near airports". The second study "...found US seniors on Medicare who were exposed to the most airplane noise were also most likely to have been hospitalized for heart disease. (British Medical Journal 2013;347:f5561 Residential exposure to aircraft noise and hospital admissions for cardiovascular diseases: multi-airport retrospective study).

"These studies provide preliminary evidence that aircraft noise exposure is not just a cause of annoyance, sleep disturbance, and reduced quality of life but may also increase morbidity and mortality from cardiovascular disease." (Stephan Stansfeld, Professor of Psychiatry, Wolfson Institute of Preventive Medicine)

The populations of Weed, Mayhill, Sacramento and Pinon are largely elderly and on Medicare. Thus, there is a public health issue with super sonic noise over our communities. The DoD/AF does not recognize the health impact of sonic booms but considers sonic booms as an annoyance.

Radio Astronomy

There are serious concerns regarding the effects of future military programs and their the use of unmanned aerial vehicles (UAV) and electromagnetic interference (EMI) as these activities relate to radio astronomy.

Weed, Mayhill and Sacramento are homes to a number of astronomy bases, some of which plan to employ radio astronomy. Telecommunications, medicine, and industry have benefitted and advanced from the contributions and innovations of radio astronomy.

The National Telecommunications and Information Administration (NTIA) and the Federal Communications Commission(FCC) recognize that the public interest can be served by providing for radio astronomy service.

Coordinated long range spectrum compatibility analysis and planning should be a consideration of the JLUS study.

Refer to **C-Band and Ku- Band UAV Line -of- Sight Data Link EMC Analysis For Two Operational Scenarios. Prepared by Bonter, Steve, Dunty, Diana, and Mangrum, Amy for the Office of the Assistant Secretary of Defense, October 2004. PDF document (JSC-04-054.pdf).** This document discusses in detail the DoD Strategic Spectrum Plan from February2008.

APPENDIX B – INITIAL COMPATIBILITY PRIORITIZATION EXERCISE RESULTS

- Primary purpose of the JLUS is to minimize or when possible prevent land use compatibility challenges
- Land use compatibility challenges occur when:
 - Certain types of development limit the ability of the military to perform its mission or cause changes in operations that reduce mission effectiveness; or
 - Communities experience higher than normal levels of impacts from military activities, such as noise or safety risks, which can then affect land uses
- Impacts are spread across the six-county study area and do not always occur close to installations

Below is a list of initial compatibility factors identified in the study area. Place a dot next to a factor that you have experienced or that you think is a high priority to address. You can place more than one dot next to the same issue. Where have you experienced impacts? What other issues should be addressed in the JLUS?

Aviation Noise (related to Low-Level Military Training Routes)	
Aviation Noise (related to Supersonic Operations)	
Range Noise	
Energy/Renewable Energy Development	
Towers (related to obstruction of aviation routes)	
Road Closures (due to military exercises)	
Trespass (onto or off of military land)	
Access to Co-Use Areas	
Use of Call-Up Areas	
Airspace Management	
Use and Protection of Cultural/Natural/Recreation Resources	
GPS Jamming and Frequency Spectrum Interference	
Quality of Life/Accommodating Military-Related Growth	
Coordination/Communication between Military/Communities/Agencies	
Water	
Light Pollution	
Mining (related to affect on military testing)	
Wildfires (related to military exercises)	



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Aviation Noise (related to Low-Level Military Training Routes)	• • • •
Aviation Noise (related to Supersonic Operations)	•
Range Noise	
Energy/Renewable Energy Development	• •
Towers (related to obstruction of aviation routes)	• • • • • • • No
Road Closures (due to military exercises)	• not concerned
Trespass (onto or off of military land)	•
Access to Co-Use Areas	• •
Use of Call-Up Areas	•
Airspace Management	
Use and Protection of Cultural/Natural/Recreation Resources	•
GPS Jamming and Frequency Spectrum Interference	
Quality of Life/Accommodating Military-Related Growth	•
Coordination/Communication between Military/Communities/Agencies	• •
Water	• • • • • • • • • • • • • • •
Light Pollution	
Mining (related to affect on military testing)	
Wildfires (related to military exercises)	•



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Aviation Noise (related to Low-Level Military Training Routes)	
Aviation Noise (related to Supersonic Operations)	
Range Noise	
Energy/Renewable Energy Development	● ● ● ● ● ● ● ●
Towers (related to obstruction of aviation routes)	
Road Closures (due to military exercises)	
Trespass (onto or off of military land)	
Access to Co-Use Areas	● ● ●
Use of Call-Up Areas	
Airspace Management	●
Use and Protection of Cultural/Natural/Recreation Resources	● ● ● ● ● ● → RELATES TO #9 ON SHEET
GPS Jamming and Frequency Spectrum Interference	
Quality of Life/Accommodating Military-Related Growth	
Coordination/Communication between Military/Communities/Agencies	
Water	● ● ● ● ● ● ● ● ● ● ● ● ● ●
Light Pollution	
Mining (related to affect on military testing)	●
Wildfires (related to military exercises)	



Otero

-

INITIAL COMPATIBILITY FACTORS AND COMMENTS

Aviation Noise (related to Low-Level Military Training Routes)	
Aviation Noise (related to Supersonic Operations)	
Range Noise	
Energy/Renewable Energy Development	
Towers (related to obstruction of aviation routes)	
Road Closures (due to military exercises)	
Trespass (onto or off of military land)	
Access to Co-Use Areas	
Use of Call-Up Areas	
Airspace Management	
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Wildfires (related to military exercises)	

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Road Closures (due to military exercises)	• • •
Trespass (onto or off of military land)	
Access to Co-Use Areas	
Use of Call-Up Areas	
Airspace Management	•
Use and Protection of Cultural/Natural/Recreation Resources	
GPS Jamming and Frequency Spectrum Interference	
Quality of Life/Accommodating Military-Related Growth	• • • • • • • •
Coordination/Communication between Military/Communities/Agencies	• •
Water	• • • • • • •
Light Pollution	
Mining (related to affect on military testing)	
Wildfires (related to military exercises)	• • • •

El Paso 6/5/13

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Quality of Life/Accommodating Military-Related Growth	•
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Wildfires (related to military exercises)	



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Range Noise	• • • • • •
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Mining (related to affect on military testing)	
Wildfires (related to military exercises)	



APPENDIX C – WRITTEN COMMENTS – PROJECT WEB SITE

SNMEP JLUS Comments

Generated on Jan 16, 2014 / 8:33PM

Comment #1:

Posted on Jun 12, 2013 / 1:47PM

How do I learn about the Southern New Mexico-El Paso, Texas Joint Land Use Study? Is there a document that shows the expected outcome, the scope of work for conducting the study, documents that will be part of the study, persons that will be interviewed, site trips, meetings, etc?

Posted by:

Audon Trujillo
audont@yahoo.com
703 300 6067

Comment #2:

Posted on Jun 12, 2013 / 1:47PM

Hopefully, the impact of any development or land use on water resources has been added to the agenda for presentations, discussions, and citizen comments.

Posted by:

Raymond Madson
RaymondLMadson@aol.com
575 524 2174

Comment #3:

Posted on Jun 12, 2013 / 2:05PM

What draft report or background materials are available on the Southern NM - El Paso Texas Joint Land Use Study? What is the objective. If contractors are hired to complete it what is their scope of work?

Posted by:

Audon Trujillo, Jr
audont@yahoo.com
703 300 6067

Comment #4:

Posted on Jun 12, 2013 / 2:06PM

*Please add my name to the emailing contact lists. Thank you,
Marie Sauter
Superintendent
White Sands National Monument
National Park Service
575-479-6124 x210*

Posted by:

Marie Frias Sauter
marie_frias@nps.gov
575-479-6124

Comment #5:

Posted on Jun 12, 2013 / 2:07PM

I would like to do a Powerpoint presentation lasting less than 10 minutes on the City of Truth or Consequences polluting the Rio Grande with waste & contaminants from their City yard.

Posted by:

Sophia Peron
jazzinn.peron@gmail.com
5758940528

Comment #6:

Posted on Jun 12, 2013 / 2:07PM

I was unable to locate the survey indicated on your \"Get Involved\" page, so I will comment on the process here. Southern NM is predicted by climatologists to experience one of the most severe droughts on the planet (we are just on the brink of that now) & will likely be essentially barren within 50 years. Conserving water NOW is the only way humans will be able to live in NM in the future. Water use & preventing water abuses should be your bedrock on which the Land Use Plan builds.

Posted by:

Robyn Richards
aTruePro@gmail.com
505-506-9571

Comment #7:

Posted on Jun 12, 2013 / 2:07PM

the single most important issue in the area is water. No plans should go forward unless plans for a rational water use/water supply system is in place. The military bases have their well developed policies and practices for energy use and water supply and use, but the non-military organizations in the area, the state and county and municipal partners are diffused and conflicting when it comes to water policy. Some order must be put in place before any joint land use can be discussed.

Posted by:

Max Yeh
maxyeh@windstream.net
575-895-3300

Comment #8:

Posted on Jun 12, 2013 / 2:08PM

None of your 'plans\" will mean anything if you do not address the issue of water first.

Posted by:

Raymond L. Madson
RaymondLMadson@aol.com
575 524 2174

Comment #9:

Posted on Jun 12, 2013 / 2:08PM

Land use in this region cannot at all be discussed without introducing serious discussion of the overuse of water. The issue is not drought but perennial overuse and thus overdevelopment in a desert climate. Without a resolution or an attempted resolution of this problem, the discussion of land use is futile. The issue of water is itself not addressable without considering the climate changes already apparent which will bring on a reduction of water, longer hot seasons, more forest fires and insect invasions, etc. If this discussion as any use, it is to focus all the partners' attention on this issue. The process can be a catalyst if the planners take heed.

Posted by:

Max Yeh
maxyeh@windstream.net
575-895-3300

Comment #10:

Posted on Jun 12, 2013 / 2:09PM

Dear Sir and Madam

my name is Georg Himmeroeder.

Because I am living here for almost 14 years now and being a pilot, I became representative for the New Mexico Pilots Association for the Municipal Airport Alamogordo.

The New Mexico Pilots Association (NMPA) began in 1984/1985 and is the Voice of General Aviation to New Mexico's 5,000 pilots. NMPA's Mission is promoting general aviation and aviation safety, pilot camaraderie, and preserving airfields and airspace. Our back country committee is dedicated to increasing aviation access to back country airstrips and recreational areas by partnering with government and public service groups.

In this function I got knowledge about the \"Joint Land Use Study\".

I am afraid, that General Aviation in the Tularosa Basin and the surrounding areas will be affected by the plans to restructure the airspace over the basin.

Because of that and in the interest of our 5000 members I friendly ask you to be informed about any date for a public meeting/hearing or any issue affecting the General Aviation or the airspace in the Tularosa Basin and surrounding areas.

Thank you very much in advance!

Sincerely

*Georg Himmeroeder
Representative Alamogordo
New Mexico Pilots Association*

Posted by:

Georg Himmeroeder
himmeroedair@gmx.us
575-430-7739

Comment #11:

Posted on Jun 12, 2013 / 2:09PM

Is it still possible to take the land use survey? On your \"Get Involved\" web page, it says \"You can also provide feedback by completing the survey below\" but I can't find a link to the survey on that page. thank you.

Posted by:

Marion M. Fisher
mmfisher5954@yahoo.com
575-652-1158

Comment #12:

Posted on Jun 21, 2013 / 8:16AM

This is a test comment

Posted by:

Matt Kirkland
matt@brandnewbox.com
6192079476

Comment #13:

Posted on Jul 11, 2013 / 3:41PM

fIAKzo <http://www.c1dOvW6eef5JOp8ApWjKQy5RO5mLafkc.com>

Posted by:

matt
barny182@hotmail.com
matt

Comment #14:

Posted on Sep 29, 2013 / 5:39AM

I already potesd before I saw this, but I asked a question of the dads. My husband probably won't come on here, but I'd like to be able to give him current dad's feedback on some things. Does this sound like it would fit the not-quite-yet-formed rules?

Posted by:

Danu
annm@bainbridge.net

I already potesd before I saw this, but I asked a question of the dads. My husband probably won't come on here, but I'd like to be able to give him current dad's feedback on some things. Does this sound like it would fit the not-quite-yet-formed rules?

Comment #15:

Posted on Oct 05, 2013 / 12:14PM

How do I post my letter with detailed comments regarding joint land use of Sierra County?

Posted by:

Rhonda Brittan
5758947070

Comment #16:

Posted on Nov 13, 2013 / 12:07PM

Please add me to the contact list for all information pertaining to the JLUS.

Thank you.

Posted by:

Carol Miller
carolmiller@newmexico.com

Comment #17:

Posted on Nov 18, 2013 / 10:23PM

l4sxCv <http://www.MHyzKpN7h4ERauvS72jUbdI0HeKxuZom.com>

Posted by:

horny
normy273@hotmail.com
horny

Comment #18:

Posted on Dec 16, 2013 / 8:04AM

*How can I read the articles that have been written?
I am the City Planner for Sunland Park, NM*

Posted by:

Ricardo Dominguez

re.dominguez73@yahoo.com
915-433-4054

Comment #19:

Posted on Jan 10, 2014 / 7:24AM

When will the draft recommendations be available to the public ? What are the dates for public comment concerning the draft recommendations?

Please send a copy of the draft recommendations to Ellen Kazor

PO Box 436

Weed, NM 88354

Thank you.

Posted by:

Ellen Kazor

songdog@pvtnetworks.net

575-687-2512

Comment #20:

Posted on Jan 14, 2014 / 3:08PM

Hello, I am a professional social media business manager, obviously.

By building more than 10,000 real people profile endorsements using Facebook LIKES to your business page. This tell Google that your website is relative and authentic to what you do.

IT WILL BE POSTED RIGHT ON YOUR PAGE FOR ALL VISITORS TO SEE HOW MANY -(people) Facebook LIKES !you have, via Facebook, by real FB counter button.

Click on to see how you can do this in you free time or no time

<http://www.businesswebmonkey.com/buy-facebook-likes.php>

We can help you also with build 10,000 Twitter Followers in 7 days, or 100,000

YouTube visits, to your YouTube video or channel, build 20,000 Google +1, from your peers about your business. Best offer G+1 building in 7 days

You can get help building 100,000 Facebook LIKES in 7 days. Likes Mean visitors endorse your Fan Page or website.

How do you think Justin Bieber(singer) get his first 1,000,000 followers before his first album? His producers bought the followers for him?

I have something to offer that might interest you. www.businesswebmonkey.com/buy-facebook-likes.php

*By placing more than 10,000 endorsements using Facebook LIKES. This tell Google that your website is relative and authentic to what you do.
IT WILL BE POSTED RIGHT ON YOUR WEBSITE FOR ALL VISITORS TO SEE HOW MANY -(people) Facebook LIKES you have, via Facebook, by real FB counter button.*

These indicators (Facebook LIKES) will be visible on your website. If you have not installed Facebook Like count button on your website - I can help you install it!

After my work is finished, the Facebook LIKES Count Button will confirm a high ranking of your site, which will be noticed and appreciated by your visitors, and they will also be able to recommend your site to their friends on these social network.

The cost of the service is very low compared to the obvious gains, just the credibility you will gain alone. I work without pre-payment. Payment is carried out after all the work is done.

You pay and all Facebook LIKES are placed.

Please let me know if you are interested.

If this does not interest you, I'm sorry to have bothered you! Have a good day!

Unsubscribe here <http://www.businesswebmonkey.com/buy-facebook-likes.php>

*Sincerely,
Facebook LIKES Provider*

Posted by:

Karen

donoghue.karen1976@yahoo.com

888-233-0877



P.O. Box 982
El Paso, Texas
79960-0982

November 5, 2014

Liz Drake, AICP
AECOM
1420 Kettner Boulevard, Suite 500
San Diego, California 92101
lizdrake@aecom.com

Daniel Hortert, AICP
Doña Ana County Community Development
845 N. Motel Blvd
Las Cruces, New Mexico 88007
danielho@donaanacounty.org

Re: Southern New Mexico | El Paso, Texas Joint Land Use Study

Dear Ms. Drake and Mr. Hortert:

The El Paso Electric Company (EPE) serves approximately 400,000 customers within its 10,000 square mile service territory in west Texas and south central New Mexico, a service area that overlaps significantly with the study area addressed in the October 3, 2014 draft of the Southern New Mexico - El Paso, Texas Joint Land Use Study (JLUS). EPE supports the JLUS initiative to create long-term planning partnerships that recognize the region's natural, cultural, and recreational resources; growth opportunities; and the value of its military training and testing environments.

Numerous foundational action items identified in the JLUS are immediately affected by, and have an effect on EPE operations, both within and beyond the boundaries of the subject military installations. Consequently, EPE is particularly interested in the proposed JLUS implementation body. Specifically, EPE concurs with the JLUS in recognizing the potential value associated with efforts to: collaborate on planning for energy development opportunities; map regional energy development opportunities; promote interagency consultation on land use; establish a notification process for vertical structures; and promote an integrated regional water planning process.

EPE has successfully partnered with the Department of Defense, hopes to continue those successes moving forward, and would welcome the opportunity to participate in the implementation of JLUS recommendations. The JLUS efforts to promote compatible growth are to be commended and EPE looks forward to an active role in furthering those efforts.

Sincerely,

/s/

Jessica Christianson
Principal Environmental Scientist



Commissioner Flores,

I had an opportunity to review the JLUS response to Mr. Bell's questions (Mr. Bell represents the Weed Community, as well as a wider area of rural Otero County).

As with all JLUS correspondence that I've seen, the reply from your JLUS "team" was long on platitudes and short on facts or specific answers to Mr. Bell's questions. I'll not dwell further on the dis-ingenuousness (means "liars") of this "study" and its members.

One query back to Mr. Bell was in the form of a challenge from the so called "Technical Committee". They challenged Mr. Bell to furnish any studies that suggest that children and specifically babies can have convulsions when exposed to either sonic booms, or in the case of the study I am providing you, low altitude high speed, sudden onset noise, military flight.

Perhaps the so called "Technical Committee" should spend less time with their friendly Department of Defense advisers and more time in independent research? Perhaps they should learn to use Google? It is not difficult, even their secretaries could do it.

This poor dumb cowboy found a lot of research by various European organizations concerning military aircraft noise. Please note that there is no advantage to the USAF making this information available. They own the aircraft that cause the noise here and they conduct any and all studies. They control all results. However, Professor Ising published studies in Germany (I believe he did some USAF studies before this "convulsion" study. That study was the end of his USAF work - please feel free to correct me). The German people were so concerned that they largely banned the German Air Force from low level flights. By the way guess where the Germans went to fly low and fast? Yes, right here in Pinon / Weed, - but don't worry they never fly that way over Alamogordo so the Commissioners and their children are safe.

My favorite study is by Professor Ising. The Ising study is titled "Exposure and Effect Indicators of Environmental Noise". A link to this study is:

www.dflld.de/Downloads/IsingPaper.pdf

I've attached a copy so you don't have to find it.

A quote from this German Study states:

" Interviews with exposed people revealed that the sudden and extremely intensive noise of fast and low direct overflights were esteemed as unbearable since they caused shock reactions and inner ear pain in adults and children and in a number of cases convulsions followed by long and intensive crying in babies. "

This is not the only available study. Lots of different opinions and data. Please learn to use Google. The USAF has been careful NOT to study this area nor publish ANY negative results. Mission first don't ya know.

I guess that the elite "Technical" committee must have missed this?? Ignorance and patronization from JLUS has no bounds. Rather than challenge Mr. Bell why not work Google, and read the available information, and offer an informed response? My guess it is easier to blow him off - saves the Google work.

If you feel like informing the so called "technical" committee (I encourage you to do so) please include this e-mail in its entirety. If they are enlightened they can not say that babies are not at risk. No one supports hurting babies, even a few rural babies.

By the way please don't play ignorant when someone broaches the possibility that sudden onset noise can harm babies. It can. Even rural babies deserve consideration and excellence in analyzing available data and in the political process. The above link provides enlightenment and removes excuses. JLUS members apparently care not a wit about rural babies, rural children or the rural economy nor about input from rural land owners.

I thank Mr. Bell for trying to work with you despite the obvious lack of interest by the JLUS "team".

Sincerely,

Walt

Walt Coffman



October 31, 2014

Lynn Post
PO Box 161
Cloudcroft, NM 88317-0161

[REDACTED]
[REDACTED]

Message: It has been proposed that the Military use the Lincoln National Forest. They have plenty of land to use on the bases and White Sands. Not only will their equipment destroy the public land, it will decrease our property values. The other factor is that it will wipe out the wild life. We as residents we do not want the military using the National Forest it belongs to us the public. The other issue how do we know they will stay within the national forest? They might kill our animals, (cows, deer, elk, chickens, turkeys, etc, The other factor as you well know is that tourist come great distances, to hike, fish, hunt, and camp. That would be impossible if the Military is allowed to use the National Forest!



United States Department of the Interior
NATIONAL PARK SERVICE
White Sands National Monument
P.O. Box 1086
Holloman AFB, NM 88330
(575)479-6124



IN REPLY REFER TO:

A3815(WHSA)

November 7, 2014

Daniel Hortert
Dona Ana County Government
Las Cruces, NM

Dear Mr. Daniel Hortert,

The National Park Service (NPS) welcomes the opportunity to comment on the Joint Land Use Study (JLUS) and strategy during the public comment period.

Under the National Park Service Organic Act of 1916 (16 USC Ch. 1- 4), the National Park Service (NPS) is charged with the stewardship of some of our nation's greatest treasures including premier historic sites and natural areas of incredible beauty and ecological importance. As one of over 400 NPS units, White Sands National Monument (NM) was established by Presidential Proclamation #2025 on January 18, 1933 to preserve the world's largest gypsum dune field and to provide public access for 'scenic, scientific and educational interest'.

White Sands NM participated in the Installation Complex Encroachment Management Action Plan (ICEMAP) public outreach by Holloman Air Force Base (HAFB) and is pleased to have another opportunity to work collaboratively with the Department of Defense partners, with a variety of federal, state and local agencies and communities in the Southern NM, Tularosa Basin, and west Texas areas. The JLUS process will provide a venue for engagement and allow for agency to agency concerns to be recognized and addressed. It is our understanding that the JLUS process provides strategies to address encroachment issues ranging in scope from local to national that may impact missions of the three military installations in the JLUS area and vice versa.

The National Park Service asks to be included with the JLUS partners and entities in development and implementation of each of the Compatibility Factors as described in the draft Compatibility Strategy Menu. In addition, we ask to be included in all appropriate correspondence and to have White Sands National Monument depicted geographically on all maps and graphics related to JLUS strategies and public outreach.

As White Sands NM is located in the center of the JLUS study area in the Tularosa Basin between White Sands Missile Range and Holloman AFB, we find it critical to the success of

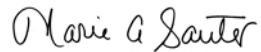


our own mission to be seated at this public table and engage in an active conversation with the military partners and our adjacent community.

We appreciate a cooperative and collaborative relationship with the Department of Defense and the local communities. Thank you for the opportunity to participate in the JLUS process within Southern New Mexico.

If you have any questions or concerns, please contact me directly at (575)479-6124 ext. 210.

With regards,

A handwritten signature in cursive script that reads "Marie G. Sauter".

Marie Frias Sauter
Superintendent

Cc: Laura Joss, Deputy Regional Director, Chief of Staff, Intermountain Region, National Park Service

Tammy Whittington, Associate Regional Director, Resource Stewardship and Science, Intermountain Region, National Park Service

Glenn Fulfer, Superintendent, Salinas Pueblo Missions National Monument, National Park Service

Theresa Ely, Soundscapes and Night Skies Coordinator, Natural Resources Program, Intermountain Region, National Park Service

David Bustos, Chief of Resources Management, White Sands National Monument, National Park Service

John D. Bell
PO Box 515
Weed, NM 88354
[REDACTED]

Dear Ms. Drake, and All members of the JLUS Technical and Policy committees,

Fifteen minutes will not allow us the time to adequately address all of our questions and concerns so we will put them in writing and request a written detailed response to each of them. We will have time to touch on a few high points during our discussion time today.

DOD has spent a substantial amount of money to do this JLUS Study! Why? What results does DOD want from this Study? How will your actions affect the people living in rural areas of Otero County?

1. How will the military's use of our property and / or airspace impact the safety, health, and welfare of our rural citizens?? Will your actions have a negative on the health, hearing, of our children, ourselves, and / or our pets and livestock?
2. How will the implementation of the JLUS study affect my private property rights?
3. Do you plan to increase the number of sorties flying over our homes, land, livestock, and wildlife? In one of your earlier discussions you talked about the impact of loud noises on spotted owls during nesting season. What about the rest of us?
4. We have experienced the shock and awe during the supersonic booms and it is detrimental to all of us, our health and safety. It literally shakes the ground and our homes and scares the hell out of us. What concessions will the military make to prevent future disruptions?
5. Are you planning to fly low, hot, and fast over our properties. What minimum height do you anticipate that planes / drones will fly over us?
6. What economic impact will your future use have on our homes, ranches, and livestock?
7. How do you plan to compensate us for our inconveniences? Will health care be provided for rural citizens whose experience health problems due military activities?
8. When the Air Force uses White Sands or McGregor Missile Ranges they are required to pay a fees to rent them. Why should the military use our airspace for free? The larger communities get economic benefits from the Military's involvement in their towns. What will be done to compensate the smaller rural communities, individual ranchers, and other property owners?

Our citizens are very patriotic and very supportive of the military but during the past 50 to 60 years our families have had their homes and ranches taken away by the military. Please recognize that many of our rural citizens and their families no longer trust the Military because they have been burned before. The military promised to use White Sands area ranches for only a few years and then return the lands back to the ranchers. When they took the lands they did not pay the ranches for the full value of the land and improvements.

We realize that JLUS does not directly address these issues but after this study is complete, how will the military impact our lives? What will this lead to? Does this Study set up actions between the Military and the County governments through a Memorandum of Understanding (MOU's) or other agreements?? What is the next step? Does the military plan to try to restrict our rights to set up wind towers, wind mills, or radio towers on our private land? Do they plan to scramble our GPS or radio frequencies?

Many people who purchased land here in the Southern Sacramento Mountains chose this area due to the quite peaceful lifestyle-not to endure super-sonic booms and aircraft noises. We do not want to be used as guinea pigs while pilots practice "Shock and Awe" flying methods. Have any of you ever endured the Focused Sonic Booms in a mountainous terrain where the sound does not dissipate into the distance but is intensified in a mountain valley. It shakes your home and the ground around you? It's like have a bomb go off near your home. It is extremely frightening to you, your family, pets, horses, and livestock. It has been reported to cause hearing damage and even convulsions.

Our citizens don't want to endure low flying drones either spying on us or flying hot, low, and fast. How much risk will we face due to a drone crashing and starting a wild -land fire here in the Forest. Will our Volunteer or professional fire fighters be able to find the fire if the GPS has been scrambled or communicate if their radio frequencies have been distorted? How will our safety and quality of life be affected?

We have numerous observatories in our area. These are very precise instruments and are sensitive to the aftermath of low, fast flying aircraft. What will the flight rules be after JLUS has been implemented? What is the minimum height above ground level they will be allowed to fly?

We have multiple Church, Scout, and quality of life camps or retreats in the area where people come to get away from the hustle, bustle, and noise of city life. They sell the opportunity to get away for a quite less stressful time in the lives of their clients. They offer peaceful quite settings, solitude, and the chance to get away from it all. These opportunities are stolen by military training routes over our airspace.

Alamogordo and the Cities get funding or economic benefits for their agreement to have the Military in their communities. What do we who live in the rural area get other than the negative impacts as a result of the military expansion into our quality of life? We want our concerns to be heard and addressed. We don't want another round of the military taking our private property rights and ignoring our way of life.

The bottom line is that we don't want to be shafted as a result of this study or the aftermath of the military's future plans for our area. The military has to pay to use the airspace on White Sands and McGregor missile ranges so they sell their air time to the German, Japan, and other military forces. But, when they fly over our homes and lands, they fly for free. What benefits will we receive from the use of our airspace?

I realize that this is a lot to ask but the JLUS Committees has yet to consider our concerns in their Study. What is to prevent the military from stealing our private property rights and life style?

Thank you for meeting with us. We are looking forward to receiving replies to our concerns.

John D. Bell Chair of the Otero County JLUS committee and

President of the Weed Community Association and Safe Skies Committee

Dear Mr. Bell and Otero Advisory Group Members,

Thank you for your ongoing interest and participation in the Joint Land Use Study (JLUS). You submitted a detailed set of questions to the Policy Committee in June and have corresponded previously with the JLUS Technical Committee. Committee members have collaborated to develop the enclosed responses (shown in bold, italics text) to your questions. We hope that this written response as well as your continued dialogue with representatives of participating JLUS partners provides helpful insight into the process and intended study outcomes.

We encourage you to remain actively involved in the JLUS as we near release of the draft document (targeted for late August or early September). Liz Drake anticipates conducting a community meeting in Weed in conjunction with the review of the draft report. Please do not hesitate to contact Pamela Heltner at 575-437-7427 or at pheltner@co.otero.nm.us if you have any questions.

DOD has spent a substantial amount of money to do this JLUS Study! Why? What results does DOD want from this Study? How will your actions affect the people living in rural areas of Otero County?

The purpose of the JLUS is to find ways for the DoD to be better neighbors and reduce negative impacts in the region, while also identifying ways to improve communication on future land use developments to prevent unintentional/avoidable negative impacts to the sustainment of existing military training capabilities in the region

1. How will the military's use of our property and / or airspace impact the safety, health, and welfare of our rural citizens? Will your actions have a negative on the health, hearing, of our children, ourselves, and / or our pets and livestock?

The Joint Land Use Study (JLUS) is not to intended to create any specific change in military mission use of airspace/ground space (i.e. support additional mission beddown, etc.). It is not a preliminary fact-finding study, nor is there any underlying hidden agenda that would result in negative impacts on any residents of the study area (to include rural residents of Otero County).

–The attached scientific studies regard impacts of military-generated noise (primarily aircraft noise) on humans and livestock represent the currently available body of knowledge on the topic.

2. How will the implementation of the JLUS study affect my private property rights?

The JLUS implementation will be accomplished through traditional democratic processes (i.e. elected county/city governments will choose which, if any, JLUS recommendations to adopt).

3. Do you plan to increase the number of sorties flying over our homes, land, livestock, and wildlife? In one of your earlier discussions you talked about the impact of loud noises on spotted owls during nesting season. What about the rest of us?

No mission changes are tied to the JLUS. This statement does not, however, preclude future mission changes to be considered, but those actions would not be impacted in any way by the JLUS outcomes/recommendations. For most major mission changes, the normal NEPA process would need to be followed allowing public input in the analysis. One of the outcomes of this JLUS will be INCREASED notification and communication procedures with citizens that may have an interest in providing input in the NEPA process

4. We have experienced the shock and awe during the supersonic booms and it is detrimental to all of us, our health and safety. It literally shakes the ground and our homes and scares the hell out of us. What concessions will the military make to prevent future disruptions?

A likely JLUS outcome/recommendation is to continue to develop and strengthen processes aimed at maximizing use of airspace over military-controlled land and prioritizing scheduling of said airspaces for potentially disturbing/disruptive missions before scheduling use of airspaces above private property.

5. Are you planning to fly low, hot, and fast over our properties. What minimum height do you anticipate that planes / drones will fly over us?

JLUS will not impact current or future uses of airspace other than deconfliction strategies referenced in response #4.

6. What economic impact will your future use have on our homes, ranches, and livestock?

JLUS outcomes/recommendation are intended to create a more symbiotic relationship between military missions and private properties. However, since JLUS is not a basing/beddown tool it is impossible to predict the economic impact of JLUS recommendations on the region. Unlike a basing-related NEPA action, JLUS is not based on a decision to place 'X number of people and aircraft at Y location, driving the creation of Z jobs'.

7. How do you plan to compensate us for our inconveniences? Will health care be provided for rural citizens whose experience health problems due military activities?

JLUS does not have provisions to compensation for inconvenience. Instead, the intent of JLUS is to minimize inconvenience while simultaneously protecting mission viability into the future.

8. When the Air Force uses White Sands or McGregor Missile Ranges they are required to pay a fees to rent them. Why should the military use our airspace for free? The larger communities get economic benefits from the Military's involvement in their towns. What will be done to compensate the smaller rural communities, individual ranchers, and other property owners?

The AF does not pay fees to use White Sands or McGregor Range. The Army cannot charge the Air Force for use of airspace. However, there are airspace use priorities for the restricted airspaces controlled by WSMR. Since WSMR's mission is rooted in testing, it is accepted practice that some outside entities pay for use of restricted airspace in order to conduct testing of new weapons systems or other technology. As such, there are times when a block of airspace is not available for USAF use because it has been "purchased" by an outside entity. Hopefully, this explains the situation more clearly. It should also shed some light on the importance of the processes outlined in response #4.

9. Our citizens are very patriotic and very supportive of the military but during the past 50 to 60 years our families have had their homes and ranches taken away by the military. Please recognize that many of our rural citizens and their families no longer trust the Military because they have been burned before. The military promised to use White Sands area ranches for only a few years and then return the lands back to the ranchers. When they took the lands they did not pay the ranches for the full value of the land and improvements. We realize that JLUS does not directly address these issues but after this study is complete, how will the military impact our lives? What will this lead to? Does this Study set up actions between the Military and the County governments through a Memorandum of Understanding (MOU's) or other agreements?? What is the next step? Does the military plan to try to restrict our rights to set up wind towers, wind mills, or radio towers on our private land? Do they plan to scramble our GPS or radio frequencies?

The expectation following completion of the JLUS Report is that local governing bodies of all types (cities, counties, states, etc.) would select the recommendations applicable for use in their specific jurisdiction and adopt them through their existing policy development process (city/county ordinance, etc.) Likewise, federal entities will select recommendations each deem viable for investment. By no means, would a DoD entity gain the right to control private property rights through JLUS implementation. Wind towers over 200', for example, are already regulated by FAA, who can consult with the DoD to assess impacts on military missions, but the DoD does not currently have the power to approve/deny developments nor would they after JLUS implementation. Instead, JLUS recommendations involving vertical airspace obstructions are much more likely to include a notification process by which the military learns of construction of towers between 75' and 200' during the planning phase and can avoid them during flight rather than "discovering" them in flight.

10. Many people who purchased land here in the Southern Sacramento Mountains chose this area due to the quite peaceful lifestyle—not to endure super-sonic booms and aircraft noises. We do not want to be used as guinea pigs while pilots practice “Shock and Awe” flying methods. Have any of you ever endured the Focused Sonic Booms in a mountainous terrain where the sound does not dissipate into the distance but is intensified in a mountain valley. It shakes your home and the ground around you? It’s like have a bomb go off near your home. It is extremely frightening to you, your family, pets, horses, and livestock. It has been reported to cause hearing damage and even convulsions.

Yes, many of the individuals involved in the JLUS –TC have witnessed focused sonic booms in the mountains. Please refer to the provided scientific studies. Please provide any studies you may have showing a relationship between aircraft noise and convulsions so the Technical Committee can review them as they are not aware of such a connection.

11. Our citizens don’t want to endure low flying drones either spying on us or flying hot, low, and fast. How much risk will we face due to a drone crashing and starting a wild – land fire here in the Forest. Will our Volunteer or professional fire fighters be able to find the fire if the GPS has been scrambled or communicate if their radio frequencies have been distorted? How will our safety and quality of life be affected?

Aside from scheduling processes outlined in response #4, JLUS will not impact flight patterns. The JLUS report will likely include a recommendation to further investigate and flesh out impacts of GPS jamming on emergency services within the study area.

12. We have numerous observatories in our area. These are very precise instruments and are sensitive to the aftermath of low, fast flying aircraft. What will the flight rules be after JLUS has been implemented? What is the minimum height above ground level they will be allowed to fly?

Aside from scheduling processes outlined in response #4, JLUS will not impact flight patterns. That said, the JLUS report will likely contain a recommendation related to improving communication/action related to the Dark Skies initiative specifically aimed at reducing the impact of the DoD on observatories

13. We have multiple Church, Scout, and quality of life camps or retreats in the area where people come to get away from the hustle, bustle, and noise of city life. They sell the opportunity to get away for a quite less stressful time in the lives of their clients. They offer peaceful quite settings, solitude, and the chance to get away from it all. These opportunities are stolen by military training routes over our airspace.

Alamogordo and the Cities get funding or economic benefits for their agreement to have the Military in their communities. What do we who live in the rural area get other than the negative impacts as a result of the military expansion into our quality of life? We want our concerns to be heard and addressed. We don't want another round of the military taking our private property rights and ignoring our way of life.

The purpose of the JLUS is to find ways for the DoD to be better neighbors and reduce negative impacts in the region, while also identifying ways to improve communication on future land use developments to prevent unintentional/avoidable negative impacts to the sustainment of existing military training capabilities in the region. The intent is also to improve/increase communications within the region.

Hi Liz,

I just sent via snmjointlanduse.com, comments regarding Salinas Pueblo Missions National Monument's request to engage in the JLUS process as a National Park Service stakeholder.

My primary concern is to have the opportunity to share with the JLUS partners and committees information regarding the Monument's Gran Quivira unit which is located in Socorro County. Such materials would include map location data along with pertinent historical/archeological information and a strong message for the continued need to protect and preserve the site.

Thanks for the opportunity to comment. Please feel free to contact me anytime.

Glenn

Glenn M. Fulfer
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Hi Liz,

Judy Ackerman met you last week at the JLUS project meeting in El Paso Texas. She mentioned that you were eager for community public participation in this project. The Frontera Land Alliance (Frontera) is the local land trust in the region. You can learn more about our efforts at: www.Fronteralandalliance.org

We are working with the National Park Service on a smaller scale project. We are working to obtain all the GIS database layers for the Franklin Mountains in TX and Organ Mountains in NM to assist with our conservation efforts, the white paper is attached. Also we are working to conserve Castner Range, Fort Bliss, El Paso Texas. Details on this specific project can be found here: <http://fronteralandalliance.org/castner/>

If you need anything from Frontera, or would like our participation at meetings, please let me know we are happy to participate.

Janae'

Janae' Reneaud Field

Executive Director

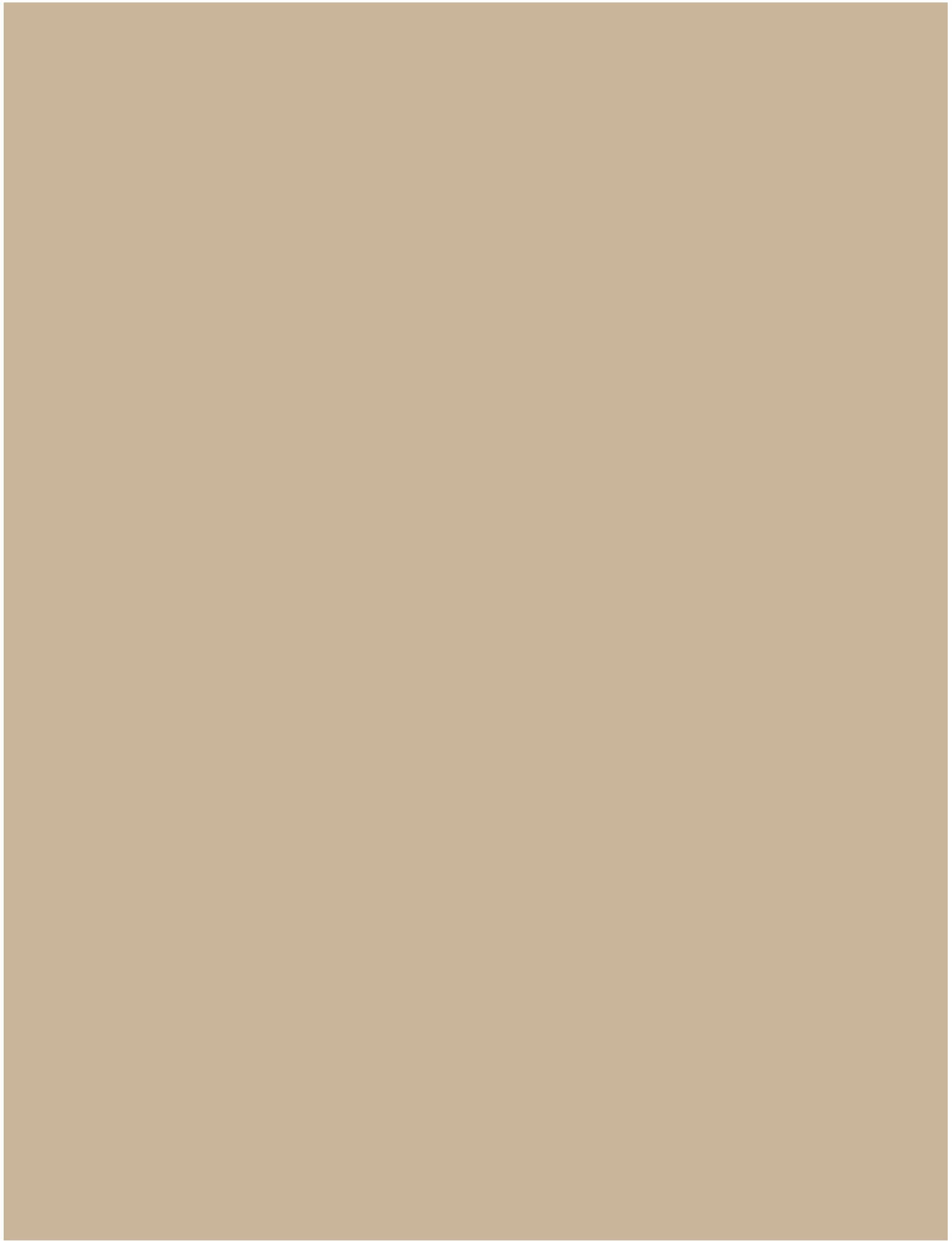
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Appendix D - Summary of Community Documents & Studies

Appendix D - Review of Community Documents

DOCUMENT REVIEW									
Document Name	Year	Geographic Area Covered	Military/Community Compatibility Policies/Goals	Land Use/Growth Vision Near Installations	Protected/Conservation Areas Near Installations	Military Operational Impact References	Military Economic and Population References	Other Military Installation References	General Comments
Air Installation Compatible Use Zone Holloman Air Force Base, New Mexico	2004		Completed in 2004, HAFB's AICUZ program sought to promote compatible land development in surrounding areas through an analysis of the installation's aircraft noise and accident potential zones. HAFB's AICUZ compatibility guidelines include land use recommendations for Clear Zones, Accident Potential Zones I and II and four Noise Zones—65, 70, 75, and 80 dB DNL. According to the AICUZ report, there are no incompatible land uses off base in the AICUZ area of influence. At the time of the report, the majority of the land area under the HAFB noise contours was undeveloped and expected to remain in agricultural, low density, or open space for the foreseeable future. However, to the south and east of the installation, a mix of private and public lands fall within the AICUZ area of influence. The private property consists of large parcels with low residential densities and the majority of the public property in this area is managed by the BLM and the New Mexico SLO. The only previously developed areas falling within the AICUZ noise contours are along Highway 70 near the main entry to the base. All of the HAFB Clear Zones fall within the HAFB boundaries or within WSMR's boundaries. APZ I and II fall outside of HAFB's boundary to the east. The APZ zones extending eastward from Runway 07/25 have the highest likelihood of experiencing incompatible development in the future. However, at the time of the 2004 AICUZ report, no new development had occurred in APZ I or II areas since the time of the previous AICUZ in 1994.						
BLM Prehistoric Trackways	2012		Management common to all alternatives: The Monument would be closed to all mechanized and motorized vehicles - exceptions to offhighway vehicle (OHV) travel restrictions or closures may be authorized for any military, fire, emergency, or law enforcement vehicles or any vehicle in official use or expressly authorized in writing by the authorized officer.						No other reference to military or specific installations
Chaparral Master Plan		Chaparral	The Chaparral Master Planning Process began in May, 2012. This planning effort is a joint project between Doña Ana County and Otero County and the study will describe both portions of the Chaparral community.						
City of Alamogordo Comprehensive Plan	2012	Alamogordo	The comprehensive plan stresses the importance of monitoring and coordinating future development with WSMR and HAFB, particularly areas west of the city adjacent to HAFB. Compatibility considerations include growth and encroachment of incompatible uses, as well as height and radio frequency issues for telecommunications projects in proximity to the military installations.	Development west of the city would pose the greatest risk of incompatibility.			HAFB and WSMR are critical to Alamogordo's economy and HAFB is the city's largest employer.		
City of Alamogordo Dark Skies Ordinance		City of Alamogordo	Limits the emission of light pollution to protect aviation and astronomical observation. The ordinance sets forth restrictions and guidelines on the timing, orientation, and shielding of outdoor lights on public and private property.						
City of Alamogordo Zoning Ordinance		City of Alamogordo	The current zoning regulations do not reference military installations and have no special height, density, or use provisions pertaining to WSMR or HAFB.						
City of Las Cruces, New Mexico Zoning and Subdivision Codes		City of Las Cruces	The City of Las Cruces Zoning Code outlines regulations for 20 general zoning districts and 13 special zoning districts. The current zoning and subdivision regulations do not reference military compatibility and have no special height, density, or use provisions pertaining to proximity to military installations.						
City of Las Cruces Extra-Territorial Zoning and Subdivision Codes (ETZ)		City of Las Cruces	The Las Cruces Extra-Territorial Zoning Code and Extra-Territorial Subdivision Code set forth use and development requirements for all properties falling within the City's ETZ jurisdiction. The current zoning and subdivision regulations do not reference specific use or development requirements for properties in proximity to military installations.						
City of El Paso Zoning Ordinance & City of El Paso Subdivision Ordinance		El Paso	The City of El Paso Zoning Ordinance and Subdivision Ordinance outline the development and use requirements for all properties falling within the City of El Paso. The current zoning and subdivision regulations do not reference height, density, or use guidelines for properties in proximity to military installations.						
COMPREHENSIVE PLAN FOR DOÑA ANA COUNTY	1994 (through 2015)	Dona Ana County	Policy for Industry: Encourage cooperation with White Sands Missile Range, New Mexico State University, and the State of New Mexico to improve productivity and broaden the range of product and services of local firms(pg53).	Minimize impacts of new development on surrounding land uses [not military specific, yet pertinent] (pg48).	None	None	Education (pg.25), fire station (pg.30) & Health Facilities (pg.32)	None	Limited public service references, nothing impacting military operations.
			Goal Statement: Encourage cooperation among local, state and federal agencies. (pg.58) - general language nothing specifically naming installations	Use the comprehensive plan to guide locations for land exchange and disposal of BLM and state lands (pg48).					
				Cooperate with local, state, federal governments, and the private sector to build additional infrastructure for commercial and industrial development [purpose: reduce dependence on "government jobs"] (pg.37).					
				Identify sites for future recreational facilities which can be acquired from the Bureau of Land Management, and other public and private agencies (pg35).					
				Encourage the establishment of a buffer zone through acquisition or exchange of state and BLM lands along the mountain ranges (pg48).					
				Encourage rural and low density residential areas in the valley, north of Hill; in the valley south of Las Cruces; in the foothills of the Organ Mountains, east of the Las Cruces city limits and along the east and west mesas (pg.51).					
				Acquire land from the state and BLM for low cost housing development (pg.57).					
				Promote development of private and public sector partnerships for educational research programs and agricultural development opportunities. (pg.58)					
				Cooperate with other governments in the county when developing services and facilities. (pg.58)					
				Coordinate Comprehensive Plan with plans of local, state and federal agencies. Develop a process of joint planning with towns, cities, state and federal land agencies. (pg.58)					

Appendix D - Review of Community Documents

DOCUMENT REVIEW									
Document Name	Year	Geographic Area Covered	Military/Community Compatibility Policies/Goals	Land Use/Growth Vision Near Installations	Protected/Conservation Areas Near Installations	Military Operational Impact References	Military Economic and Population References	Other Military Installation References	General Comments
				Military Land Use - land used primarily for military purposes (pg.66)					
Dona Ana County Zoning Ordinance			Unincorporated lands within Dona Ana County are divided into three zoning districts, Community Districts, Village Districts, and Performance Districts. Each of these districts contains specific zoning designations. The current zoning regulations do not reference specific use or development requirements for properties in proximity to military installations.						
El Paso County Subdivision Regulations			El Paso County's Subdivision Regulations outline the development and administrative provisions for land subdivision in El Paso County. The regulations apply to the subdivision of property that 1) creates two or more lots of five acres or less and 2) is intended for residential purposes. El Paso County's regulations set forth provisions for water facilities and waste disposal, setbacks, road and lot arrangement, and the plat approval process. The regulations do not outline specific standards or requirements pertaining to properties adjacent to military installations.						
Historic Preservation Board Ordinance	2004	Lincoln County							No military references
Mission 2035 Metropolitan Transportation Plan	2010	El Paso county (including Ft. Bliss), par Dona Ana County, Otero County	Project "O" Northeast Parkway Project F201A-MOD ROW acquisition for ultimate design, see MapA	Proposed bike route surrounding Ft. Bliss and along south border of Biggs Airfield on spur 601 (pg.25)			The influx of military personnel is also expected to result in an increase of civilian employment on Ft. Bliss, and an increase in employment in public schools and other local government jobs. (pg.4)		References to the NM Military Institute and limited econ/pop references; no consistency policies or issues
			Trust land map; pg. 13 - potential issues may arise if trust lands identified are part of existing/utilized installation areas.	Exhibit B41 El Paso International Airport Master Plan (pg.33) immediately adjacent to Biggs Airfield/Fort Bliss. Map_MPO AirportPlan			Over the next several years, the Study Area is forecast to grow significantly. The expansion of Fort Bliss brought about by Base Realignment and Closure (BRAC) is expected to bring approximately 40,000 additional troops by 2012. Expansion of Fort Bliss will bring not only troops to the El Paso area, but their civilian families as well (pg.4)		Employment in the area is expected to grow from 302,592 in 2010 to 361,185 in 2035
City of Las Cruces Comprehensive Plan	1999	Las Cruces	2.3 The City should provide for or encourage increased usage of public transportation vehicles and ride-share programs, especially to large employment sectors, such as NASA, White Sands Missile Range, El Paso, Texas, and eventually the West Mesa Industrial Park.	3.16 The City shall encourage rural residential uses in the north and south fringe areas of the City.				ISTEA Planning Factors (1 of 15): international border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation areas, monuments and historic sites, and military installations. (Note: The airport is recognized as a legal port of entry.)	No interface with military mentioned or regulated
			3.1 The City should support efforts that maintain the visibility and funding of existing public sector jobs and facilities, such as White Sands Missile Range (WSMR) and NASA, including the creation of industrial lands and parks on the East Mesa that provide support/locations for contractors that serve WSMR and NASA. Priority: US Highway 70: 1-2.5 to NASA Road - Frontage Roads;	The ability of the City to enable the process of infill development is very important in the maintenance and enhancement of the overall urban fabric as it lends physical, social and economic stabilization to areas with vacant land. The City shall continue to encourage appropriate infill development within developed areas of Las Cruces which protects the integrity of existing uses, densities, and urban design standards while optimizing the use of existing utility and transportation systems.					
Las Cruces ETZ Comprehensive Plan	2000-2020		Goal: Provide for effective inter-governmental joint planning, coordination, and implementation of significant programs designed to better manage regional growth and urbanization in manner that will serve to: • Foster maximum inter-governmental cooperation and problem solving. • Promote the best interests of the public in the provision of cost-effective services and infrastructure. • Insure timely and effective growth management. • Develop an efficient pattern of land use that follows the adopted comprehensive planning policies and regulatory requirements. • Promote fair and equitable administration and enforcement of plans and ordinances. • Provide for an efficient customer service and permitting process. (pg.3-27)	East Mesa shown as 2020 growth area for mobile homes and industrial development near WSMR (Map 1 / Map 22)	The ETZ and County shall coordinate with State and Federal wildlife management agencies, conservation groups, and land management agencies to preserve important wildlife habitat areas.(pg.3-14)		WSMR referenced as "trigger for growth" of the ETZ regions, as a historical reference only not a current one		Little reference to military in any capacity; any growth or land use issues would stem from East Mesa area of the plan - goals/policies/objectives related to intergovernmental coordination do exist but do not reference military directly.
			Objective 12.1: Establish effective inter-governmental communications and coordination. (pg.3-27 to 3-27	Hwy 70 approaching WSMR is designated as an "Urban Growth Area" (Map 8)	Areas near existing observatories shall be developed with special consideration for the impacts that development may have on astronomical observing conditions.(pg.3-16)		WSMR, "a major area employer" (pg. 2-12)		
			Policy 12.1.1: Work with Federal and State Agencies to coordinate future planning efforts on public lands. (pg.3-27 to 3-27	Planned proposed transportation expansion in East Mesa near WSMR (Map 20)					

Appendix D - Review of Community Documents

DOCUMENT REVIEW									
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			Program 12.1.1.1: The ETZ shall make every effort to meet periodically with the State Land Office and BLM to coordinate any planning proposals and land disposals. (pg.3-27 to 3-27)	Land and infrastructure availability, governmental policies and regulations, as well as the more difficult to quantify "favorable development climate" determine the type and amount of development that takes place. The total ETZ comprises an area 342.88 square miles or 219,496.5 acres of which 47.6 square miles or 30,471.4 acres are within municipal corporate limits or is under New Mexico State University ownership. More than two thirds of the land in the ETZ is owned by federal, state and other public agencies. The remaining land that is vacant is the land with development potential. (pg.2-14)					
			Program 12.1.1.2: The ETZ shall seek a strong advisory role in any future consideration by the State or the BLM, to release additional land for development to determine whether such releases are compatible with the ETZ Comprehensive Plan. (pg.3-27 to 3-27)	Open space and recreation opportunities should be negotiated on lands now owned by the state and federal governments. (pg.3-4)					
			Program 12.1.1.3: The ETZ shall work with the County and City planning departments to promote a smooth transition of land uses along the ETZ boundaries. (pg.3-27 to 3-27)	The majority of future mobile home housing on large lots with septic systems should be restricted to areas generally north of US 70 East. (pg.3-4)					
Lincoln County Comprehensive Plan		2007		NR/PL Goal 7. Work to effectively manage large game herds in Lincoln County. Strategy 1. Work with the New Mexico Game and Fish Department, as well as the USFS, BLM, and Department of Defense, as necessary, to develop and implement plans for improving the management of elk, deer, antelope, and oryx herds in Lincoln County. Strategy 2. Encourage the confinement of the oryx population to the White Sands Missile Range.			Military provides 0.5% of total employment (2004) and 0.8% of total earnings; not recognized as major employer		
				In July of 2006, LCSWA also assumed operational responsibility for solid waste management, including recycling, for the rural portions of Otero County, which do not include Alamogordo or Tularosa. Holloman Air Force Base solid waste collection is also expected to participate in 2007.			Military not		
Lincoln County Subdivision Ordinance	2006	Lincoln County	Adopted in 2006, Lincoln County's Subdivision Ordinance outlines plat and review procedures for the subdivision of land within unincorporated Lincoln County. The ordinance also sets forth requirements and standards for required improvements, flood control and drainage, water availability, water conservation and fire protection, waste management, and terrain management. Lincoln County's current subdivision regulations do not reference specific guidelines pertaining to proximity to military installations.						
Lincoln County Wind Energy Conservation System Ordinance	2011	Lincoln County	Required information for permit application: (F) copies of registered letters notifying locally affected military installations (SWMR, Holloman, Kirtland, and Cannon Air Force Bases) that a WECS permit has been applied for in Lincoln County.	WECS shall not be operated in a manner that causes electromagnetic interference					No other military references
Lincoln National Forest Land Resource Management Plan	1986	Lincoln National Forest area							No reference to military
New Mexico State Land Office Annual Report	2010-2011						Intellectual capital in our...military research facilities. The State Land Office can play a pivotal role in [development of technologies] by providing lands to locate renewable energy production facilities, transmission lines, and commercial sites for renewable energy technology research and production. pg. 3		
Northern Socorro County Comprehensive Plan	2006	Northern Socorro County Study Area			None	None			As far as possible from the installations -- more interaction with Sevilleta National Wildlife Refuge and BLM than any installations -- no issues
One Valley One Vision 2040	2012	Dona Ana County	The plan emphasizes the need for coordination with military installations, as well as other state and federal entities.	Population forecasts estimate an increase of approximately 115,000 residents in Dona Ana County, yielding a total population of 325,000, by the year 2040. The plan notes that population densities in communities adjacent to military installations are increasing and that planning decisions must consider land use compatibility in these areas.					
Otero County Comprehensive Plan	Oct. 2005	Otero County	Otero County citizens have direct control over only the small portion of private land within its borders, yet the County's economy is dependent on business activities on Federal and State lands. These activities are inseparably tied to the private, patented lands in the County. This situation creates conflict when residents perceive that Federal and State land managers are making land use decisions within the County without sufficient County notice, guidance and consultation." [6-2]	67% o county land is managed by Federal government. [6-1]		Air Installation Compatible Use Zone (2004)	Military provides 16% of county jobs and 30% of total earnings (2002)		

Appendix D - Review of Community Documents

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			overriding government issue is how the County can work most effectively with...Federal and State land managers regarding US Government-owned and controlled land in the County. [2-8]	Projected growth rate of 4-5% per decade from 2010 to 2030As these [US military operations in the area] downsides source: UNM Bureau of Business and Economic Research		Military Withdrawal Land Issues [6-7] In 1999, President Clinton signed the Defense Authorization bill which included the renewal of the McGregor Range Withdrawal from public use. The Army uses the approximately 678,108-acre McGregor Range, an integral part of the Fort Bliss Range Complex, to train the nation's military forces, develop and test future concepts for fighting wars, and support the sister services and allied military education and training programs. This includes closures of portions of NM 506 and US 54 during military activities such as missile firings.	Holloman Air Force Base and White Sands Missile Range combined make up a military/civilian annual payroll of more than \$255 million and an economic impact of over \$485 million to the local economy. WSMR / Holloman AFB / German Air Force at Holloman / Naval Air Warfare Center.	The US Army administers all activities and access on McGregor Range, while the Bureau of Land Management co-manages the nonmilitary uses, subject to Army approval. The renewal of the withdrawal for 50 more years specified the continuance of grazing, protection of wildlife and their habitats, control of predatory animals, recreation, and prevention and suppression of nonmilitary-caused fires, to the extent they do not conflict with the military mission. There are 14 grazing units totaling 271,000 acres permitted in areas that have a relatively low safety risk.	
			Goal: support military and federal organizations through citizen education, encouraging appropriate development around bases through cooperation between private and public stakeholders, encourage local workforce and services support for military facilities, and support the expansion of military operations	Encourages proper planning in APZs			Holloman AFB is a major economic force in Alamo and the county employing 6,603 personnel and housing approximately 3,526 on the base in Fiscal 2004. [2-1]		
			Goal: increase intergovernmental cooperation with municipalities and State and Federal agencies. [2-9]	Refers to Holloman's proposed AICUZ study					
			NR Goal 2 Strategy a. Coordinate Federal/State agency management to consider entire watershed/ecosystems in relation to landscapes (grazing, soil conservation, preservation of agricultural lands etc.).	Federal land use planning laws and regulations require all Federal agencies to consider the impacts of proposed actions on the social structure and economy of an affected area. Federal agencies have accepted the term "custom and culture" in the context of land use planning as synonymous with social structure and economy. Otero County "custom and culture" include Agriculture; Grazing and Ranching; Timber and Wood Products; Mineral Resources; Recreation; Cultural, Wildlife and Wilderness Resources. [6-8]			7.8% of county persons (3,599) employed in the Armed Forces; military accounts for nearly 16% of jobs in 2002 [8-3]		
			NR Goal 2 Strategy b. Ensure County involvement in Federal/State agency decision about the use of public land (public land use advisory committee, advocate managing the forest for multiple use, advocate managing grazing resources to include elk and other wild game animals as well as domestic livestock according to available resources so the environment is not degraded). [5-5]	The County expects that based on Federal laws cited previously, Federal agencies and any State agency subject to NEPA will inform local governments of those pending actions affecting local communities and citizens economically, and coordinate and consult with them in the planning and implementation of these actions. It also expects that all Federal and State agencies subject to NEPA and other Federal laws will use as a guide the Otero County Land Use Policy Plan and Comprehensive Plan and coordinate with the County Commission in planning and managing Federal lands within the geographic boundaries of Otero County. [6-9]			US military is a major economic engine for Otero County. Holloman AFB and WSMR combined make up a military/civilian annual payroll of more than \$255 million and an economic impact of over \$485 million to the local economy. [8-6]		
			Land Disposition policies [6-9] 1) Increase opportunities for local economic developments by increasing the amount of patented and non-Federal land within the County. 2) Federal land agencies shall not acquire any private land or rights in private lands within Otero County without first ensuring that private property interests are protected and enhanced. 3) Federally managed lands that are extremely difficult to manage, particularly those which lie in isolated tracts, will be targeted for disposal. 4) Otero County will be notified of and consulted about all Federal land adjustments in Otero County. 5) Before Federal Land agencies can change the local historic customs, culture and community stability of land use, the Otero County Commission may require adverse impact studies as outlined in Presidential Executive Order 12630 which requires that all Federal agencies complete a takings implication assessment (TIA) to evaluate the effect of their rules, regulations and decisions on: (1) private property, (2) private property rights, and (3) the investment-backed expectations of private citizens. These requirements shall be conducted and mitigation measures adopted with concurrence from Otero County. Adverse impact studies shall also address all classes of grazing rights, flood plain areas and public access.	Water policies [6-10] The Otero County government will be notified of all State, Interstate and Federal actions that have any impact on the water of the County prior to such actions being initiated. In addition, such proposed actions, including Federally Proposed Wild and Scenic River designations, will be coordinated with the Otero County Commission, and appropriate water use groups, and the County water and land use plans prior to adoption and implementation. It is the intent of the County to guide Federal and State agencies in the planning and management of the County's natural, cultural and economic resources.			Otero County's economic strengths derive largely from its Department of Defense, Research, Test and Evaluation (RDT&E) and scientific establishments, particularly Holloman Air Force Base...At the same time, dependence on the military leaves the County's economy subject to the vagaries of the US Government's plans. The periodic base realignment and closure (BRAC) process is partly political and cannot be predicted. [8-12]		

Appendix D - Review of Community Documents

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			Otero County shall enforce compliance with this public land use plan and shall monitor consistency between Federal and State actions and activities and the land use requirements enumerated herein. [6-13]	Agriculture Policies [6-10-11] Opportunities for grazing livestock on Federal land shall be continued at sustainable levels consistent with proper range management custom, culture and the protection of equitable property rights. 2) Federal and State governments will not obstruct agricultural opportunities, along with other appropriate multiple uses.			The County is constrained somewhat by the small amount of private land available—about 11 percent of the area—as well as the lack of readily available potable water. Efforts to desalinate the water, if successful, could position the County as a leader in this area and potentially be turned to economic benefit. Completion of the Tularosa Basin National Desalination Facility creates the potential to develop a cluster of water desalination facilities and businesses. Military operations also serve to constrain commercial growth by seeking to limit development around bases due to potential encroachment as well as road closures during missile launches. On the other hand, aviation		
				Goal/strategy: Work with NM Department of Transportation to establish a bike route to Holloman AFB. [15-9]			ED Goal 1. Support existing businesses and encourage their expansion. Strategy d. Work with the local Chambers of Commerce to identify State and Federal issues that hamper local businesses. [8-14]		
				Frequent references to the Public Land Use Advisory Committee and Air Installation Compatible Use Zone (AICUZ) [17-1 and 17-4] Federal agencies have their own concerns about the interface between Federal and private land. Holloman Air Force Base, for example, is seeking assurance that the land surrounding their operations will continue to be compatible with neighboring land use so their flying mission can continue without adversely impacting the community's safety or noise tolerance. It has proposed an Air Installation Compatible Use Zone (AICUZ) surrounding the base operations. An AICUZ study extensively analyzes the effects of noise, aircraft accident potential, existing land use, and proposed development around military installations and provides land use compatibility recommendations.			ED Goal 5. Support and promote the full use of Otero County's Federal facilities/entities; Holloman Air Force Base, White Sands Missile Range, the Lincoln National Forest, White Sands National Monument and the Sunspot and Apache Point observatories. Strategy a. Recognize these entities as having prime economic significance to the community and take action to facilitate their retention and expansion.[8-15]		
				LU Goal 5. Ensure Holloman Air Force Base Mission is not jeopardized by incompatible growth. Holloman AFB is a significant contributor to the County's economy. Strategy a. Work with Holloman AFB to promote further consideration of the Air Force Air Installation Compatible Use Zone (AICUZ) land use recommendations. Strategy b. Adopt the Holloman Air Installation Compatible Use Zone as County policy and attach the report as a technical appendix to the County Comprehensive Plan. Strategy c. Implement the Holloman Air Installation Compatible Use Zone through cooperation between adjacent landowners and the base. [17-6]			Strategy b. Cooperate with El Paso and Las Cruces in the promotion of the region as a location capable of handling new military and homeland defense missions. Strategy c. Encourage use of available local workforce and local business products and services at these facilities. Strategy d. Re-use former government facilities. [8-15]		
Plan El Paso	2012	El Paso	El Paso's plan includes a section dedicated to coordinated planning strategies with Fort Bliss—portions of Fort Bliss are within El Paso's city limits. The installation plays a critical role in the local economy and a significant portion of the city's population consists of military staff, personnel, and families. The presence of Fort Bliss affects El Paso's housing, education, and healthcare services, in addition to the city's land use planning efforts. The plan emphasizes strategies to provide quality services and to ensure land use compatibility in the communities adjacent to the installation.						
PUBLIC NUISANCE ORDINANCE OF SOCORRO COUNTY	2009	Socorro County							No military references; only references public works/government noise sources no military
Mimbres Resource Management Plan	Mimbres Resource Area; BLM	1993		Mimbres Resource Area is available for mineral entry, except where restricted by withdrawals for military, flood control, conservation, or other specific purposes. [2-3]	Several plant types lists as found and/or collects on the military reservation, in the Organ Mountains on the military reservation				
				Public land may be affected by discretionary and nondiscretionary closures which are presented in a lease as stipulations. The White Sands Missile Range (WSMR) and Dofia Ana Range portion of Fort Bliss military areas are excluded from leasing by nondiscretionary closures [8-3]					

Appendix D - Review of Community Documents

DOCUMENT REVIEW									
Document Name	Year	Geographic Area Covered	Military/Community Compatibility Policies/Goals	Land Use/Growth Vision Near Installations	Protected/Conservation Areas Near Installations	Military Operational Impact References	Military Economic and Population References	Other Military Installation References	General Comments
				The Peila Blanca WSA is bounded on the east by the Fort Bliss Military Reservation, [APNDX]-1]					
				is bounded on the east by the Fort Bliss Military Reservation, is bounded on the east by the Fort Bliss Military Reservation and the White Sands Missile Range, on the south by Fort Bliss and private land, on the west by roads, and on the north end by private land and the 7,283-acre Organ Mountains WSA, [I-5]					
				Military Withdrawal is listed as a major land holder manager in the area.					
El Paso Regional Growth Management Plan	2009	El Paso region (city, county, and communities in the region)	Implementing the Army Compatible Use Buffer (ACUB) program should continue as a high priority in order to restrict allowable land uses in areas at risk of encroachment. This will require local and regional support.	Section 3.4 Land Use Compatibility and Buffer Zones [pdf page 154]		The term "Land Use Planning Zone" (LUPZ) is a planning tool used to indicate the maximum acceptable range (60 to 65 dB ADNL) for what is considered compatible levels for all land uses. "ADNL" stands for Day-Night Average Sound Level for A-weighted noise.	From 2005 to 2008 (the baseline year) the number of military troops and dependents coming to Fort Bliss increased by nearly 18,000. Note, however, that this is less than 30 percent of the nearly 59,000 troops and dependents expected by 2013.	With five of the nine school districts in the El Paso region categorized as "primarily impacted" by military relocations, the concern over a sharp increase in the numbers of children of military families is a major issue for planners. Estimates show that from 2006 to 2013, growth at Fort Bliss and the surrounding region will bring about 45,000 children age 10 or under.	
			It is generally considered a beneficial economic stimulus for a community to gain rather than lose a military presence; however, excessively rapid growth can present logistical and fiscal challenges in planning for and meeting short-term community needs and for managing growth with long-term desirable benefits.	describes the current state of the El Paso region and evaluates the impact of expected growth for a range of scenarios (from no further military expansion to full expansion). This impact includes "induced" growth that the military buildup will generate in the City of El Paso, El Paso County, and other communities in the region.		Training operations at Fort Bliss impact surrounding properties by generating noise, vibrations, dust, various types of emissions, and vehicle movement. Additional types of training and expanded quantities of training activities are changing the levels of impacts on the community.	The need for spousal employment will be significant for families of young enlisted soldiers.	[Education]Outreach to incoming military spouses and early approval of credentials are potentially issues as is the need for local educational institution cooperation to combine capabilities for training El Paso residents for the thousands of prospective jobs resulting from military growth.	
			Encroachment issues surrounding Fort Bliss include the proximity of existing residential development, increasing traffic volumes on US 54, loss of open space to proposed new development, and noise from El Paso International Airport (EPIA) flight operations. These primary encroachment issues may have associated characteristics that impose resultant impacts on Fort Bliss from emissions, fugitive dust, erosion, light pollution, and wildlife migration.	BRAC 2005 identified Fort Bliss as an ideal installation for expansion; WSMR offers assets that could support future Army growth.		Biggs Army Airfield - has low traffic volume, does not pose noise impact problem; operation noise extend to the SW of the airfield but do not exceed 65dB ADNL. New training operations using helicopter routes along US 54 could cause elevated noise levels over this road corridor in the future.		Fort Bliss reports that it intends to provide facilities for less than 15 percent of the thousands of new military children in El Paso in need of child care.	
			Residential Encroachment areas include the west side of US 54 from the main post north to where it crosses the Fort Bliss boundary, areas along the south boundary of the Doña Ana Range, areas along the south and east boundary extending east from the main post and north to the New Mexico state line, and the area in El Paso County just south of the boundary of McGregor Range. Retaining public lands as conservation areas, and providing buffers of open space, recreational facilities and other compatible uses around development projects are recommended strategies. Close coordination with Fort Bliss will be essential for the City of El Paso and each of the counties prior to any approvals of rezoning and development proposals.	New development designed to accommodate the housing needs of military families will necessarily be more compact with higher density development concentrated near transportation corridors. This land use pattern will require less total infrastructure for its support and result in more efficient, sustainable development; but the costs are, nonetheless, very significant.		Main Cantonment Area: localized noise from daily activities within these areas does not cause any far reaching effects in surrounding areas. However, Fort Bliss activities do affect commuting and vehicular traffic on surrounding roads. During development, residential areas may experience some temporary effects such as increase truck traffic, noise from equipment, and dust from site grading.		Establishing a working committee consisting of city, county, federal, and military Public Safety officials is recommended. This committee would develop a strategic plan to address common concerns, issues, and objectives. Such collaboration has proved very effective for other Army posts.	
			Buffers: Industrial zoning and land uses provide buffer zones in several areas of the City of El Paso, creating sufficient separation between Fort Bliss and incompatible development such as residential. A combination of commercial, industrial, and mixed use parcels extending east from EPIA along Montana Avenue provide additional buffers between the installation and residential properties.	A Housing Market Analysis (HMA) prepared for Fort Bliss in 2008 (found in Appendix B of this document), indicated a need for 1,801 housing units above the existing supply within the community. The available supply of "affordable" housing for military families dependent on a Basic Housing Allowance (BAH) is a long-term challenge.		County Training Areas: Off-road vehicle operations have the greatest potential to generate direct impacts on Fort Bliss lands, with some potential for migration of noise and dust beyond the installation boundaries under certain conditions. While these areas do not support live fire operations, soldiers may practice some aspects of tactical and weapons training in these areas, either on foot or in wheeled or tracked vehicles. As a neighboring land use, residential uses may be less optimal land immediately adjacent to these kinds of operations.		Fort Bliss has over \$150 million for quality of life projects that will result in new child and youth facilities, 12 new child care centers, a 100,000 square foot fitness center, and a new aquatics center on the post. The city will face budget challenges to provide the same degree of planning for quality of life projects in the community where the majority of soldiers and their families will live.	
			The ACUB program, described in the Existing Conditions Assessment has been utilized to establish restricted-use easements for large parcels of land near Chaparral, New Mexico and for land within a noise contour of incompatible level for designated uses. The 75-year easements preclude residential homes, retirement and nursing homes, intermediate care facilities, hospitals, and schools on those parcels. ⁹⁷	The HMA indicated that in addition to increasing the supply of affordable housing generally, the community will need to supply between 22,000 and 23,900 housing units to meet the military requirements for housing by 2013. Thus, the housing shortfall, when combined with organic growth in El Paso's population, is estimated to be from 9,700 to nearly 13,000 units.		The Supplemental Programmatic Environmental Impact Statement (SPEIS) written for Fort Bliss in 2007 detailed proposed improvements on the installation, but it is unclear to what degree these improvements would mitigate the impact of the addition of more than 20,000 military personnel, nearly 27,500 military dependents, and 2,700 government civilian personnel coming to Fort Bliss by the year 2013.			

Appendix D - Review of Community Documents

DOCUMENT REVIEW									
Document Name	Year	Geographic Area Covered	Military/Community Compatibility Policies/Goals	Land Use/Growth Vision Near Installations	Protected/Conservation Areas Near Installations	Military Operational Impact References	Military Economic and Population References	Other Military Installation References	General Comments
			As the amount of growth increases for each scenario, pressures for land development will also increase. This demands that land use controls and building restrictions be strictly enforced, and that increased communication and cooperation between Fort Bliss and the relevant jurisdictions be established and maintained.	Adjustment of the BAH, the result of a yearly survey, will require careful monitoring by developers and Fort Bliss to insure that it accurately reflects the costs of acceptable rental units. If the BAH is not carefully adjusted, soldiers and their families will be placed under additional financial stress. While this will help military families, it can cause the local housing market to sustain higher rental rates than are affordable to most families. Providing affordable housing options will become an increasing concern for the city.		SPEIS: installation leadership indicates the need for six new entrance and exit gates to reduce traffic congestion in the morning and evening throughout the week. The SPEIS did not provide a detailed or long-range evaluation of regional transportation needs.			Primarily concerned with housing stock and affordable housing availability for military families, and the price pressure created for non-military families based on the limited housing stock. Some transportation (entry/exit) planning and impact concerns as well.
			Recommendation: Continually monitor Fort Bliss gate capacity, operations and use to avoid severe congestion on roads adjacent to them. [3-93]	Further, Fort Bliss and the community must work together to increase the number of units that will be built on post so that the need for adequate housing for all El Paso residents can be met.		Training Areas in Doña Ana and Otero Counties: noise contours (except large caliber weapons) are contained within Fort Bliss boundaries			
			Recommendation : Provide transit, pedestrian, and bikeway accommodations for traffic volumes on local roadways to and around key facilities such as Medical Centers, Fort Bliss Access Control Points (entry gates), large shopping centers, downtown, and campuses. [3-94]	Land Use Implications. The City of El Paso has the available water supply and treatment capacity necessary to meet the projected growth from the military expansion. As discussed in Section 3.2, much of the anticipated residential development can be accommodated within areas for which future subdivision plans and land studies have already been identified. The infrastructure improvements necessary to serve these areas have already been identified and planned.		It is very important that Fort Bliss, the City of El Paso, El Paso County, Doña Ana County, and Otero County work together to implement land use controls and sound mitigation measures in building regulations to alleviate potential future problems related to housing and other development in the affected areas. Where possible, existing public lands and agricultural uses currently adjacent to Fort Bliss should be used and preserved as buffers. High priority needs should be maintained on the Army ACUB program to acquire property and easements for the protection of the community and sustainment of military operations at Fort Bliss.			
			3. Create public-private partnerships for transportation system improvements • Use information and presentations by a national public-private partnership association to identify strategies for use of private sector funding for public purpose, including enhanced used leasing	2. El Paso and Fort Bliss should cooperate in the development of a new landfill and renewable energy projects. Consider the combination of refuse streams to justify waste-to-energy facility within a new joint landfill. Applicability of the Fort Bliss/El Paso waste streams, must be studied as well as opportunities for geothermal, solar, and wind generation					
			5. Plan for expanded industrial transportation resulting from the inevitable growth of El Paso's manufacturing and distribution businesses. • This activity will be a supplement to the Comprehensive Plan	As a result of the military transition at Fort Bliss, the demand for housing will increase and prices will likely adjust upwards as the supply of both rental and homeowner housing lags behind the demand. The additional demand depends upon the number of military personnel moving to El Paso County and the resultant number of new jobs that are filled by new arrivals to the area. Within the Housing Market Area, developable land is available to accommodate additional housing demand and the Army is expected to build additional units for military families and unaccompanied personnel although the number of housing units that may be built depends on circumstances not well defined at this time.					
				The estimates for the total number of military personnel requiring housing in the community ranges from 30,599 for the low scenario to 33,525 for the high scenario (Table 3.7-8). The estimate assumes that only the Floor Housing Requirement of 542 will be available for military families as well as the current housing capacity for 6,318 unaccompanied personnel.					

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DOCUMENT REVIEW									
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				Table 3.7-9 shows the military demand for off-post housing combined with the civilian demand for housing results in a community shortfall of housing ranging from 24,238 to 28,624 owner or renter occupied units depending on the growth scenario. The shortfall would be reduced by the number of housing units that the military develops for both military families and unaccompanied personnel. The HMA suggests that some 7,168 to 7,803 family housing units may need to be developed through privatization programs or military construction programs.					
				4. Create a center of excellence to integrate and provide information concerning all available federal and state housing assistance programs and provide the information at convenient places throughout the city [3-128]					
				6. Request inclusion of Fort Bliss in the Army program to add bachelor enlisted and officer housing to privatized housing projects					
State Trust Lands within Otero County	Jan-13	Otero County							Otero County has surface estate lands, subsurface estate lands, and "both" lands
SunZia Draft EIS		Lincoln, Socorro, Sierra, Luna, Grant, Hidalgo, and/or Torrance counties in New Mexico	BLM's preferred alternative (Subroute 1A1) is located within a portion of the Northern Call-up Area and portions of HAFB's R5107C/R5107H airspace used for flight operations. Additionally, the preferred alternative falls within an area at risk for potential damage from WSMR missile launch malfunctions.						
Tri-County RMP EIS Scoping Report	2005	Sierra/Dofia Ana/Otero Counties BLM management	limited metion of military activities; no goals or policies						
Tri-County RMP (BLM)	2013	Sierra, Otero, and Dona Ana Counties	The Military training is a prominent activity within the BLM tri-county planning area. The RMP evaluates the potential impacts land disposal and management decisions might have on military missions and training activities. Several of the issues, especially the disposal of lands near military operations and renewable energy development are pertinent in the JLUS context.						
Otero County Subdivision Regulations		Otero County	Otero County's subdivision regulations outline plat and review procedures for the subdivision of land within unincorporated Otero County. The regulations also set forth requirements for water quality and waste disposal, water use and conservation, terrain management, and streets, roads, alleys, and easements. Otero County's current subdivision regulations do not reference specific guidelines pertaining to proximity to military installations.						
Socorro County Land Subdivision Regulations		Socorro County	The regulations also set forth requirements and standards for water quantity and availability, water quality, waste disposal and management, and terrain management. Socorro County's current subdivision regulations do not reference specific guidelines pertaining to proximity to military installations.						
Sierra County Comprehensive Plan	2006	Sierra County	Adopted in 2006, the Sierra County Comprehensive Plan outlines the county's existing conditions and sets forth strategies to guide future growth and development, while preserving the area's quality of life. The plan addresses the following elements: land use and code enforcement, economic development, water, infrastructure, transportation, and housing. The majority (67.7%) of Sierra County's land area is federally owned, 18.9% is privately owned, and 13.4% is held in state trust. Spaceport America and WSMR combine to form a major physical presence in the county. Agriculture and recreational tourism are the county's key economic engines. No reference to military.						
Sierra County Subdivision Ordinance	1999	Sierra County	Adopted in 1996 and amended in 1999, Sierra County's Subdivision Ordinance outlines plat and review procedures for the subdivision of land within unincorporated Sierra County and establishes five subdivision types based on number of units and lots per acre. Current subdivision regulations do not reference specific guidelines pertaining to proximity to military installations.						
Viva Dofia Ana	2012	Dona Ana County	Viva Dofia Ana is a county-wide plan that seeks to build a more sustainable community through the livability principles of expanding transportation and housing choices, enhancing economic competitiveness, strengthening existing communities, coordinating policies and leveraging investments, and valuing communities and neighborhoods.						

Appendix E - Summary of Military Documents and Studies

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Holloman Fort Bliss WSMR Spaceport		EG: ground disturbance from construction; aircraft operations ; munitions expenditures; missile firing; off-road vehicle operations	E.g., North McGregor Range, MTRs (list if relevant); R-5107; new DAGIR; Holloman airfield;	This will reflect to the EA/EIS topic	What is the problem outside the installation boundary: frequent evacuation, unsafe for public; noise affects residences; vibrations affect residences; interferes with using TVs, GPS;	List affected locations(s)plac e(s) mentioned in the document	Measures mentioned as preventative actions; or stated as mitigations. This topic could get mired in the realm of unspecified BMPs, so in that case say something like Follow DoD/Army Safety regulations, or Erosion control BMPs	Use this to record any internal notes to our team. Or, document if this is a bigger issue such as cumulative, or if there is an underlying concern, or questions about how to define locations....
Installation	File Name	Action/activity of concern	Location of activity	Resource category	Issue	Location of concern	Published minimization measures	Notes/com ments
Fort Bliss	3_FBT X_Co mma nd_Br ief__ M__0 2_MA R_12. pptx	PowerPoint presentation about the expansion of Ft. Bliss facilities for training.						Doesn't mention specific impacts, but generally states that noise, energy and transmission facilities, airspace, and water resources are encroachme nt challenges in regards to adjacent land uses.

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Fort Bliss	AR#1 74_Ft Bliss Traini ng Area Devel opme nt Conce pt.pdf	Fort Bliss, Texas and New Mexico, Training Area Development Concept	Orogrande Range Camp	Noise	The Orogrande Range Camp is on the boundary of Ft. Bliss with valley lands to the north. Training in this area could impact surrounding land with noise impacts.	Area surrounding Orogrande Range Camp	None listed	this concept doc does not have categories of impacts
Fort Bliss	AR#1 74_Ft Bliss Traini ng Area Devel opme nt Conce pt.pdf	Aircraft training exercises that extend beyond Ft. Bliss boundary, but are within Ft. Bliss restricted airspace.	Ft. Bliss restricted airspace	Noise	Restricted airspace extends beyond the boundary of Ft. Bliss to the east and northeast. Appears to be about five miles out. Potential noise impact and fuel contaminati on.	Areas east and northeast of Ft Bliss.	None listed	
Fort Bliss	AR#1 74_Ft Bliss Traini ng	Aircraft operations	West half of South Training Areas	Noise	Aircraft operations in west half of South Training	City of El Paso	None listed	

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	Area Development Concept.pdf				Areas could impact City of El Paso with aircraft noise (e.g., low-flying helicopters)			
Fort Bliss	AR#1 74_Ft Bliss Training Area Development Concept.pdf	Off-road vehicle operations	West half of South Training Areas	Air Quality	Off-road vehicle operations in west half of South Training Areas could have dust impacts on City of El Paso.	City of El Paso	None listed	
Fort Bliss	AR#1 74_Ft Bliss Training Area Development Concept.pdf	Aircraft operations	East half of South Training Areas	Noise	Aircraft operations in east half of South Training Areas could impact area to the south and east with aircraft noise (e.g., low-flying helicopters)	Areas to the south and east of the east half of South Training Areas	None listed	
Fort Bliss	AR#1 74_Ft Bliss Training Area Development Concept.pdf	Off-road vehicle operations	East half of South Training Areas	Air Quality	Off-road vehicle operations in east half of South Training Areas could have dust impacts on	Areas to the east of the east half of South Training Areas	None listed	

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	Conce pt.pdf				area to the east.			
Fort Bliss	AR#1 74_Ft Bliss Traini ng Area Devel opme nt Conce pt.pdf	Missile firings	McGregor Range	Noise	FIREX (exercise following Roving Sands JTX) Missile firing at McGregor Range could impact the City of El Paso and surrounding areas with noise. It's one week of missile firing in the following quantities: 8 to 10 Hawk missiles; 14 to 15 Patriot missiles; 56 to 60 Stinger missiles; and 8 to 10 Roland missiles.	City of El Paso and surrounding areas	None listed	
Fort Bliss	AR#1 74_Ft Bliss Traini ng	Live-fire activities	McGregor Range	Transportation	Live-fire activities performed at McGregor	A portion of New Mexico Highway 506	None listed	

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	Area Development Concept.pdf				Range for approximately one week, normally following JTX Roving Sands, usually result in temporary closure of New Mexico Highway 506.			
Fort Bliss	AR#174_Ft Bliss Training Area Development Concept.pdf	Missile firings	South Training Areas	Noise	Allied forces use a 6.8-square mile portion of the South Training Areas to conduct Hawk and Patriot Battery exercises 2 to 3 days per month. During 1996, the JSDF participated in their 32nd consecutive ASP that was held from August through	City of El Paso and surrounding areas	None listed	

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					December. They deployed 17 Hawk units and fired 17 missiles. The JSDF deployed 24 Patriot units to McGregor Range and fired 30 Patriot missiles. Allied units fire other weapons systems consistent with current U.S. weapons system range capabilities. These could impact the City of El Paso and surrounding areas with noise.			
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Fort Bliss	AR#174_Ft Bliss Training Area Development Concept.pdf	Aircraft operations, missile firings, and live-fire activities	Tularosa Basin portion of McGregor Range	Noise	<p>The ADATD has “A” stations located in the Tularosa Basin portion of McGregor Range and has utilized this area extensively for decades for the following testing and experimentation support activities:</p> <ul style="list-style-type: none"> • Low-flying attack profile with fixed and rotary aircraft • Laser tracking of aircraft and ground vehicles • Live short-range missile firings (Stinger, Chaparral, ADATS, etc.) • Live anti-aircraft gun firings 	City of El Paso and surrounding areas	None listed	
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					<p>(Bradley, Vulcan, etc.)</p> <ul style="list-style-type: none"> • Live laser designated weapon firings • Live Patriot missile firings • Live High Mobility Multi-purpose Wheeled Vehicle Mounted Advanced Medium (HUMRAAM) firings to include over the horizon (Otero Mesa) • Live "Shoot on the Move" firings • Many "Black Box" type missions and tests <p>These could impact the City of El Paso and surrounding areas with noise.</p>			
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Fort Bliss	AR#1 74_Ft Bliss Traini ng Area Devel opme nt Conce pt.pdf	Live-fire activities	Doña Ana Range–North Training Areas	Noise	The Doña Ana Range– North Training Areas are used for small arms, crew-served weapons (heavy and light automatic weapons and mortars), armor, mechanized infantry, artillery, aerial gunnery and tactical operations. Explosives used in the western and northern portions of the Dona Ana Range– North Training Areas could have noise impacts on adjacent lands to the west and north.	Adjacent lands to the west and north	None listed	
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Fort Bliss	AR#1 74_Ft Bliss Traini ng Area Devel opme nt Conce pt.pdf	Missile firings	McGregor Range	Noise	Various small missiles, rockets, and HIMAD missiles used on the McGregor Range could impact the City of El Paso and surrounding areas with noise.	City of El Paso and surrounding areas	None listed	
Fort Bliss	AR#1 74_Ft Bliss Traini ng Area Devel opme nt Conce pt.pdf	Missile firings	McGregor Range Training Area 10	Noise	Potential location for TBM target launch facilities - could impact adjacent off-post area with noise.	Adjacent off-post areas	None listed	
Fort Bliss	AR#1 74_Ft Bliss Traini ng Area Devel opme nt Conce pt.pdf	Live-fire activities	McGregor Range Training Area 16	Noise	Potential locations for controlled access FTX - could impact adjacent off-post area with noise.	Adjacent off-post areas	None listed	
Fort Bliss	AR#1 74_Ft Bliss Traini ng	Missile firings	McGregor Range Training Area 25	Noise	Small portion of TA 25 would become a	Adjacent off-post areas	None listed	

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	Area Development Concept.pdf				surface impact area for ATACMS IB (Army Tactical Missile System) - could impact adjacent off-post area with noise.			
Fort Bliss	Army 2010 _Fort Bliss Army Growth and Force Restructure Realignment EIS.pdf	Army Growth and Force Structure Realignment						

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		Increased on-road maneuver activities	Northeast McGregor Range North of Highway 506	Soils/water	The Northeast McGregor Range North of Highway 506 would also experience the highest level of on road vehicle trips annually compared to other FBTC subdivisions . The vehicle trafficability ratings for soil in the Sacramento Mountains portion of the Northeast McGregor Range North of Highway 506 on slopes less than 30 percent (Bissett – Rock Outcrop complexes) are rated as good for	Off-post areas downhill or downstream of on-road and off-road training areas in Northeast McGregor Range North of Highway 506	<p>The inclusion of the Northeast McGregor Range North of Highway 506 as part of the ITAM RTLA plan to characterize gullies and assess and mitigate combat/tank trail erosion would mitigate impacts to less than significant.</p> <p>Potential loss of grassland could increase wind erosion; however, erosion would be minimized by erosion control projects that are part of the LRAM program.</p> <p>LRAM seeks to stabilize soils and provide long-term vegetative cover to support military land use. The program involves using cost-effective technologies, such as revegetation, erosion control structures, site hardening, blockades, and dust palliatives to prevent training</p>	
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					most vehicle types. The soils outside of the Sacramento Mountains are fine grained and thus more susceptible to erosion and are in proximity to the existing roadways (unvegetated). These effects could lead to increased erosion and channelizing, and indirectly to downstream sedimentation. Damage to the road areas could also be substantial from increased on-road maneuver activities because vehicle use would be		site degradation, soil erosion, and excessive road damage.	
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					concentrate d onto a smaller area. While this disturbance would not destroy as much vegetative cover as disturbance to off road areas would, it could disturb the soils underlying the roads, causing ruts and gullies to form, which in turn could lead to the indirect effect of increased surface water runoff and soil erosion off of the road surface.			
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		Redevelopment of Cantonment Area	Cantonment Area	Visual Resources	Redevelopment would result in less open space and would further contribute to the Cantonment's already dense visual context. Existing visual resources on the installation, as they are visible when traveling along public roadways within Fort Bliss and surrounding areas and from publicly-accessible overlooks at higher elevations that are located both within and outside the installation boundaries.	The ROI for visual resources includes those areas of the installation that are visible when traveling along public roadways within Fort Bliss and surrounding areas and from overlooks at higher elevations that are located both within and outside the installation boundaries.	From a visual perspective, however, the additional redevelopment would be consistent with its surroundings. Consequently, impacts to visual resources on the Cantonment would be less than significant.	
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		Redevelopment of Cantonment Area	Cantonment Area	Noise, Air Quality, Visual Resources	Construction impacts, involving noise, dust, and increased construction-related traffic, could negatively impact both adjacent areas as well as visual resources.	City of El Paso lands adjacent to Cantonment Area	Construction impacts, however, would be temporary and contractors would be required to follow all Fort Bliss requirements. This would be consistent with construction management procedures on the installation. Therefore, development impacts would be less than significant.	
		Rail operation	Along existing rail line	Noise	Operation of the rail could increase noise levels in proximity to the Town of Orogrande. Given the fact that the proposed rail line would be located east of the existing railway, and it would be expected to operate less frequently	Town of Orogrande		

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					than the existing railway, projected impacts of TI-4 are deemed to be less than significant.			
		Construction activities in Cantonment Area	Cantonment Area	Earth Resources	Construction activities on the cantonment to accommodate the additional stationing of Soldiers would result in increased soil erosion.	Off-post areas adjacent to Cantonment area	Construction contract terms and conditions would include installation and maintaining BMPs, erosion and sediment controls, and stormwater management measures during and immediately following construction; minimizing the area of exposed soil during construction and use soil stockpiling methods that minimize dust generation; and installation ground cover on remaining exposed areas after construction is complete.	
		Construction of rail line	Cantonment Area	Earth Resources	Construction of rail line would interfere with natural drainage over time	Off-post areas adjacent to rail line	Rail line construction plans would include a storm water management plan and a soil management plan	

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					and would impact surrounding soils with creosote from the railroad ties.		to address creosote impacted soils.	
		Placement of three additional Controlled FTX sites	Otero Mesa South of Highway 506	Earth Resources	Soils on Otero Mesa plain South of Highway 506 have somewhat limited suitability for Controlled FTX uses, requiring aggressive sediment and erosion controls to minimize impacts. Most soils on the Otero Mesa escarpment are located on the steep slopes, and are rated as very limited for the construction and use of bivouac areas. The very limited	Off-post areas downhill or downstream of FTX sites on Otero Mesa plain South of Highway 506	The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance associated Controlled FTX sites located on the Otero Mesa escarpment would be expected. By locating the proposed Controlled FTX sites on the Otero Mesa plain and on-going LRAM program projects impacts to soils would be less than significant.	

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					rating indicates that the soil has one or more features that are unfavorable for the specified use.			
		Live-fire training at ranges	McGregor Range and Doña Ana – North Training Areas	Earth Resources	Detonation of munitions, smoking, use of welding torches, vehicle engines, and other training-related activities could initiate wildland fires. Wildland fire caused by live-fire training activities could remove large areas of vegetation that normally protect soil from	Off-post areas adjacent to McGregor Range and Doña Ana – North Training Areas		

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					erosion by slowing surface runoff, intercepting raindrops before they reach the soil surface, and anchoring the soil with roots. Vegetation removal resulting from wildland fires could result in increased soil erosion by water and wind, indirectly causing large-scale removal and redepositio n of soils, gullyng, or unstable slopes in areas of steep slopes and rapid runoff. The impact would be directly			
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					proportiona l to the size of the fire.			
		Road construction	Southeast McGregor Range	Soils/water	Most soils in the Fort Bliss ROI are highly erodible soils that are susceptible to wind erosion. The highly erodible soils on Fort Bliss that are susceptible to water erosion occur primarily on steep slopes in the Southeast McGregor Range. Constructio n of roads would	Off-post areas adjacent to road construction in the Southeast McGregor Range	This impact would be less than significant during construction with implementation of standard road construction BMPs.	

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					remove existing vegetation and disturb soils, increasing the erosion potential. The largest impacts are likely to be in steep slope areas that are more vulnerable to wind and water erosion.			
		Training activities	The ROI for this analysis encompasses Fort Bliss and the surrounding area, including the Franklin and Organ Mountains to the west, Sacramento Mountains to the northeast, Hueco Mountains to the southeast, Otero Mesa to the east, and Tularosa Basin.	Natural Resources	Noise and potential fires from training activities would be impacts to wildlife receptors, potentially affecting breeding, feeding, and habitat (vegetation) loss. Indirect impacts would also occur and include soil erosion and textural	Off-post areas adjacent to Ft. Bliss training areas		

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					changes, invasion of non-native and exotic species, and introduction of pollutants (e.g., particulates, smoke).			
		Live fire training and off-road vehicle maneuvers	Sacramento Mountains portion of the Northeast McGregor Range North of Highway 506	Natural Resources	Live fire training and off-road vehicle maneuver in the Sacramento Mountains portion of the Northeast McGregor Range North of Highway 506 might impact nesting season of the Gray Vireo.	Off-post areas adjacent to Sacramento Mountains portion of the Northeast McGregor Range North of Highway 506	Periodic surveys of the known Gray Vireo nesting areas will be conducted to monitor impacts to habitat and populations and ensure impacts stated in document are correct.	

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		Live fire and pyrotechnics	Northeast McGregor Range North of Highway 506	Natural Resources	The addition of live fire and pyrotechnics to the Northeast McGregor Range North of Highway 506 would increase the potential for wildfires, which could have adverse impacts to vegetation and habitats. Live fire events and the fine fuels of the grasslands could result in wildfires.	Off-post areas adjacent to Northeast McGregor Range North of Highway 506	Fire suppression crews, which are required to be available for live fire exercises, would suppress such fires quickly, making it unlikely that the fires would spread and endanger the nearby montane vegetation and habitats or the community of Timberon. In addition, forest management practices under INRMP include the thinning of dead brush and trees in montane vegetation areas to reduce the potential fuel capacity have occurred and would continue.	
		Training activities	South TAs, North TAs, and Tularosa Basin	Cultural Resources	Increased training in South TAs, North TAs, and Tularosa Basin, could potentially restrict or limit Native American access to TCPs or	Off-post areas adjacent to and requiring passage through South TAs, North TAs, and Tularosa Basin	Continued consultation with tribes would be required to schedule for access.	

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					sacred sites.			
		Construction activities in Cantonment Area	Cantonment Area	Air Quality	Construction activities on the cantonment to accommodate the additional stationing of Soldiers would result in increased fugitive dust emissions.	Off-post areas adjacent to Cantonment area	Dust control practices in the construction contract terms and conditions would include maintaining moisture in aggregate materials, limiting vehicle speeds on unpaved areas, prompt cleanup of tracked out materials and covering haul trucks when possible.	
		Construction activities in Cantonment Area	Cantonment Area	Air Quality	Completion of additional buildings on the cantonment to accommodate the additional stationing of Soldiers would result in increased demand for fuel; thereby, increasing the	Off-post areas adjacent to Cantonment area	The use of energy efficient building and support facilities designs would reduce the amount of fuel that must be burned to supply energy and thereby reduce the associated air pollutant emissions.	

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					associated air pollutant emissions. Additional air pollutant sources associated with building operations would increase emissions.			
		Water demand increase	Ft. Bliss	Water Resources	Water demands would increase with additional population influx in the region and the stationing of additional Soldiers at Fort Bliss.	Region served by EPWU	Implementation of water conservation measures, such as using more reclaimed water for on post landscaping would reduce the consumption of potable water. Utilization of desalination plant that significantly increases availability of potable water in the area and decreases the amount of water needed to meet demand.	
		Increased maneuver training	Ft. Bliss	Water Resources	Increased maneuver training in the FBTC may result in increased degradation of	Waterways adjacent to Ft. Bliss	None listed	

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					waterways and watershed.			
		Construction activities and stormwater runoff	Ft. Bliss	Water Resources	Cantonment and FBTC construction activities would increase impacts associated with stormwater runoff.	Areas adjacent to Ft. Bliss	Construction contract terms and conditions would include the following BMPs: dredging, filling, or grading in or adjacent to streams and riparian areas would be scheduled to occur during low-flow periods and would be in compliance with the Clean Water Act. No project-related materials (such as fill, revetment rock, and pipe) would be stockpiled in the water or in riparian areas. All project related materials and equipment placed in the water would be cleaned prior to use to ensure that they are free of pollutants. Trash or debris would be collected and disposed of properly. Project vehicles and equipment would be fueled away	

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							from streams and riparian areas. Turbidity and siltation from project-related work would be minimized and contained to the site through the appropriate use of effective silt containment devices and the curtailment of work during adverse weather conditions. Application of dust-suppressing materials would occur according to industry standards.	
		Range construction and range camp expansion and increased waste-water demand	Ft. Bliss	Water Resources	Increase waste-water demand associated with range construction and range camp expansion.	Region served by EPWU	Upgrade waste water treatment as required to support the added population.	
		Live fire training	Northeast McGregor Range North of Highway 506	Water Resources	Live fire training in the Northeast McGregor Range North of Highway 506 could impact	Waterways adjacent to Ft. Bliss	Continue implementation of arroyo riparian Limited Use Areas.	

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					waterways.			
		Increased water demand	Cantonment, Orograde, and McGregor	Water Resources	Increased water demand for Cantonment, Orograde, and McGregor Currently allotted amount of water from WSMR (0.2 mgd) would, therefore, not be sufficient to meet the water demand of all the training personnel. Training personnel would need to obtain water from sources other than Orogrande Range Camp until such time that the Army developed additional sources to supply this	Region served by EPWU	If needed, additional potable water sources could be developed from water sources within the installation. In addition, the installation would establish brackish water wells for fire and dust suppression, if additional water was required to meet training requirements. In addition to utilizing the recently constructed desalination plant, EPWU also plans to obtain water from other sources, such as purchase of additional Rio Grande water rights, increased withdrawals from the Hueco and Mesilla Bolsons, and development of the Dell City Area to meet the increased future water demand.	

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					location. In addition to utilizing the recently constructed desalination plant, EPWU would have to obtain water from other sources, such as purchase of additional Rio Grande water rights, increased withdrawals from the Hueco and Mesilla Bolsons, and development of the Dell City Area to meet the increased water demand.			
		Increased wastewater load	Ft. Bliss	Water Resources	ST-1 would increase the wastewater load from the Post by 3.4 mgd above current	Region served by EPWU		

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					<p>levels. Combined with baseline population growth, total wastewater treatment loads could exceed EPWU's existing treatment capacity by approximately 13 percent by 2015. The total off-post generation loads would be 3.4 mgd, which represents an increase of 0.76 mgd over the ST-1. The total combined on-post and off-post wastewater loads would be 24.6 mgd, which represents approximately 55 percent of the EPWU's</p>			
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					excess treatment capacity.			
		Construction of utility infrastructure	The ROI for assessing infrastructure and utility systems is made up of the service areas of each service provider serving the facilities operated by Fort Bliss in the Cantonment and the surrounding area. It includes El Paso County in Texas, and Doña Ana and Otero Counties in New Mexico; the City of El Paso; and the service areas of El Paso Electric Company (EPEC), El Paso Gas Company (EPGC), and other utility service purveyors.	Utilities	Construction of additional utility infrastructure improvements as proposed for this alternative would result in temporary service interruptions.	service area for the utility providers	These impacts would be less than significant because the length of disruptions would be minimized to the greatest extent possible during this period and service would be returned to normal after construction.	

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		Increased energy demand	Ft. Bliss	Energy Demand and Infrastructure	Energy demand associated with construction and operation of new facilities in the cantonment and FBTC.	service area for the utility providers	New Army facilities would be designed with energy saving features and would comply with current Army Regulations, Executive Orders, etc. Currently those include AR 11–27, Army Energy Program; EO 13123, Greening the Government through Efficient Energy Management; EO 13423, Strengthening Federal Environmental, Energy, and Transportation Management; and the requirements under the new Energy Independence and Security Act of 2007. Energy conservation measures would continue to be implemented as described in the Fort Bliss Final Mitigation and Monitoring Plan (US Army 2008).	
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		Additional stationing units increasing traffic and decreasing safety	Ft. Bliss gates	Transportation and Traffic	Additional stationing units would result in significant back-ups at the gates during peak hours. In addition, the level of safety would decrease along the U.S. 54 turning lanes as large amounts of traffic exit the highway.	U.S. 54 turning lanes	Size gates to mitigate back-ups and increase the level of safety where traffic exits highways. Follow Army regulations regarding the size, spacing, etc for convoys. Continue to provide the media with information regarding anticipated high traffic events and other actions that could adversely affect traffic when consistent with security concerns.	
		Higher traffic volumes	In and around installation, and specifically Cassidy, Sheridan, Biggs AAF, and Robert E. Lee gates	Transportation and Traffic Resources	The forecasted addition of active duty Soldiers, civilian personnel, and their dependents to Fort Bliss will result in a significant increase in traffic volumes both within and around the installation.	The ROI for the ground transportation systems within the Cantonment is El Paso County, TX.	Traffic impacts would generally be limited to the Fort Bliss installation and impacts to public roadway operations would be less than significant.	

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					The highest volume of additional traffic would occur at Cassidy, Sheridan, Biggs AAF, and Robert E. Lee gates, which will lead to additional delay or congestion at the entry points.			
		Constrained airspace	Ft. Bliss airspace	Air Space Use and Management	Airspace in the ROI is constrained .	The ROI for terminal airspace is the area that generally lies within 20 miles of Biggs AAF and El Paso International airport. Notice is taken, however, of airports within a similar distance to SUA scheduled or used by Fort Bliss. For SUA, the ROI extends a	Constraints can be minimized through careful scheduling and management of Fort Bliss will need to schedule and manage airspace.	

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						greater distance and would include not only the military training airspace within which the aircraft stationed or TDY to Fort Bliss would fly, but also associated SUA in the southeastern New Mexico region. This airspace includes generally the area around White Sands Missile Range and Holloman AFB as well as Fort Bliss.		
		Large caliber weapon firing	Ft. Bliss Training complex	Noise	Large caliber weapon firing on ranges in the FBTC may result in increased noise complaints.	Areas adjacent to Ft. Bliss	Participation in public outreach and continued use of noise complaint hotline.	
		Increased housing demand	Areas adjacent to Ft. Bliss	Socioeconomics	Increased housing demand from Fort Bliss	Communities near Ft. Bliss	Continue quarterly meetings with realtors and apartment associations to	

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					military personnel		ensure they have the best available planning information. Work with the privatized housing partner at Fort Bliss to consider the advisability of constructing more housing on the Installation.	
		Increased student population	Areas adjacent to Ft. Bliss	Socioeconomics	Impact of increase in student population on area schools	Schools near Ft. Bliss	Military student impact aid.	
		Increased demand for medical services	Areas adjacent to Ft. Bliss	Socioeconomics	Impact of increased demand for medical services.	Medical facilities near Ft. Bliss	Cooperate with local entities in plans to address shortfalls in healthcare.	
Fort Bliss	Bingaman NDAA Proposal.docx	To transfer administrative jurisdiction over certain Federal land (2,050 acres) in New Mexico from the Secretary of Defense to the Secretary of the Interior						No impacts listed in doc. Is there another doc that accompanies this one?
Fort Bliss	BlissPALFinalEA.pdf	Implementation of the Privatization of Army Lodging (PAL) Program						

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		Demolition and construction of army lodging	Cantonment Area	Air Quality	Short-term minor adverse and long-term minor beneficial effects on air quality would be expected. Implementing the Preferred Alternative could affect air quality through airborne dust and other pollutants generated during demolition and construction, and by introducing new stationary sources of pollutants, such as heating boilers.	City of El Paso El Paso International Airport	The Texas Administrative Code outlines precautions that would be required during the new facilities' construction (Texas Administrative Code Title 30, Chapter 111). All persons responsible for any operation, process, handling, transportation, or storage facility that could result in fugitive dust, would take reasonable precautions to prevent such dust from becoming airborne. Reasonable precautions might include using water to control dust from building demolition, construction, road grading, or land clearing.	<u>Mitigation Summary in EA:</u> Mitigation actions are used to reduce, avoid, or compensate for significant adverse effects. The EA does not identify any significant adverse effects or the need for any mitigation measures.
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		Demolition and construction of army lodging	Cantonment Area	Noise	Short-term minor adverse effects on the noise environment would be expected. Short-term increases in noise would result from the use of construction equipment.	City of El Paso El Paso International Airport	That source of noise would be present only during the construction phases of the project and would be limited to normal weekday business hours to the extent practicable. Because of the temporary nature of proposed construction activities and the limited amount of noise that construction equipment would generate, the effects would be minor.	<u>My note:</u> The impacts of this project are not specifically stated in the analysis as having a potential impact on off-post lands (except for waste going to off-post landfills), but given the proximity of the PAL sites to the city and airport, they are worth noting.
		Demolition and construction of army lodging	Cantonment Area	Geology and Soils	In the short term, staging, site preparation, demolition, and new construction activities in parcels D, F, H, K, M, or L would be expected to involve some soil disturbance	City of El Paso El Paso International Airport	Potential adverse effects on the groundwater and surface water systems would be minimized by using appropriate site-specific BMPs to control erosion and runoff, in accordance with all applicable federal, state, and installation regulations, and by preparing and	

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					<p>or compaction and the potential for removing limited vegetation on-site. It could result in increases in dissolved solid, sediment, or other waterborne pollutant runoff that could reach groundwater through infiltration through the porous soils, either during overland sheet flow, or by infiltration from storm water retention ponds.</p>		<p>adhering to site-specific SWPPPs and to requirements of the Fort Bliss TCEQ Multi-Sector General Storm Water Permit (TXR050000), its Phase II Small Municipal Separate Storm Sewer System General Permit (TXR040000), and the TCEQ Construction General Permit (TXR150000) for construction activities disturbing areas 5 acres or larger.</p>	
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		Demolition and construction of army lodging	Cantonment Area	Water Resources	Long-term minor adverse effects on water resources would be expected from any PAL parcels on which demolition followed by new construction, or new construction alone, would result in a net loss of pervious ground cover (vegetation or permeable sand or gravelscaping) and net increase in impervious surface area. Increased impervious surface area, such as driveways, parking lots, sidewalks,	City of El Paso El Paso International Airport	Long-term minor adverse effects would be minimized by complying with all applicable regulations for storm water management, including developing an effective site-specific SWPPP and incorporating BMPs for storm water management into the site design.	
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					and rooftops, can result in increased runoff (in the forms of increased volume, velocity, and peak flows), increased erosion, increased pollutant loads (e.g., dissolved solids, petroleum hydrocarbon debris from vehicles) and sediment loads, and reduced ground absorption and infiltration of runoff that would otherwise recharge groundwater aquifers.			
		Demolition and construction of army lodging	Cantonment Area	Transportation	Short-term traffic delays from construction vehicles	City of El Paso	Construction vehicles would be scheduled and routed to minimize conflicts	

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					would be likely. It is likely that during the construction phases, construction vehicles and day labor traffic would have a minor adverse effect.		with other traffic.	
		Demolition and construction of army lodging	Cantonment Area	Utilities	Long-term minor adverse effects on off-post landfills would be likely. Debris from construction, demolition, and renovation of lodging facilities would create a substantial amount of construction debris. Implementing the Preferred Alternative would generate	Off-post landfills	Approximately half of the debris would be recycled, which would result in 10,394 tons of non-hazardous C&D debris for disposal in landfills.	

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					approximately 20,788 tons of C&D debris (Table 3.11-1).			
Fort Bliss	EPCC_FNSI_signed_FB.pdf	Construction and operation of a community college campus by El Paso Community College on approximately 200 acres of Army-owned undeveloped land located within the South Training Area.	South Training Area	Wildlife	Increase of bird use of site due to onsite permanent water.	El Paso International Airport	Due to the proximity of the proposed East Fort Bliss Campus site to El Paso International Airport, any onsite permanent water would incorporate the use of bird balls to camouflage the liquid surface from the air and deter birds and waterfowl. Landscape design would be compatible with the BASH program and would include measures to avoid attracting avian species such as minimizing outside trees to discourage nesting habitat; designing buildings with no shady spots under cooling systems, vent systems, or ducting so as not to provide nesting habitat; and discouraging permanent water	How close is build site to Butterfield Trail, and how close is the Butterfield Trail to the surrounding areas? (potential impacts)

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							on the site.	
		Construction activities	South Training Area	Vegetation	Introduction of invasive species through importation of fill materials.	Areas near build site.	Fill materials would be obtained by EPCC from nearby site to reduce unwanted invasive weed dispersal. Borrow pits would be inspected by EPCC for exotic weeds before use.	
		Construction activities	South Training Area	Vegetation Wildlife Air Quality	Wind erosion and dust impacts due to grading of areas to accommodate construction.	Areas adjacent to build site.	Only areas necessary to accommodate planned construction will be graded.	

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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Mission and Master Plan - changes to land use in the Main Cantonment Area and Fort Bliss Training Complex and develop infrastructure and facilities, including live-fire and qualification ranges, to support Base Realignment and Closure (BRAC) and Integrated Global Presence Basing Strategy (IGPBS) decisions.	Cantonment and Training Areas		Off-road vehicle maneuvers are already conducted on approximately 335,000 acres in the North Training Areas, South Training Areas, and a small portion of McGregor Range. Alternative 4 (the Proposed Action), would include all of the changes considered in the other three alternatives , providing approximately 352,000 acres of additional off-road vehicle maneuver space which, when			Susan - should I review the Final Fort Bliss, Texas and New Mexico, Mission and Master Plan Programmatic EIS (Mission and Master Plan PEIS) dated December 2000 and associated Record of Decision (ROD) signed in 2001? This supplemental EIS supports it.
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					combined with the existing maneuver areas, would provide a total of 687,000 acres of off-road vehicle maneuver training capability at the installation. None of the alternatives would involve off-road vehicle maneuvers on Otero Mesa or in the Sacramento Mountain foothills on McGregor Range. The analysis of impacts on ground transportation considers the effects of military convoys traveling from the Main			
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					Cantonment Area to the training areas on public roadways and the potential for off-road vehicle maneuvers on McGregor Range to affect traffic on Highway 506 and access roads through McGregor Range to Forest Service land in the Sacramento Mountains.			
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Level of service on US 54	US 54	Main Cantonment Area Transportation	Level of service on segments of US 54 would decline to unacceptable level. LOS of US 54 in Training Areas, however, is not expected to be affected.	US 54	Transportation planning; roadway widening projects.	

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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Closures of Hwy 506	Hwy 506	Training Area Transportation	Highway 506 would be occasionally and temporarily closed for military vehicle crossings; delays expected to last 15 minutes or less. A similar situation would exist for access roads through McGregor Range to the Sacramento Mountains and Grapevine.	Hwy 506	Fort Bliss would notify the Otero County Administrator and BLM of any road closings on Highway 506. <u>From Mitigation Measures Section Table</u> - Provide traffic control during unit crossings of NM Highway 506; limit typical civilian traffic delays to 15 minutes or less; notify Otero County Administrator and BLM of Highway 506 closures.	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Development of two BCT's	East of Biggs AAF	Main Cantonment Area Transportation	The developme nt of two more BCT's east of Biggs AAF would add another source of traffic to	Local roads and highway network (Loop 375 and Sergeants Major Boulevard)	To minimize congestion and queuing at access gates to Fort Bliss, site development would need to address the interface of the additional BCT areas with	

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					the local roads and highway network (Loop 375 and Sergeants Major Boulevard).		infrastructure and roadway networks.	
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Level of service on area roadways	Area roadways	Main Cantonment Area Transportation	Projected LOS under this alternative (proposed project) would not be substantially different from Alternatives 2 and 3. One more segment, US 54 between Van Buren and Fred Wilson Avenues, would decline to LOS E by 2021 (see Table 5.2-4). A total of seven segments would operate at LOS D and another	Area roadways	<u>Proposed Project mitigation</u> - The additional decline of LOS on US 54 could be mitigated by widening that roadway segment to 8 lanes. The estimated cost would be approximately \$10 million (Ref# 568, 569, 570). <u>Alternatives 2 and 3 mitigation</u> - The decline of LOS on Loop 375 and Fred Wilson Avenue to unacceptable levels could be mitigated by widening those roadway segments. It is estimated the cost of widening Loop 375 to 6 lanes would cost approximately \$9 million. The cost of widening Fred Wilson Avenue to 8 lanes is estimated to be approximately \$10	

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					<p>seven at LOS E or F, including two segments each of I-10 and US 54 and one segment each of Loop 375, Fred Wilson Avenue, and Airport Road. Future transportation planning would need to consider the concentrated development in the Main Cantonment Area. Projects identified to date would not provide enough capacity to handle the additional traffic.</p> <p><u>Alternatives 2 and 3</u> - one additional roadway</p>		<p>million (Ref# 568, 569, 570). <u>Alternative 1 mitigation</u> - The decline to unacceptable LOS on I-10 and US 54 could be mitigated by widening those roadway segments. I-10 is already projected to be at LOS F between Paisano Drive and McRae boulevard by 2016 and between Paisano Drive and US 54 by 2021 under the No Action Alternative. It is estimated that widening the 5-mile segment between US 54 and McRae Boulevard to 12 lanes would cost approximately \$75 million. Widening US 54 to 8 lanes between Pershing Drive and Van Buren Avenue is estimated to cost approximately \$10 million. Airport Road between Fred Wilson Avenue and Haan Road is projected to operate at LOS F under all alternatives.</p>	
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					segment, Loop 375 from Montana Avenue to BR 54, would decline to LOS D (see Table 5.2.3). No additional roadway segments would decline to unacceptable levels of service. By 2021, Loop 375 between BR 54 and US 54 and Fred Wilson Avenue between US 54 and Airport Drive would be at LOS E, slightly more degraded than under Alternative 1 (see Table 5.2-191 4). <u>Alternative 1</u> - the large influx of vehicles		Widening that roadway segment to 8 lanes is estimated to cost \$14 million (Ref# 568, 569, 570).	
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					was distributed around the Fort Bliss Main Cantonment Area on US 54, Airport Road, and Fred Wilson Avenue. LOS on 11 roadway segments would be lower than under the No Action Alternative in 2016 (see Table 5.2-3). Six would decline to LOS D and I-10 between US 54 and Paisano Drive would further degrade to LOS F. By 2021, another segment of I-10 would be at LOS D, and US 54 between Pershing Drive and			
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					Van Buren Avenue would operate at LOS E (see Table 5.2-4). Four of the roadway segments would operate at LOS E or F.			
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased operations in the Restricted Areas airspace	Ft. Bliss airspace	Airspace Use and Mgmt	Increased operations in the Restricted Areas overlying the Fort Bliss Training Complex	Restricted airspace above off-post lands	Manage through scheduling, balancing training requirements with airspace availability.	

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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased development in El Paso and Doña Ana Counties	El Paso and Doña Ana Counties	Land Use	Additional personnel and related population increase would increase development in the City of El Paso. Open space would be converted to more urban use. Rural communities in El Paso and Doña Ana Counties likely to become more developed. The additional units identified for stationing on Fort Bliss are projected to increase population in the ROI by about 120,000 people over the next	City of El Paso and rural communities in El Paso and Doña Ana Counties	Municipal and county planning and land use controls are the primary mechanisms for managing sustainable growth. There is currently no community-level plan for development in the Chaparral area. Issues of public financing and housing demands are addressed in more detail in Section 5.13.	
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					five years, above baseline growth level (see Section 5.13). This includes new military and civilian personnel, their dependents , and other incoming population caused by increased economic activity. The population influx would generate a demand for more than 36,000 homes in the region above that projected under the No Action Alternative (see Section 5.13). The increased growth would affect local land use plans and			
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					infrastructu re developme nt, especially in El Paso County. Most of the growth in the county in recent years has occurred in east El Paso, and this trend is expected to continue. The City of El Paso recently changed its Master Plan to proceed with zoning an 18,000- acre area in Northeast El Paso. The conceptual planned developme nt for this area includes about 62,000 homes, commercial and industrial areas,			
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					community facilities, parks, and schools. This large scale initiative would meet future housing needs, but in the interim, new housing supplies may not be able to keep up with demand and there may be interim shortfalls in residential capacity in the city. Residents may seek areas that are already established, accessible, or less expensive such as Chaparral and Anthony, New Mexico. The			
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					planned Northeast Loop highway project could also influence the location of new growth in the region into Northeast El Paso and the Chaparral and Anthony areas of Doña Ana County. Open space areas would be converted to residential and other developme nt.			
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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased dust and noise	North and South Training Areas	Land Use	Off-post areas adjacent to North and South Training Areas could be exposed to increased noise and dust. Increased dust and noise may reduce the desirability of some areas adjacent to the Fort Bliss Training Complex for residential use and for recreation, particularly on the south and east sides of the South Training Areas and south and west sides of Doña Ana Range (see Sections 5.6 and 5.10). It is unlikely that land uses would	Off-post areas adjacent to North and South Training Areas		This is from the No Action Alternative. Under the No Action Alternative, land use in the Main Cantonment Area would remain as designated in the RPMP adopted pursuant to the ROD for the Mission and Master Plan PEIS.
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					change dramatically , but unfavorable conditions may influence where people choose to live, affecting regional growth patterns over time. The addition of a second CAB would increase helicopter operations on Doña Ana Range and the DAGIR. This might generate increased aircraft noise in the community of Orogrande.			
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Fort Bliss	FB MMP SPEIS _Volume I.pdf	1,500 acres of new urbanized landscape	East of Biggs AAF	Visual Resources	Development east of Biggs AAF would increase under this alternative, resulting in about 1,500 acres of new urbanized landscape. This visual change would be evident to travelers along major roadways such as Loop 375 and Sergeants Major Boulevard. It would be similar to the industrial and commercial development occurring on adjacent airport property.	East of Biggs AAF	The new development on Biggs AAF would not be near existing residential areas that might be sensitive to the visual effects of large-scale industrial development. Dust during construction may be a temporary direct impact on visibility and cause annoyance to El Paso residents driving and living in proximity to Fort Bliss, but this would be a temporary impact and would not alter the visual environment.	
		Development of the DAGIR and CACTF	McGregor Range	Visual Resources	Additional new ranges would be developed on the Fort	higher viewing locations along the roadways	Within the areas classified by BLM as VRM IV, the visual changes would not be	

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					Bliss Training Complex. Development of the DAGIR and CACTF on the McGregor Range would involve large areas, but the features would be relatively dispersed given the size of the range.		inconsistent with management objectives. For the most part, the new features would not be visible off the installation, except from higher viewing locations along the roadways.	
		Illumination from night training	Fort Bliss Training Complex (esp. DAGIR)	Visual Resources	Night training would occur on the Fort Bliss Training Complex and would include use of illumination flares, especially at the DAGIR.	Off-post areas adjacent to the Fort Bliss Training Complex	These would be temporary light sources that might be visible off-post, but because of distance, would be small, temporary, and unobtrusive.	
		Increase of off-road vehicle maneuvers and supersonic aircraft operations	Ft. Bliss and Holloman AFB	Recreation	The increase in off-road vehicle maneuvers at Fort Bliss, combined	Areas surrounding Fort Bliss and Holloman AFB		

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					with increased supersonic aircraft operations from Holloman AFB, could cumulatively decrease solitude and the attractiveness of outdoor recreation resources in the region.			
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Increased water demand from Hueco Bolson aquifer and subsequent drawdown	Ft. Bliss/Hueco Bolson aquifer	Water Resources	Increased demand for potable water leading to increase in withdrawal of fresh water from Hueco Bolson and potential aquifer drawdown	Other areas that use the aquifer for water (El Paso, Ciudad Juarez, Mexico)	<u>From the Mitigation Measures Section table</u> - Accelerate implementation of projects for alternative water sources; increase desalination capability. <u>Not from the Mitigation Measures Section table</u> - projects to inject water to recharge the Hueco Bolson	
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Increased potable water demand	Ft. Bliss	Water Resources	Increased demand for potable water taxing fresh water resources	Area water sources	Use more reclaimed water for landscaping on post.	

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Fort Bliss	FB MMP SPEIS _Volume .pdf	Increased potable water demand & baseline population growth in El Paso	Ft. Bliss/El Paso area	Water Supply	Increase in demand for potable water in combination with baseline population growth in El Paso area estimated to exceed EPWU's available resources by 3 percent, requiring acceleration of EPWU plans to obtain additional supplies.	El Paso Water Utility		
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Fort Bliss	FB MMP SPEIS _Volume .pdf	Increased potable water demand	Ft. Bliss/El Paso area	Water Supply	Population increase would represent 28 percent of EPWU's demand for potable water. Alternative 4 could involve an increase in the on-post population of approximat ely 18,768 and a daily population of approximat ely 21,791. The total demand for potable water in the Main Cantonmen t Area (on- post increase) could increase by an estimated 4.3 MGD (4,850 afy) and an increase in off-post water	EPWU and areas that use Rio Grande, Hueco and Mesilla Bolsons, and the Dell City Area Aquifer for water sources	Using more reclaimed water for on-post landscaping would reduce the consumption of fresh water.	
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					consumption of approximately 25,280 afy (22.6 MGD) above current levels. The additional water required would be supplied by EPWU. The capacity of the pipelines from EPWU connections may need to be upgraded to meet increased flows. The combined requirement from both on-post and off-post population increases would be approximately 28 percent of EPWU's existing demand for water and 9 percent of EPWU's			
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					current treatment capacity. As noted for the No Action Alternative, this is likely an overestimation because of water conservation measures being incorporated in military family housing. The increased consumption, combined with baseline population growth, could exceed EPWU's available resources by 3 percent. Depending on when the additional population influx occurred,			
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					EPWU would need to develop additional sources of potable water, currently not anticipated to be needed until 2020 (Ref# 317). Possible sources include purchase of additional Rio Grande water rights, increased withdrawals from the Hueco and Mesilla Bolsons, and development of the Dell City Area Aquifer.			
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Fort Bliss	FB MMP SPEIS _Volume .pdf	Increased wastewater generation in El Paso	El Paso	Sanitary Wastewater	Increased wastewater generation in El Paso estimated to exceed existing capacity by approximately 13 percent. Alternative 4 would increase the wastewater load from the post by 3.4 MGD above current levels, representing 25 percent of existing excess capacity of the Haskell Street plant. The increase in off-post population would generate approximately 17.2 MGD of wastewater above current levels. The	EPWU	Reroute wastewater to plants with additional capacity; develop additional capacity.	
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					combined additional flow represents approximately 46 percent of EPWU's excess treatment capacity. Combined with baseline population growth, total wastewater treatment demand could exceed EPWU's existing treatment capacity by approximately 13 percent by 2015.			
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Hazardous materials contamination in stormwater	Ft. Bliss Forward Area Refueling Points and other hazardous materials handling areas	Water Resources	Potential for storm water contamination from hazardous material spills	Off-post areas that could experience run-off from Ft. Bliss refueling points and other hazardous materials handling areas	Construct containment systems such as bermed areas for fuel bladders in Forward Area Refueling Points and other hazardous materials handling areas	

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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased runoff from increased impervious areas	Main Cantonment Area	Stormwater/Wastewater	Increased runoff from the estimated 1,600 acres of new impervious area. This would represent an 88 percent increase in impervious area above the 2005 Main Cantonment Area impervious area and could result in approximately 1,700 afy additional surface water runoff over 2005 conditions. While some of this additional runoff will be contained by existing retention ponds on the post,	El Paso Int'l Airport and Rio Grande	Under Alternative 4, storm water conveyances would need to be constructed in the area between EPIA (El Paso Int'l Airport) and Biggs AAF to handle the runoff from the estimated 1,600 acres of new impervious area. Additional storm water management facilities would likely need to be built to minimize the discharge of storm water from Fort Bliss during moderate to high-intensity rainfall. <u>From Mitigation Measures Section Table</u> - Construct additional storm water management facilities.	
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					during storms, it is likely that storm water would need to be discharged through existing conveyance s to the Rio Grande to avoid flooding conditions. Storm water discharges would be required to comply with Fort Bliss' MS4 permit and incorporate appropriate best manageme nt practices.			
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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased solid waste for landfill	Fort Bliss Cantonment Area	Hazardous Materials and Waste	Additional population increase estimated to reduce the life of the Clint Landfill by about 2.2 years if new on-post landfill is constructed and 2.6 years if new on-post landfill is not constructed .The potential additional constructio n at Fort Bliss under Alternative 4 could generate an estimated 44 tons per day of additional constructio n waste that would be disposed of at the Fort Bliss landfill, and 5.2 tons of recyclable material per	Clint Landfill and areas served by Clint	Develop new on- post landfill.Transport refuse to off-post landfills.	
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					day. If a new landfill is constructed on post, refuse from the post disposed of in the Fort Bliss landfills could increase by 40.3 tons per day (105 percent increase). Refuse from on-post residential areas and the increased off-post population associated with this alternative could increase the disposal rate of solid waste to the Clint Landfill by approximately 236.3 tons per day (almost 30 percent increase)			
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					over current levels, shortening its remaining life by approximat ely 2.2 years. If a new on- post landfill is not constructed , the disposal rate of solid waste to the Clint Landfill would increase by approximat ely 276.6 tons per day, shortening its remaining life be about 2.6 years (9 percent).			
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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased electrical demand	Cantonment area, El Paso, and surrounding communities	Utilities	Under Alternative 4 (Proposed Project), peak electrical demand could increase by as much as 52.3 MVA and consumption could increase by as much as 15.7 MW. The increase in peak demand would represent 22 percent of the current excess power available from EPEC. Power would need to be routed to areas of new construction on post and may require the addition of a	El Paso Electric Company (EPEC) and areas served by EPEC	Add new substations and gas lines; energy-efficient facility design.	
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					substation. The potential increase in off-post population associated with this alternative would increase peak electrical demand by approximately 108.6 MVA, which is 45.7 percent of the current excess power available from EPEC.			
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Increased gas demand	Fort Bliss	Utilities	The square footage of buildings on Fort Bliss could more than triple under Alternative 4 to a total of approximately 37 million square feet. At the current rate of hourly gas	El Paso Gas Company (EPGC) and areas served by EPGC	Add new substations and gas lines; energy-efficient facility design.	

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					consumption per square foot (0.08 CFH), total gas consumption during the coldest days would be on the order of 2.9 million CFH. The existing capacity of the gas supply system to the post is 2.5 million CFH, so additional connections or increased feeder line sizes would be needed to meet demands under this alternative. In addition, total annual gas consumption could increase by a factor of about 3.4.			
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Fort Bliss	FB MMP SPEIS _Volume .pdf	Soil erosion	Fort Bliss training areas	Earth Resources	Accelerated soil erosion in training areas	Off-post areas adjacent to post training sites	Establish earth cover; add soil binding materials to the ground surface in areas of concentrated development and use. Install artificial or vegetative windbreaks in highly erosive areas. Perform soil erosion impact surveys and implement Land Rehabilitation and Maintenance to repair damage caused by maneuver training.	
Fort Bliss	FB MMP SPEIS _Volume .pdf	Increased sedimentation	Fort Bliss	Earth Resources	Potential for cumulative increases in sedimentation from increased water erosion on Fort Bliss land in combination with other sources of sedimentation in down- stream surface waters.	Down-stream surface waters		

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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased wind erosion/vegetation burial	Fort Bliss training areas	Earth Resource	Significant increase in wind erosion potential in south Tularosa Basin portion of McGregor Range from range construction and off-road vehicle maneuvers. Heavily used areas would be vulnerable to downwind soil transport. Down-wind vegetation could become covered, leading to further desertification. Vegetation cover in less heavily used areas likely to become patchy. Extension of offroad	Off-post areas downwind of post training sites	Management goals listed in the INRMP (Ref# 23) include monitoring of earth resources and preventing accelerated erosion. An improved understanding of the local effects of increased off-road vehicle maneuvers would aid in planning to meet the goals of the INRMP and help identify mitigation measures that meet site-specific conditions on the Fort Bliss Training Complex. Regular and repeated monitoring of selected locations in the training areas before and after maneuvers would provide needed data useful to help identify areas that require mitigation measures for minimizing erosion and to determine trends in ecosite transition states. Fort Bliss has instituted on-going monitoring efforts	
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					<p>vehicle maneuvers resulting in increase in soil erosion in training areas north of Highway 506.</p> <p>Extension of offroad vehicle maneuvers resulting in increase in soil erosion in Training Areas 24, 26, and 27 on McGregor Range, which are also susceptible to moderate to severe water erosion. Areas of concentrated use in the vicinity of the range camps and CACTF are more likely to become barren, accelerating damage to</p>		<p>using remote sensing and vegetation plots. In some cases, mitigation may include avoiding intensive vehicle maneuvers on areas with high or moderate erosion hazards to maintain ground cover. Construction of roads and buildings in areas that have fewer hazards or limitations and mitigation by design would minimize the need for after construction rehabilitation and maintenance. The capacity of vegetation and soils to recover from disturbance should be considered when scheduling training activities (Ref# 125).</p> <p>Soil erosion controls that may be implemented to reduce soil movement by air and water may include typical measures as (Ref#</p>	
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					soils by wind and water erosion and expanding adverse offsite impacts by blowing dust and burial of vegetation and biological crusts downwind from the bare areas.		<p>133):</p> <ul style="list-style-type: none"> • Establishment of earth cover such as vegetation or aggregate • Installation of artificial or vegetative windbreaks • Adding soil binding materials to the ground surface <p>Other mitigation measures may be identified as a result of monitoring, such as avoiding areas where vegetation and biological crusts have been damaged by multiple vehicle passes in order to allow recovery to occur.</p> <p>In addition, limiting off-road vehicle maneuvers on loamy soils in the vicinity of Hackberry Tank would reduce erosion in that area.</p>	
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Increased construction equipment emissions	Fort Bliss Cantonment Area	Air Quality	Temporarily increased emissions from construction	Off-post areas adjacent to on-post construction sites	Use efficient construction practices; avoid long periods with equipment engines idling; carpooling	

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					equipment		of construction workers; use postcombustion control equipment on heavy duty diesel engines.	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased POV emissions	Fort Bliss and surrounding area	Air Quality	Increased emissions from privately owned vehicles	Areas surrounding Fort Bliss and El Paso	Encourage car pooling.	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased airborne dust	Fort Bliss Training Complex	Air Quality	Increased fugitive dust from military vehicle convoys	Off-post areas adjacent to Fort Bliss training areas	Regulate convoy routes, spacing, and speed. Apply surface treatments (e.g., dust suppressants, gravel) on heavily traveled segments of unpaved range roads and tank trails. Construct or upgrade internal range roadways that lead to training areas away from installation boundaries.	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased noise and dust	Fort Bliss Training Complex	Noise Air Quality	Areas adjacent to the Fort Bliss Training Complex will be exposed to increased dust and noise associated with	Off-post areas adjacent to Fort Bliss training areas		

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					training by one Heavy BCT			
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased fugitive dust	Fort Bliss Training Complex	Air Quality	Increase in offroad vehicle maneuvers would result in increased fugitive dust generation; however, particulate levels at installation boundary would be well below air quality standards.	Off-post areas adjacent to Fort Bliss training areas	Dust suppressants or gravel can be used to mitigate fugitive dust emissions on heavily traveled unpaved roads and tank trails. These mitigation efforts would not be practical for off- road maneuver areas because of the extensive geographic size of those areas. Fugitive dust from military vehicle convoys could be reduced by regulating convoy routes, spacing and speed. Using internal roadways removed from installation boundaries would reduce off-post impacts from fugitive dust. Off- road vehicle maneuvers could be reduced during periods of high wind that might transport particulates greater distances. <u>From Mitigation</u>	

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							<u>Measures Section</u> <u>table</u> - Reduce training during periods of high wind.	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased air pollutants	El Paso County	Air Quality	The forecast baseline population growth, in combination with Fort Bliss-induced population changes, is projected to result in a 44-52 percent increase in the population of El Paso County between 2004 and 2015. This could ultimately result in exceedance	Fort Bliss, El Paso County, and surrounding areas		

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					s of the NAAQS, especially of carbon monoxide and particulate matter (PM10) (for which the City of El Paso is in moderate non-attainment) and of nitrogen oxides. PM10 levels in El Paso and Doña Ana Counties are further aggravated by windblown dust, especially during dust storms. Additional ground disturbance due to construction both on and off post, in combination with agricultural			
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					uses and off-road vehicle use (both military and civilian), would all contribute to potentially significant cumulative increases in PM10 emissions in the ROI. While air pollutant emissions from proposed activities at Fort Bliss are not expected to significantly affect visibility in Class I areas such as Guadalupe National Park, cumulatively, increased emissions in the ROI can be expected to contribute to increasing			
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					haze in those areas.			
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Off-road vehicle maneuvers	McGregor Range	Biological Resources	Off-road vehicle maneuvers in south Tularosa Basin portion of McGregor Range would have moderate impact on vegetation and wildlife. Vegetation cover likely to become more patchy with herbaceous species, which could lead to less	Off-post areas adjacent to south Tularosa Basin portion of McGregor Range and southeast training areas of McGregor Range		

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					wildlife density. Also, habitat in southeast training areas of McGregor Range (TAs 24, 26, and 27)			
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Off-road vehicle maneuvers	Fort Bliss training areas	Biological Resources	Damage to vegetation and loss of habitat from off-road vehicle maneuver	Off-post areas adjacent to Fort Bliss training areas	Where practicable and appropriate, rotate off-road vehicle training among training areas to provide for recovery or restoration of vegetation; invasive weed monitoring and control.	

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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Large caliber weapons firing	Doña Ana and McGregor Ranges	Noise Environmental Justice	Noise from large caliber weapons firing at Doña Ana Range would affect the community of Chaparral, which has a higher percent of low income population than the average for the region of influence. Additional areas in Doña Ana, El Paso, and Otero Counties with higher than average low-income population would be affected by large caliber weapons firing at Doña Ana and McGregor Ranges.	Communities such as Berino and the outskirts of Anthony, New Mexico, as well as the northeast suburbs of El Paso, would experience an increase in noise exposure. The southern part of the Organ Mountains Recreation Area would also be exposed to noise levels between 57 to 62 CDNL as far north as Pyramid Peak and Pena Blanca.		
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					<p>The LUPZ 57 CDNL contour extends off the installation at the northern, southern, and western boundaries of Doña Ana Range, southeast of the boundary where the South Training Areas and McGregor Range meet, and east of TA 23. The Noise Zone II 62 CDNL contour extends off the northern, southern, and western boundaries of Doña Ana Range and south of McGregor Range. Approximat</p>			
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					<p>ely 193,170 acres outside of Fort Bliss would be newly exposed to noise levels between 57 and 62 CDNL and 40,264 acres to noise levels above 62 CDNL.</p> <p>Almost 4,400 acres of private land, primarily in the Chaparral area, would be in Noise Zone II, which is generally incompatible with residential use. Based on current density in the areas affected, the potential number of homes affected is</p>			
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					small.			
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Weapons firing	The new CACTF and DAGIR	Noise	Weapons firing at the new CACTF and DAGIR would expand the 57 CDNL off the installation along US 54 in Otero County, mostly affecting public lands but also the community of Orogrande. South of TA	Public lands and residential areas near Fort Bliss, the community of Orogrande, the Hueco Tanks		

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					32, the LUPZ contour would expand south toward the Hueco Tanks, where the noise would likely be audible to park visitors.			
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Helicopter operations	Fort Bliss training areas	Noise	Elevated helicopter noise in residential areas, especially during night operations	Residential areas near Fort Bliss	Route helicopter traffic between Biggs AAF and the Fort Bliss Training Complex over Fort Bliss land.	
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Helicopter operations	Fort Bliss training areas	Noise	Elevated helicopter noise at the town of Orogrande	Town of Orogrande	Route helicopter traffic between Orogrande Range Camp and the DAGIR at sufficient distance from Orogrande to keep Day-Night Average Sound Levels at residences in the town below 65 ADNL	
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Large-caliber weapons firing	Fort Bliss training areas	Noise	Incompatible noise from large-caliber weapons firing	City of El Paso, El Paso County, Doña Ana County, Otero County	Restrict new residential development in areas with Day-Night Average Sound Levels above 62 CDNL.	

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Fort Bliss	FB MMP SPEIS _Volume I.pdf	Incompatible noise from Fort Bliss	Fort Bliss	Noise	Incompatibl e noise levels in off- post residential areas due to military activities	Off-post residential areas	Provide sound attenuation of existing residences exposed to Day Night Average Sound Levels above 62 CDNL and 65 ADNL.	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Higher risk of wildfires	Southeast Training Areas	Safety	Higher risk of wildfires in grasslands of the southeast training areas.	Off-post areas adjacent to southeast training areas	<p>The Fort Bliss Range SOP specifies the following procedures for fire prevention and response:</p> <ul style="list-style-type: none"> • All training units are required to furnish a firefighting team while on the Fort Bliss Training Complex. • All fires must be reported to Range Control immediately on detection. Range Control will immediately place a hold on live fire and dispatch a fire fighting team with suppression equipment. • Unit commanders are required to ensure that smoke grenades, trip flares, and other fire-causing devices are not used in an area that could 	

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							<p>cause a range or brush fire. Live or spent devices will not be abandoned or discarded anywhere on the Fort Bliss Training Complex.</p> <ul style="list-style-type: none">• Sufficient unit personnel and firefighting equipment are required to be present at artillery and mortar powder burning areas during use, including at least 10 gallons of water.• Range Control restricts burning of excess powder bags during extremely dry and windy periods (wind exceeding 12 knots). Unused powder increments that cannot be burned due to weather conditions will be packed in metal containers and returned to the ammunition supply point.• Tracers, pyrotechnics, and illumination projectiles are subject to restriction/suspens	
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							<p>ion during dry periods.</p> <ul style="list-style-type: none"> • Fires are not fought in impact areas. 	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Higher risk of wildfires	Fort Bliss Training Complex	Safety	Risk of wildfires in Fort Bliss Training Complex	Off-post areas adjacent to Fort Bliss Training Complex	<p>Units furnish on-site fire-response personnel and equipment for all training exercises and report all fires immediately to Range Control. Avoid use of fire-producing ammunition and flares in high-risk areas such as grasslands during</p>	

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							extremely dry and windy conditions. Establish schedule to monitor and maintain strategic fire breaks.	
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Noise from explosives	Fort Bliss Training Complex	Noise	Off-post explosive safety impacts	Off-post areas adjacent to Fort Bliss training areas	Site all live-fire ranges in accordance with safety criteria to ensure all Surface Danger Zones remain within installation boundaries.	
Fort Bliss	FB MMP SPEIS_Volume I.pdf	Increased population pressure in El Paso County and associated quality of life issues	El Paso County	Socioeconomics	Significant increase in population growth in El Paso County. Annual population growth rate estimated to increase from less than 3 percent to more than 4 percent over next five years. Demand for additional housing may outpace ability of local market to respond,	El Paso County		

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					resulting in increased housing prices. El Paso school districts, law enforcement and fire protection, and medical services would require substantial personnel increases and new facilities in some cases. Medical service impacts especially significant due to already existing shortfalls in the community. Quality of life in El Paso would be affected by increased urbanization and probable cost of			
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					living increases.			
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased housing demand	Areas adjacent to Ft. Bliss	Socioeconomics	Increased housing demand from Fort Bliss military personnel	Communities near Ft. Bliss	Construct additional on-post housing.	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased student population	Areas adjacent to Ft. Bliss	Socioeconomics	Impact of increase in student population on area schools	Schools near Ft. Bliss	Military student impact aid; additional grants and funding for school improvements	
Fort Bliss	FB MMP SPEIS _Volume I.pdf	Increased demand for medical services	Areas adjacent to Ft. Bliss	Socioeconomics	Impact of increased demand for medical services on top of existing shortfalls	Medical facilities near Ft. Bliss	Establish medical school in El Paso; create state healthcare infrastructure fund; provide financial incentives for physicians and healthcare professionals.	

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Fort Bliss	FB MMP SPEIS _Volume I.pdf				<u>CUMULATIVE IMPACTS</u> <u>Identification of Significant Issues - Comments rec'd on:</u> <ul style="list-style-type: none"> • Impacts of dust on local and regional air quality. • Damage to soils, vegetation, habitat, and wildlife. • Transportation and access. • Impacts on cultural resources. • Impacts on other uses of McGregor Range, including grazing, recreation, special land designations such as Culp Canyon Wilderness Study Area, and Bureau of Land 			
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					<p>Management plans and management activities.</p> <ul style="list-style-type: none">• Impacts of increased population on water supply, public services, education, utility costs, and quality of life.• Cumulative impacts of military training in combination with the effects of drought.• Cumulative impacts of Army actions in combination with other plans, uses, and development.			
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					<p><u>CUMULATIVE IMPACTS</u> <u>Identification of Significant Issues - Those with potential to produce a larger cumulative impact:</u> Effects of increased development on and off post on land use in the region. • Changes in the visual character of the landscape. • Impacts of increased traffic on local and regional roadways. • Increased demand for utilities (water, wastewater treatment, solid waste disposal) and energy consumption. • Increased</p>			
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					<p>military use of the regional airspace.</p> <ul style="list-style-type: none">• Changes in physical and natural resources including soils, vegetation, wildlife, and protected species.• Effects of increased air pollutant emissions and fugitive dust on regional air quality.• Depletion of surface and groundwater resources due to increased demand for potable water.• Loss of historic properties that could be eligible for listing in the National Register of Historic			
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					<p>Places.</p> <ul style="list-style-type: none"> • Increased pressure on socioeconomic resources, including housing, schools, law enforcement and fire protection, and medical services. 			
Fort Bliss	FB MMP SPEIS_Volume I.pdf				<p><u>CUMULATIVE IMPACTS Identification of Significant Issues - National and International Concerns:</u></p> <ul style="list-style-type: none"> • Cumulative impacts of the 2005 BRAC decisions. • Cumulative 			

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					<p>impacts from all Army Transformation and IGPBS activities.</p> <ul style="list-style-type: none"> • Impacts of the Global War on Terrorism, military actions in Iraq and Afghanistan , or potential future military deployments and engagements. • Immigration policies and border programs that may affect El Paso and/or Ciudad Juárez. • Growth, development, and economic activity in Mexico. 			
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Fort Bliss	FB MMP SPEIS _Volume I.pdf				SUMMARY OF PROBABLE ADVERSE IMPACTS THAT CANNOT BE AVOIDED Ground disturbance during construction and off- road vehicle maneuvers. Wind erosion of areas exposed by off-road vehicle maneuvers and resulting temporary degradation in air quality due to dust generation. Although erosion control measures are available, it is not feasible to implement these measures on the scale			
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					needed to prevent erosion and fugitive dust generation in the training areas used for off-road vehicle maneuvers. Changes in vegetation type and cover and in habitat type and quality in areas that are heavily used for off-road vehicle maneuver training. Although most areas identified for off-road vehicle maneuvers under any of the alternatives already provide limited habitat for wildlife, some loss of habitat value and			
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					<p>mortality of individual animals is unavoidable</p> <p>.</p> <p>Impacts to individual plants and animals, including sensitive species, in numbers not expected to significantly affect populations</p> <p>.</p> <p>Loss of some archaeological resources in the training areas.</p> <p>Increase in noise exposure in areas adjacent to the live-fire ranges used for large caliber weapons training.</p> <p>Increased development of the El Paso area to</p>			
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					accommodate the increase in population, both direct and induced by the economic activity associated with the actions at Fort Bliss. Increased urbanization, reduction in open space, and change in visual character are likely unavoidable consequences of this development. Increase in utilities use, including potable water consumption, wastewater treatment, solid waste disposal, and energy, in many cases leading to			
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					the need for additional infrastructure and/or resources sooner than previously planned by the various service providers.			
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Fort Bliss	FB_N OI- NetZe ro(1F eb 12)_F B.pdf	Implementation of Energy, Water, and Solid Waste Sustainability Initiatives: Actions to be evaluated in the EIS include: (1) the aggressive implementation of waste reduction, and energy and water conservation policies and practices; (2) the construction of a new pipeline to transport reclaimed water for best uses on Fort Bliss; (3) the construction of a Waste- to- Energy plant with adjacent landfill in the Southern Training Area of Fort Bliss, or on land to be exchanged with the Texas General Land Office; (4) the development and construction of dry-cooled concentrating solar thermal arrays in Fort Bliss Southern Training Area; (5) the development of geothermal resources on Fort Bliss in New Mexico for power generation and heating; (6) the development of existing wind energy resources on the eastern central and northern portions of Fort Bliss in New Mexico; and (7) the development of up to 20 MW of natural gas powered turbines as a complementary source of back-up power to renewable energy facilities to provide for Fort Bliss energy security.		Environmental impacts associated with the implementation of the proposed action at Fort Bliss could include significant impacts to airspace, biological resources and migratory birds, soils and vegetation, noise impacts, increased traffic impacts, cultural resources, air quality, and surface and ground water.				No specific impact or mitigation information in this doc. Is there another doc that accompanies it?
Fort Bliss	Final EA_JL ENS_ FB.pdf	CONSTRUCTION AND OPERATION OF JOINT LAND ATTACK CRUISE MISSILE DEFENSE ELEVATED NETTED SENSOR SYSTEM (JLENS) TACTICAL TRAINING SITES (blimps)	The south side on NM 506 on Fort Bliss's McGregor Range					A potential for off-post impact was that any and all aircraft are restricted from the airspace 4.6 miles in diameter from the surface to

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								15,000 feet MSL around each aerostat, the two aerostats must be further apart than 3.1 miles to function. However, the EA states that this restriction will only occur in already restricted airspace.
Fort Bliss	Final EA_JL ENS_FB.pdf	Traffic and railroad disruptions from construction activities	south side on NM 506 on Fort Bliss's McGregor Range	Transportation and Infrastructure	Temporary disruptions to traffic and the railroad would be expected during construction and road renovation. Increased traffic load in area during operations and training.	NM 506	Renovations to the railroad crossing would be coordinated with railroad. NM 506 renovation would be within existing road alignments. Paving results in reduction of fugitive dust in area from traffic, reduces need for road maintenance, and increases road safety. Fort Bliss would obtain an easement for the renovation and maintenance of NM 506 from the	

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							BLM.	
Fort Bliss	Final EA_JL ENS_ FB.pdf	Radio frequency interference		Radio Frequency and Spectrum Use	There could be a small potential to create frequency interference.	Does not mention specific locations	The radars will meet MIL-STD 461F for allowable electromagnetic emissions. A permit would be required for radar usage from Fort Bliss Network Enterprise Center. Standard operating procedures would be followed for radar usage. Coordination of operations with the Area Frequency Coordinator, FAA, and the FCC would reduce the incidences of interference.	

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Fort Bliss	Final_EA_Airspace_Modification_28_Aug_12_FB.pdf	<p>MODIFICATION OF SPECIAL USE AIRSPACE - modifying current Class G airspace to Special Use Airspace (SUA) over the South Training Areas and certain adjacent lands to separate military aircraft and civilian aircraft operating in those areas.</p> <p>Change airspace over the South Training Areas and McGregor Range Training Areas 8 and 9 from Class G to Special Use Airspace (SUA) to restrict flights in the area to military aircraft only from the surface to 1,200 feet above ground level (AGL), including an area of private and state lands east of the South Training Areas and south of the Terrain Flying Area in the Hueco Mountains. The new SUA would be adjacent to existing Class C and Class E airspace for El Paso International Airport. The existing Restricted Airspace R-5103A would be extended south to the Texas/New Mexico state line to align with the edge of Fort Bliss property. The proposed SUA would be located within the South Training Areas in Hudspeth County, Texas, and McGregor Range Training Areas 8 and 9 in Otero County, New Mexico, adjoining SUA R-5103A and R-5103B (Figure 1-2). The proposed SUA would also extend south of the Terrain Flying Area in the Hueco Mountains adjacent to SUA R-5103A.</p>	South Training Areas, McGregor Range Training Areas 8 and 9, and private and state lands east of the South Training Areas and south of the Terrain Flying Area in the Hueco Mountains.	National Airspace Air Traffic Safety	Airspace above private and state lands would have increased restrictions.	private and state lands east of the South Training Areas and south of the Terrain Flying Area in the Hueco Mountains	Restrictions are temporary and only during training (12 to 15 hours) on weekdays.	
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		<p>The Proposed Action is to:</p> <p>Designate SUA (restricted airspace) in the South Training Areas and Training Areas 8 and 9 in the McGregor Range from the surface to a ceiling of 1,200 feet above ground level (AGL) (approximately 5,200 feet mean sea level [MSL]), including a triangular area over private land extending east of the South Training Areas and south of the Terrain Flying Area;</p> <p>Correct restricted airspace coordinates currently in effect for R-5103A airspace to extend that airspace south to the Texas/New Mexico state line and the edge of Fort Bliss property, as originally intended.</p>		National Airspace Air Traffic Safety	The Proposed Action would primarily modify airspace within the current boundaries of Fort Bliss to restrict civilian aviation traffic in areas not previously restricted.	<p>A small triangle of land lies outside Ft. Bliss - to the east of the South Training Area in El Paso County, TX, at the border with Otero County, NM.</p>	<p>This would not interfere with commercial aircraft operating out of El Paso International Airport, since normal VFR and IFR takeoff climb angles and landing patterns in that direction would place aircraft above the proposed SUA (1,200 feet AGL).</p> <p>Impacts on air transportation would be insignificant, since most civilian and commercial flights operate above the altitudes that would be restricted by the new SUA.</p> <p>No other human or natural resources would be impacted by the Proposed Action.</p>	
Fort Bliss	Final_EA_Ranges K&L_28Aug12_Final.pdf	CONSTRUCTION AND TRAINING USE OF A MULTIPURPOSE MACHINE GUN RANGE AND A GRENADE LAUNCHER RANGE close to the Cantonment Area.	South Training Area 1B, adjacent to the Rod and Gun Club, northeast of Purple Heart Memorial Hwy (Loop 375) and the Cantonment Area.	Noise	The El Paso neighborhoods adjacent to Fort Bliss and proposed Range K could notice minimal	The increased area of Zone II would be approximately 707 acres and encompasses an additional 645 residences,	Not req'd - The Zone II noise model contours appear overly conservative in that actual noise levels recorded during the test were predominantly lower (in the range	This tiers off of: <i>Fort Bliss, Texas and New Mexico Mission and Master Plan Final Supplemental Programmat</i>

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					noise from training gunfire depending upon the time of day and weather conditions. Peak Zone II noise contours (87 and 104 dB PK15 [met]) from proposed Range K would extend beyond the western boundary of the Installation approaching 1 mile. It also extends beyond the existing Zone II noise contour for the Rod and Gun Club.	Desertaire Elementary School, and Shearman Park.	of Zone I). The risk of impacts to the public from noise is, therefore, predicted to be low. There would be no risk to public health or damage to structures. Analysis of the test data indicates that the average noise levels from .50-caliber weapons on Range K did not exceed the city's allowable exterior noise levels per the noise ordinance.	<i>ic EISandFort Bliss Army Growth and Force Structure Realignment Final EIS</i>
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Fort Bliss	FNSI- Obsc urant Munit ionsTr aining _FB.p df	Use of Obscurant Munitions (smokes and obscurants) during training exercises.	Within existing unexploded ordinance impact areas of the Dona Ana Range, the Digital Air/Ground Integration Range (DAGIR, Range 88) and after firebreaks are constructed on the east side, within the Digital Multi Purpose Range Complex (DMPRC, Range 83).	Air Quality Biological Resources Vegetation Wildlife Cultural Resources Human Health and Safety	Initiation of wild land fires by obscurant munitions that could then affect cultural and natural resources.	Areas adjacent to Ft. Bliss near the Dona Ana Range, the Digital Air/Ground Integration Range and the Digital Multi Purpose Range Complex	Existing impact areas with minimum vegetation cover would be designated for OM use and lessen the chance of wild land fires. Requirements would include no firing of obscurants under high danger fire conditions (New Mexico State Forestry fire ratings FIRECON 3 (High Danger) or FIRECON 4 (Very High Danger)), road closures if required, safety equipment issue and use, and construction/maintenance of necessary fire fighting lanes/breaks. The wild lands fire management plan, under coordination with the Bureau of Land Management, would be amended to address the increased risk of fire due to OM use.	
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Fort Bliss	FNSI- Obsc urant Munit ionsTr aining _FB.p df	Human health risk from exposure to obscurant compounds		Human Health and Safety	Human health risks could occur if obscurant compounds exceed short-term exposure guidelines to persons (troops or commuters on War Highway) outside of the impact areas.	War Highway	Impact areas are also remote and thus exposure to Soldiers and the public would be minimized. Standard Army obscurant safety and health restrictions and/or requirements used at other installations would be enacted and officially incorporated into the Fort Bliss Regulation 350-1, Training Safety.	
Fort Bliss	FORT BLISS DESA L FEIS.p df	Proposed Leasing of Lands at Fort Bliss, Texas for the Proposed Siting, Construction, and Operation by the City of El Paso of a Brackish Water Desalination Plant and Support Facilities	Desal plant is just east of south end of existing feed well area on east end of airport. Deep well injection site is at NE corner of South Training Area.					
Fort Bliss	FORT BLISS DESA L FEIS.p df	Waste injection well	NE corner of South Training Area	Geology and Soils	Slightly increased risk of localized low- intensity earthquake at deep- well injection site which is adjacent to	NE corner of South Training Area - nearest residential area is 3.8 miles to SE.	None, but it states that any damage would be localized at the injection site, removed from population centers. This was identified as a probable adverse environmental effect that cannot be avoided.	

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					private land.			
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Draw down of Hueco Bolson aquifer	Hueco Bolson aquifer	Geology and Soils	Subsidence of the El Paso area of approximately 0.5 feet over 50 years as water is drawn down from the Hueco Bolson aquifer.	El Paso area near the feed wells, and to a lesser extent the blend wells	None - this was identified as a probable adverse environmental effect that cannot be avoided.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Interference of geothermal resources	NE corner of South Training Area	Geology and Soils	Possible interference with future development of geothermal resources	NE corner of South Training Area	None - this was identified as an irreversible and irretrievable commitment of resources.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Wind erosion/dust increase	Proposed desalination facility site	Geology and Soils Air Quality	Increased risk of wind erosion/dust from construction sites near El Paso residential area, especially during March and April.	Desal site at SE corner of El Paso International Airport	Use dust suppression measures such as watering and application of soil stabilizers during ground disturbance.	
Fort Bliss	FORT BLISS DESAL	Aquifer drawdown	Hueco Bolson aquifer	Water Resources	Changed pattern of aquifer drawdown	Other areas that use the aquifer for water (El	None, but it states that the north-to-south groundwater flow indicates that	

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	FEIS.pdf					Paso, Ciudad Juarez, Mexico)	wells more than a few miles east or west of the blend and feed wells are unlikely to affect or be affected by the proposed action.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Contamination of underground water sources	Hueco Bolson aquifer	Water Resources	Small risk of contamination surficial aquifer and underground sources of drinking water from disposal of concentrate	Other areas that use the aquifer for water (El Paso, Ciudad Juarez, Mexico)	Installation of pressure monitors in the concentrate pipelines to allow early detection of leaks or catastrophic failure so that corrective action can be taken. Develop an emergency action plan to minimize the release of concentrate during an accident or equipment failure. Evaluate the presence or absence of a connection between the injection zone and other aquifers during deep-well injectivity tests.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Increase in power consumption	Proposed desalination facilities	Utilities and Services	Slight increase in power consumption within El Paso Electric Company's service area	Service area for El Paso Electric Company	None, but the increased demand can be met with existing infrastructure. This was identified as a probable adverse environmental effect that cannot	

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							be avoided.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Risk of release of hazardous materials during transport	Proposed desalination facilities	Hazardous Materials, Hazardous Waste, and Safety	Small increased risk of release of hazardous materials during transportation and use. Slightly increased risk of release of hazardous waste at plant site.	Areas adjacent to new facilities	Given the hazardous materials and waste management and safety procedures required by regulation, no additional mitigation measures would be needed.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Increase in emissions during construction	Proposed desalination facilities	Air Quality	Small increase in area-wide emissions during 18-month construction period (e.g., exhaust from heavy equipment)	Areas adjacent to new facilities	None - this was identified as a probable adverse environmental effect that cannot be avoided.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Risk of soil and groundwater contamination from concentrate disposal	NE corner of South Training Area	Biological Resources	Risk of soil and groundwater contamination from concentrate disposal with subsequent	Area adjacent to concentrate disposal site	None	

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					impacts on vegetation and wildlife			
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Decrease in aesthetics	Proposed desalination facilities	Land Use and Aesthetics	Plant visible from Loop 375. Future connection from Loop 375 to EPIA would need to be located around plant site. Future EPIA development currently planned for site would need to be located elsewhere.	ROI - 2 miles around all areas of desal facilities	None - this was identified as a probable adverse environmental effect that cannot be avoided.	
Fort Bliss	FORT BLISS DESAL FEIS.pdf	Impact on traffic flow	Montana Ave.	Transportation	Slight adverse impact on traffic flow from access road off Montana Avenue to plant site.	Montana Ave.	Design the entry and exit road from the desal plant to Montana Ave to minimize impact to traffic flow.	

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Fort Bliss	FORT BLISS DESA L FEIS.p df	Army Growth and Force Structure Realignment	NE section of post. McGregor Range and Sacramento Range	Traffic	Delays in traffic due to constructio n equipment	Hwy 506 and post entrance gates	Units crossing Hwy 506 with heavy equipment will provide traffic control and space vehicle crossings limiting civilian traffic delays to 15 minutes or less in most cases. Ft. Bliss will notify the Las Cruces District of the BLM and Otero County Administrator of planned closures of Hwy 506 on McGregor Range. These measures are expected to redcue adverse impacts to Hwy 506 to non- significant levels. Ft. Bliss access gates will be sized to mitigate back- ups and increase the level of safety on highway ingress and egress points to the installation. Ft. Bliss will continue to provide the media with information regarding anticipated high traffic events and other actions that could adversely affect traffic when	
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							consistent with security concerns.	
Fort Bliss	FORT BLISS DESA L FEIS.pdf	Increased water and wastewater demand	Ft. Bliss	Water Supply and Sanitary Wastewater	More personnel will require more water and wastewater treatment which will be supplied by the El Paso Water Utility.	El Paso Water Utility	Ft. Bliss will collaborate with EPWU to create a brackish water desalination plant and on Ft. Bliss land. Ft. Bliss will work with EPWU to increase use of reclaimed water for landscaping on the installation.	
Fort Bliss	FORT BLISS DESA L FEIS.pdf	Increased waste generation	Ft. Bliss	Hazardous Materials and Waste	More waste will be generated by more personnel and by construction.	Off-post landfills	Additional solid waste generated on post will be sent to the existing Ft. Bliss landfill or transported to licensed, off-post disposal facilities.	
Fort Bliss	FORT BLISS DESA L FEIS.pdf	Increased housing demand	Ft. Bliss	Socioeconomics and Environmental Justice	More personnel will require more housing.	City of El Paso and surrounding residential areas	Ft. Bliss will continue quarterly meetings with realtors and apartment	

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	df						associations to ensure they have the best available planning information.	
Fort Bliss	Enclosures _ACUB proposals	Increased military traffic on access road (Nike Boulevard) to Orogrande Range Camp passes through BLM land and community of Orogrande.	Nike Boulevard between US 54 and Orogrande Range Camp	Transportation, Land Use	Right of way on BLM land; heavy military vehicles and convoys passing through small town is incompatible (dust, noise, traffic)	Nike Boulevard between US Highway 54 and Orogrande Range Camp	N/A	Identified as one of four ACUB program locations. Land exchange with BLM under consideration.
Fort Bliss	Enclosures _ACUB proposals	Town of Orogrande in LUPZ. Noise increasing concern with new ranges.	Town of Orogrande	Noise, Land Use compatibility	Noise from large caliber weapons firing at Doña Ana Range and on new DAGIR and DMPTR could affect the community of Orogrande.	Town of Orogrande	N/A	Identified as one of four ACUB program locations. Land exchange with BLM under consideration.
Fort Bliss	Enclosures _ACUB proposals	Cross-country tracked and wheel vehicle maneuver, bivouac sites and dismounted training, air drop zones, weapons firing ranges	Dona Ana Range, Fort Bliss	Noise, Land Use compatibility (noise, dust)	Noise and vibration from weapons firing ranges, air operations, blowing dust and	Town of Chaparral and BLM and State land along southern boundary of Dona Ana Range on Fort	N/A	Identified as one of four ACUB program locations. Land exchange with BLM under

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					military maneuver in close proximity to residential areas.	Bliss.		consideration.
Fort Bliss	Enclosures _ACU B proposals	Heavy vehicles and troop convoys transit over state-owned land between East Bliss contonment areas and the South Training Areas.	State of Texas land (previously owned by DoD) on south boundary of the South Training Areas	Dust, traffic, Land Use	Land on three sides of this parcel is within Fort Bliss, and the land is used as a pass-through area for military units. If developed by the State (commercial, residential, industrial), FB could not use this area and it would impact mission efficiency. Non-military development could pose potential safety and security risks between FB	State of Texas land (previously owned by DoD) on south boundary of the South Training Areas	N/A	

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					training areas and non-military uses. State not using the land and wants to sell to developers in order to raise funds for Texas schools.			
Fort Bliss	Enclosures _ACU B proposals	Weapons firing at Meyer Range, maneuvers in Tularosa Basin (on McGregor Range and South Training areas), close to new water injection wells constructed on Fort Bliss by El Paso Public Utilities Board.	Meyer Range, training areas in southern McGregor Range and east part of the South Training Areas	Dust, traffic, Land Use	Area is impacted by incompatible noise and dust. Currently used for ranching but if developed could pose compatibility concern. The current owner(s) may be willing to sell. Purchase of development rights is possible option.	Area outside Fort Bliss south of McGregor Range and east of the South Training Areas, Hueco Tanks area	N/A	

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Holloman Fort Bliss WSMR Spaceport		EG: ground disturbance from construction; aircraft operations ; munitions expenditures; missile firing; off-road vehicle operations	E.g., North McGregor Range, MTRs (list if relevant); R-5107; new DAGIR; Holloman airfield;	This will reflect to the EA/EIS topic	What is the problem outside the installation boundary: frequent evacuation, unsafe for public; noise affects residences; vibrations affect residences; interferes with using TVs, GPS;	List affected locations(s)place(s) mentioned in the document	Measures mentioned as preventative actions; or stated as mitigations. This topic could get mired in the realm of unspecified BMPs, so in that case say something like Follow DoD/Army Safety regulations, or Erosion control BMPs	Use this to record any internal notes to our team. Or, document if this is a bigger issue such as cumulative or if there is an underlying concern, or questions about how to define locations....
Installation	File Name	Action/activity of concern	Location of activity	Resource category	Issue	Location of concern	Published minimization measures	Notes/comments
Holloman	2011-07-29 - F-16 EA Delivered - REDUCED FILE SIZEpdf .pdf	Chaff and Flare Use	Training Airspace Units	Biological Resources	Fire Hazard	Training Airspace Units	Minimize use during periods of high fire hazard	
Holloman	2011-07-29 - F-16 EA Delivered - REDUCED FILE SIZEpdf	Vegetation loss across 12 acres of land = possible habitat loss	Holloman AFB	Biological Resources	Effect to state listed species	Holloman AFB	Biological survey indicates no listed species occur in affected area	

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Holloman	2011-07-29 - F-16 EA Delivered - REDUCED FILE SIZEpdf.pdf	Subsonic Booms, aircraft noise, munitions noise	Training Airspace Units, Centennial Range, McGregor Range	Biological Resources	Wildlife Annoyance	Training Airspace Units, Centennial Range, McGregor Range	Reductions in the time-averaged noise levels near Holloman AFB would occur; therefore, no adverse impacts on native vegetation, wildlife, or quality of wildlife habitat are expected	
Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Chaff and Flare use	Holloman AFB, Training Airspace	Biological Resources	Impacts to wildlife or domestic animals	Holloman AFB, Training Airspace	None, since mylar wrappings from chaff and flare use are expected to degrade from exposure to sunlight and inert plastic pieces are not expected to affect biological resources, including native or domestic animals	

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Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Sonic Noise/Vibrations	Holloman AFB, Training Airspace	Biological Resources	Impacts to wildlife or domestic animals	Holloman AFB, Training Airspace	Wildlife under the airspace have previously experienced thunder and thunder-like sonic booms at different levels and are expected to become habituated to additional thunder- like sounds. Even after habituation, a sonic boom, as with thunder, could startle high strung or other animals in a pen or other restricted area	
Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Subsonic Booms, aircraft noise, munitions noise	Training Airspace Units, Dona Ana Range, McGregor Range	Biological Resources	Game-species Annoyance resulting in affects to Mescalero economy	Training Airspace Units, Centennial Range, McGregor Range	Game species, such as elk, mule deer, and domestic species, that contribute to the Mescalero economy expected to habituate.	

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Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Noise/Activities in training airspace	Training Airspace	Biological Resources	negative effects to critical habitat/species	critical habitat in training airspace		
Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Sonic Noise/Vibrations	vicinity of Holloman AFB, Training Airspace	Biological Resources	nest abandonment due to noise	nests of critical species in training airspace	none, since response of birds to sonic noise is similar to that of thunder, and no nest abandonment occurs	
Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Sonic Noise/Vibrations	vicinity of Holloman AFB, Training Airspace	Biological Resources	cracking of chicken eggs/decrease in hatchability due to noise	commercial chicken operations in training airspace	none, since no effects were found to occur in study	Bowles and Seddon (1994), Stadelman (1958)

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Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Sonic Noise/Vibrations	vicinity of Holloman AFB, Training Airspace	Biological Resources	startle response in privately owned animals	vicinity of Holloman AFB, Training Airspace	The Air Force has established procedures for damage claims that begin by contacting the Holloman Public Affairs Office	
Holloman	Draft EA_Transforming the 49th FW Holloman_June 2006.pdf	Chaff and Flare use	Holloman AFB, Training Airspace	Biological Resources	Specific issues for biological resources are the potential for and consequences of (1) ingestion of chaff fibers or chaff or flare plastic, nylon, or mylar materials; (2) inhalation of chaff fibers; (3) physical external effects from chaff fibers, such as skin irritation; (4) effects on water quality and forage quality; (5) increased fire	Holloman AFB, Training Airspace	none, since no reports or studies to date have documented negative impacts of training chaff or flares to biological resources from any of these potential sources of impacts	

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					risk; and (6) probability of being struck by large flare debris			
Holloman	HAFB General Plan pt1.pdf	General Use	Holloman AFB	Biological Resources	Negative effects to transient, migratory threatened, endangered, and sensitive species	Holloman AFB	constrain actions when species present	

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Holloman	HAFB General Plan pt1.pdf	General Use	Holloman AFB	Biological Resources	Demolition of buildings could negatively affect resident bat populations	Holloman AFB	Buildings should be surveyed for bats prior to demolition. Demolition should be scheduled for the winter months to ensure that bats will not be in the area when demolition activities take place.	
Holloman	Final EA_Predator_signed FONSI_04-30-09.pdf	Mexican Spotted Owl Critical Habitat	R-5103B/C is located above the Sacramento Mountains and a small portion of the Lincoln National Forest	Biological Resources	Nest abandonment	MSO critical habitat in Sacramento Mtns, Lincoln NF	Studies have shown low nest abandonment due to noise/other disturbances	

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Holloman	Final EA_Pre dator_s igned FONSI_ 04-30- 09.pdf	Todsen's Pennyroyal Critical Habitat	There is critical habitat for Todsen's pennyroyal approximatel y 34 miles northwest of Holloman AFB on WSMR within Rhodes Canyon	Biologica l Resource s	Habitat loss due to ground disturbance	Todsen's Pennyroyal Critical Habitat, Rhodes Canyon	no ground disturbing activities, such as ordnance delivery, to affect habitat	
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	EG: ground disturbance from construction; aircraft operations ; munitions expenditures; missile firing; off-road vehicle operations	E.g., North McGregor Range, MTRs (list if relevant); R-5107; new DAGIR; Holloman airfield;	This will reflect to the EA/EIS topic	What is the problem outside the installation boundary: frequent evacuation, unsafe for public; noise affects residences; vibrations affect residences; interferes with using TVs, GPS;	List affected locations(s)place (s) mentioned in the document	Measures mentioned as preventative actions; or stated as mitigations. This topic could get mired in the realm of unspecified BMPs, so in that case say something like Follow DoD/Army Safety regulations, or Erosion control BMPs	Use this to record any internal notes to our team. Or, document if this is a bigger issue such as cumulative or if there is an underlying concern, or questions about how to define locations....
File Name	Action/activity of concern	Location of activity	Resource category	Issue	Location of concern	Published minimization measures	Notes/comments
WSMR-NASA MOA Fire.pdf	none						
WSMR Navy Standard Missile EA 2006.pdf	missile testing and resulting ground disturbance	impact/launch/intercept sites	T&E Species	habitat loss of T&E Species due to ground disturbance	Todsen's Pennyroyal, Northern Aplomado Falcon, White Sands pupfish, WSMR Wildlife of Concern		
WSMR Navy Standard Missile EA 2006.pdf	missile testing and resulting ground disturbance	impact/launch/intercept sites		loss of unique and critical habitat	Wetlands and Malpais Areas		

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WSMR Navy Standard Missile EA 2006.pdf	Exceedance of NAAQs Air Quality	launch complexes, Cholla site, WSMR	Air Quality	public, sensitive populations such as asthmatics children, and the elderly; public and environmental welfare	EJ populations in the surrounding area		
WSMR Navy Standard Missile EA 2006.pdf	mission activities resulting in noise	WSMR	Noise	Exceedance of OSHA standards resulting in hearing loss	WSMR	Army regulations require that hearing protection be used when noise levels are greater than 85 dB. Safety zones and hazardous noise areas (≥ 85 dBA) will be established using noise level meters, and warning signs will be posted to reduce the risk of human hearing loss.	
WSMR Navy Standard Missile EA 2006.pdf	traffic resulting in noise	WSMR, Main Post	Noise	Exceedance of OSHA standards resulting in hearing loss	WSMR, Main Post	none, since noise levels in undisturbed areas away from Main Post have been measured at 45 dB, which is comparable to that experienced in a library setting	
WSMR Navy Standard Missile EA 2006.pdf	military testing resulting in sonic booms	WSMR, airspace designated for supersonic flight	Noise	Exceedance of OSHA standards resulting in hearing loss	WSMR, supersonic airspace, WSNM		
WSMR Navy Standard Missile EA 2006.pdf	radiation due to military testing	WSMR	Health and Safety	damage to cellular structures or contamination due to ionizing radiation	WSMR	thorium alloy ring is removed from range during recovery operations; thorium level in soil samples taken from known debris fields is indistinguishable from	

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						background radiation	
WSMR Navy Standard Missile EA 2006.pdf	radiation due to military testing	WSMR	Health and Safety	damage to cellular structures due to non-ionizing radiation	WSMR range	none, since non-ionizing radiation is not damaging	
WSMR Navy Standard Missile EA 2006.pdf	hazardous activities in airspace shared by commercial and private operations	Restricted Airspace	Airspace	interference with or damage to non-WSMR aircraft due to hazardous activity use including live ordnance delivery, missile firings, and laser shots	Restricted Airspace	Civil or military aircraft must have proper authorization and scheduling by WSMR Range Control before entering active restricted airspace.	
WSMR Navy Standard Missile EA 2006.pdf	mission activities resulting in surface disturbance	WSMR, range	Cultural	damage to cultural resources	WSMR, range	due to the vast amount of open land within the footprint, the intensity of the testing programs and physical size of the debris, the probability of cultural site being damaged is considered remote; During recovery efforts, care will be taken to minimize travel over undisturbed areas and any sites impacted by large debris will be reported to Environmental Stewardship	
WSMR Navy Standard Missile EA 2006.pdf	mission activities resulting in loss of jobs	WSMR	Socioeconomics	effects to regional economy	Doña Ana Co, Lincoln Co, Sierra Co, Otero Co, Socorro Co, Las Cruces,	none, STANDARD Missile testing activities will keep existing jobs within the surrounding communities as well as the revenues that are	

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					Alamogordo	associated with Navy activities	
WSMR Navy Standard Missile EA 2006.pdf	testing resulting in roadblocks	WSMR & surrounding roads	Infrastructure	impacts to traffic due to road blocks	US Highway 70, US Highway 380	An agreement with the State of NM allows WSMR to establish off-range roadblocks on U.S. Highways 70 and 380 as a safety precaution during missile tests. Under the agreement, roadblocks may last no longer than 1 hr and 15 minutes.	
WSMR Navy Standard Missile EA 2006.pdf	soil disturbance	Cholla Site, Aerial Intercepts	Geology	soil disturbance	Cholla Site, Aerial Intercepts footprint	Vegetation at Cholla Site will be mowed before testing to minimize disturbance; To reduce soil disturbance at aerial intercept footprints, locating larger pieces of debris will occur with the use of a helicopter. Additional clean up will occur either by foot or through the use of low impact ATVs.	
WSMR Navy Standard Missile EA 2006.pdf	contamination of surface water due to testing debris	Cholla Site, Aerial Intercepts	Water resources	habitat loss of T&E Species due to debris contamination	Surface Waters that serve as Critical Areas	Restricting missions from intercepting over critical areas (primarily pupfish habitat) will help minimize the potential of impact to surface water	

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WSMR Navy Standard Missile EA 2006.pdf	ground water contamination due to liquid fuel	WSMR	Water resources	ground water contamination due to liquid fuel	Ground water resources	Most fuel will be consumed during testing; Any remaining fuel will be expected to evaporate before hitting the ground. If there is a small quantity of fuel left within the tank of the target vehicle upon impact, this will be discovered during recovery and appropriate remediation measures will be taken.	
WSMR Navy Standard Missile EA 2006.pdf							
WSMR Navy Standard Missile EA 2006.pdf	missile testing	LC-35, LC-35N, Cholla Site, intercept area	T&E Species	loss of Todsen's Pennyroyal or other plant T&E Species due to ground disturbance	LC-35, LC-35N, Cholla Site, intercept area	No TES plant species were found or are expected to occur at LC-35, LC-35N or Cholla Site. No flora species of interest (SOI) were found during floral surveys at any of these locations. A total of thirty-eight SOI floral species occur or may occur within the proposed intercept area. However, due to the limited number of tests and the wide range for dispersal of debris, no significant impact is expected.	

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WSMR Navy Standard Missile EA 2006.pdf	missile testing and resulting ground disturbance	LC-35, LC-35N, Cholla Site, intercept area	T&E Species	loss of burrowing owl, baird's sparrow, or other avian T&E species due to ground disturbance	LC-35, LC-35N, Cholla Site, intercept area	Monitoring for animals, eg: During the breeding season, January through October, project personnel will observe areas prior to ground disturbing activities for the presence of burrowing owls, specifically looking in areas that show evidence of rodent burrows. If a burrowing owl is detected, Environmental Stewardship will be notified and mitigation will be developed to ensure there is no significant impact.	
WSMR Navy Standard Missile EA 2006.pdf	missile testing and resulting ground disturbance	intercept area	T&E Species	loss of white sands pupfish due to ground disturbance	Mound Springs, Malpais Springs, Salt Creek, and Malone Draw/Lost River	aerial target interceptions will be planned to avoid White Sands pupfish habitats.	
WSMR Navy Standard Missile EA 2006.pdf	missile testing and resulting ground disturbance	intercept area	T&E Species	loss of WOC reptiles due to ground disturbance	WSMR	The Texas horned lizard (Phrynosoma cornutum) is classified as a WOC and is the only state protected species found on WSMR. No STANDARD Missile missions are expected to impact any Federal or State listed reptile species	

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WSMR Navy Standard Missile EA 2006.pdf	missile testing resulting in damage to unique and critical habitats, caused by recovery activities or falling debris	WSMR	T&E Species	damage to unique and critical habitats	playas, alkali flats, Fifteenmile Lake, Lumley Lake, Big Salt Lake, Brazel Lake, malpais, National Wildlife Refuge, Areas of black grama/longleaf mormon tea	No ground recovery of debris will be conducted on the four main playas afforded protection by Environmental Stewardship: Fifteenmile Lake, Lumley Lake, Big Salt Lake, and Brazel Lake. Aerial access by helicopter will reduce anticipated impacts resulting from debris recovery in these areas; implement comprehensive reseeding and erosion control strategies to rehabilitate disturbed areas when requested by Environmental Stewardship; no test activities near NWR; aerial recovery (via helicopter) where necessary	
WSMR Navy Standard Missile EA 2006.pdf	mission activities resulting in noise	WSMR	Noise	negative effects of noise on wildlife	WSMR	due to the infrequent nature of the testing activities and the short duration of tests, no long-term effects to wildlife are expected to result from noise sources	
WSMR Navy Standard Missile EA 2006.pdf	impacts to fauna due to radar beams	WSMR	Radiation	Radar beams could potentially impact fauna, particularly birds	WSMR	fauna were unlikely to be critically exposed to the beam because of its small cross-sectional area, active motion while tracking, and upwardly directed angle away from the ground; Radars will be positioned so no potential raptor perches are	

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						included within the hazard area	
WSMR Navy Standard Missile EA 2006.pdf	impacts to recreation due to mission activities	WSMR	Land Use	Public access throughout the installation is limited to highly regulated hunting, infrequent running races or bicycle excursion tours and semiannual tours to Trinity NHL	Trinity Site, hunting areas, bike routes	Recreational activities scheduled to avoid testing operations	
WSMR Navy Standard Missile EA 2006.pdf	inadvertent missile impacts	WSMR	Hazardous Materials	Inadvertent missile or target impacts outside WSMR boundaries, including WSNM and San Andres NWR	Area outside WSMR	addressed under provisions of RCRA and WSMR Environmental Compliance Handbook which also contains WSMR Regulations 200-1	
WSMR Navy Standard Missile EA 2006.pdf	impacts to EJ populations due to testing activities	WSMR	EJ	impacts to EJ populations due to testing activities	Minority and low income populations outside WSMR	minority and low income populations are believed to exist within the proposed action's surrounding communities. However, the proposed testing locations of LC-35, LC-35N, and Cholla Site are remote and not considered to be near population centers or schools within the surrounding communities.	

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WSMR Strategic Plan.pdf	mission activities that impact the support and services of surrounding activities	WSMR		impacts on surrounding communities and their services	call-up areas, surrounding communities	outreach program to invite community leaders to visit White Sands in an effort to be more transparent; identify which services are of lesser priority in order to protect services that we rely upon such as child care, food service, and recreation	
WSMR Strategic Plan.pdf	future mission activities that expand beyond WSMR boundary	WSMR		national security mission is outgrowing WSMR land mass and require expanded distances along the air, ground, and electromagnetic domains	state and other federal entities in vicinity, including airspace	work with federal and state partners	
WSMR 2nd Eng Battalion EA.pdf	increase in stormwater runoff due to impervious surface	WSMR	Water resources	increased storm water flow and concentration leading to decrease in water quality	downstream from WSMR cantonment	negligible effects to watershed	
WSMR 2nd Eng Battalion EA.pdf	decrease in air quality due to mission activities	WSMR	Air Quality	dust emissions due to training along tank trail and construction	Air Quality Control Region (AQCR) 6 that includes Dona Ana, Otero, Sierra, and Lincoln counties. These counties, as well as six in Texas, are also part of the EPA	Dust suppressants will be used during construction	

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					El Paso-Las Cruces-Alamogordo Interstate AQCR 153 per 40 CFR 81.82; tank trail to Fort Bliss		
WSMR 2nd Eng Battalion EA.pdf	disturbance to T&E species due to construction and training	WSMR	T&E Species	Todsen's Pennyroyal, Pupfish and peregrine falcon will lose habitat as a result of construction/training activities	Pupfish and peregrine falcon habitat	There would be no effect on the habitat of the White Sands Pupfish. No peregrine falcon has been sited in the proposed action areas. Peregrine falcons have been known to hunt on scrublands this minor loss of acreage would have no effect. No Todsen's pennyroyal is present in this area and would not be disturbed.	
WSMR 2nd Eng Battalion EA.pdf	increase in personnel causes increase in number of students at local schools	WSMR	Socio	ability of local schools to handle increased number of students	local schools	The post schools (kindergarten through junior high) and daycare are not at capacity and could accommodate this increase. WSMR will have to work with local officials and school board to address the additional students in high schools that are at or near capacity	

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WSMR MDA Flexible Target EA 2007.pdf	Missile debris from mission activities	WSMR	Land Use	debris will fall over WSNM, or T&E habitat	WSNM, T&E habitat	Missile flight trajectories would be planned to avoid impact in the San Andres National Wildlife Refuge and other sensitive habitats such as pupfish habitat and would adhere to requirements of the agreement between the National Park Service and WSMR, which states that no planned debris will impact in the White Sands National Monument.	
WSMR MDA Flexible Target EA 2007.pdf	fire from launch mishap	WSMR	Land Use	fires from launch mishaps could spread, adversely affect vegetation & surrounding communities	Area outside WSMR	Use existing launch sites where much of the vegetation has previously been removed; emergency fire fighting personnel would be on stand-by status for all launch activities as a protective measure	
WSMR MDA Flexible Target EA 2007.pdf	off-range accidental impact	WSMR	Land Use	A missile could impact off-range, endangering human life	Area outside WSMR	The project office emergency response SOP would activate the WSMR Emergency Operations Center (EOC). The EOC would activate the in-place notification rosters for the appropriate WSMR Disaster Plan Annex, depending on the nature of the off range impact area.	

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WSMR MDA Flexible Target EA 2007.pdf	off-range accidental impact	WSMR	Hazardous Materials	A missile could impact off-range, releasing hazardous materials into the environment	Area outside WSMR	Release of materials above threshold levels would be reported to the U.S. EPA and to state and local agencies with emergency planning authority as mandated by the Emergency Planning and Community Right to Know Act of 1986. In accordance with the Military Munitions Rule, the WSMR Directorate of Public Works would determine what range clearance and remediation actions are necessary to support WSMR operations. There would be no on-site treatment of hazardous waste except in the event of an emergency response as allowed in the WSMR RCRA permit. Entry to the impact site would be restricted to approved hazardous materials response personnel until the area is determined to be safe.	
WSMR MDA Flexible Target EA 2007.pdf	noise from testing operation	WSMR	Noise	Noise sensitive areas could be affected by testing activities	San Andres NWR, Bosque del Apache NWR, WSNM, raptor locations in the Oscura Mountains	Duration of noise is too short lived for impacts to occur	

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Cannon LATN EA.pdf	Establishment of a low altitude training area for training Air Force Special Operations Command (AFSOC) aircrews						
	Single exposure noise levels generated by C-130 and CV-22 aircraft flown at low altitude	Airspace training area	Noise	Noise from the Proposed Action would be expected to result in infrequent annoyance and very infrequent interference with activities such as conversation and sleeping.	Residences at any given location under the proposed training area and outside an avoidance area	Since overflight of any given location would be relatively rare, noise impacts would not be expected to be significant. A typical overflight generates a short-term peak in sound level followed by a return to ambient conditions. Disruptions caused by aircraft overflights usually only last a few seconds and usually lasts less than 15 seconds.	
	Secondary effects of an aircraft crash	Airspace training area	Airspace Safety	Secondary effects of an aircraft crash include the potential for fire or environmental contamination	Areas under and adjacent to airspace training areas	None listed.	
	Aircraft overflights	Airspace training area	Airspace Safety	The danger of avalanches caused by aircraft overflights	Areas under and adjacent to airspace training areas	Aircraft using the proposed training area would avoid flying over ski areas to the greatest extent practicable	

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	Fuel dumping	Airspace training area	Airspace Safety	contamination of fuel	Areas under airspace training areas	Under non-emergency situations, aircraft would not dump fuel. If an emergency requiring a fuel dump were to occur, the aircraft would climb to an altitude greater than 2,000 above the highest obstacle within five miles prior to initiating the dump in accordance with Federal Aviation Administration (FAA) ATC Manual 7110.65T. At this altitude, the vast majority of dumped fuel vaporizes prior to reaching the ground. As the likelihood of an in-flight emergency requiring fuel dump is low and standard FAA regulations for fuel dumping would be complied with if such an emergency were to occur, the risk of hazardous materials reaching the ground in quantities that could potentially be dangerous is low.	
	Low altitude flights in the training area	Airspace training area	Biological Resources	startle response or other reactions in wildlife, such as flushing or leaving an area	Areas under airspace training areas	such reactions are not necessarily detrimental to species populations, nor is reaction alone enough to imply adverse effect. Given the average number per day and distribution of sorties throughout the training area, a given individual	

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						animal would not be consistently subjected to high noise levels. Habituation to noise may also occur.	
	Low altitude flights in the training area	Airspace training area	Biological Resources	Range cattle are especially sensitive to overflights when penned, such as for branding operations	Areas under airspace training areas	The Air Force has included procedures whereby ranchers and others can notify the 27 SOW of such activities and temporary avoidance areas can be established.	
	Low altitude flights in the training area	Airspace training area	Biological Resources	bird strike incidents have the potential to increase	Southwest Colorado and northwest New Mexico	the potential for increase should not be significant given that, with the exception of the east and central New Mexico area of the proposed training area, the rest of the proposed training area is rated as a low threat for bird strike. While the 27 SOW would continue to follow general risk reduction measures as stated in the 27 Bird Aircraft Strike Hazard (BASH) Plan, specific measures for the proposed training area have yet to be developed. Thus, the Proposed Action would require an expanded BASH avoidance and mitigation plan for severe bird strike	

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						risk areas.	
	Low altitude flights in the training area	Airspace training area	Cultural Resources	vibration-induced effects on historic properties and sensitive fossil beds	Areas under the airspace training area	Overhead flights would not occur often and impacts would be of short duration, therefore impacts would not diminish the integrity of a historic property that qualifies the property for inclusion in the NRHP. Impacts on sensitive fossils beds such as those associated with Florissant Fossil Beds National Monument would be minimized by restricting flights to a minimum of 2,000 ft AGL.	

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	Low altitude flights in the training area	Airspace training area	Land Use and Recreation	Sudden and intense noise could result in disruptions to the expected dominant land use	Areas under the airspace training area	<p>These incidences are not likely to be persistent and would have only temporary impacts on any given experience. These events are not expected to change visitor habits or recreational land uses overall, but such intermittent overflight could be annoying to some residents and visitors. National monuments, national parks, and state parks would be avoided by 2,000 ft AGL. Therefore, the potential for significant impacts on recreationists seeking quiet recreation is somewhat reduced. The projected noise levels are compatible with land uses under existing compatibility guidelines used by the FAA or the DoD.</p>	
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DTRA EIS 2007	Additional tunnel targets	Mockingbird South	Aesthetics and Visual Resources	would detract from the largely natural appearance of the area	expanded Capitol Peak HTD test bed and a new test bed at Mockingbird South	<p>While there would be some additional degradation to the aesthetics of test bed areas under the proposed action, these would not be significant based on historic and on-going use patterns. The number of viewers is primarily limited to the work force supporting activities on northern portion of WSMR. These viewers generally tend to have reduced sensitivities to potential visual impacts and are more accepting to test infrastructure and activities potentially affecting the environment. Furthermore, DTRA facilities and activities are compatible with the existing land use of WSMR.</p> <p>Test support vehicles could use existing roads and keep within test bed boundaries. Off-road travel could be limited to placement of testing infrastructure, plume tracking and recovery activities using a single path in and out. Following the end</p>	
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						<p>of their usefulness as test beds, these areas could be returned to their approximate original contours to the greatest extent feasible. Impact craters and depressions caused by explosions or recovery activities would normally be filled in and returned to approximate original contours following testing. In cases where recovery activities are prolonged due to extensive data collection efforts, craters and depressions could be filled within two years of testing.</p>	
	<p>Construction of berms, hardened targets, and nonpermanent structures at Permanent High</p>		<p>Aesthetics and Visual Resources</p>	<p>would be visible from certain local roads and also generate visible amounts of airborne dust</p>			

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	Explosive Test Site (PHETS)						
	Craters from explosive tests and pits excavated to recover inert warheads		Aesthetics and Visual Resources	would create obvious blemishes on the landscape to observers.		Impact craters and depressions caused by explosions or recovery activities could be filled and returned to approximate original contours. In cases where recovery activities are prolonged due to extensive data collection efforts, craters and depressions could be filled within two years of testing event. Where craters and pits are filled in, the lack of vegetation still indicates where testing has occurred.	
	Expansion of test bed boundaries		Location and Topography	would increase the overall area subject to testing related disturbances (i.e., target construction, crater formation, etc.).		Following the end of their usefulness as test beds, all sites could be returned to their approximate original contours to the greatest extent feasible.	

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	Expanding current test beds - the boundaries of SHIST, Alt. SHIST, and the Capitol Peak HTD test bed would be extended into adjacent bedrock		Geology and Soils	would cause the greatest increase in ground disturbance, including soil compaction and resulting erosion soil compaction and erosion (primarily from the anticipated access roads into the new areas).			
	Construction of the proposed Mockingbird South test site and the use of heavy equipment		Geology and Soils	potentially result in localized soil compaction and erosion.		It is proposed that best management practices (BMPs) designed to reduce erosion be implemented at the discretion of WS-ES. BMPs to minimize erosion may include mulching, chemical stabilization, geotextiles, hay bale berms, silt fences, reseeding, diversion berms, gabions, etc. If required, disturbed areas may also be reseeded with native flora species approved by the WS-ES land manager.	
	Ground disturbing activities (such as excavation, site preparation, and		Geology and Soils	could accelerate water erosion on these thin rocky soils with a severe water erosion	Alt. SHIST and the Capitol Peak HTD test bed (including the expansion areas), Rockland	Appropriate erosion control measures should be implemented on relatively steep slopes having potential for accelerated erosion at the discretion of	

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	projectile recovery)			hazard on steep slopes along the mountain fronts	Warm and Rockland Cool Soils	the White Sands Environment and Safety Directorate (WS-ES)	
	Wildfires caused by testing activities		Geology and Soils	increase bare ground and soil erosion potential as well		During static high explosive testing the fire department would be on call to prevent the spread of wildfires.	
	DTRA activities		Water resources	Surface water flow may be disrupted locally on test beds after ground disturbance from tunnel target construction, weapon impacts, and warhead recovery. In these instances, surface water runoff from rain events may increase due to an increase in bare ground.		DTRA test beds are at least several kilometers from perennial surface water bodies in Tularosa Basin. Computer models have indicated that collateral effects tests at the Capitol Peak HTD test bed would result in only trace amounts of simulants potentially entering Salt Creek or nearby basin springs.	

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	<p>A portion of the test materials released into the air at PHETS and other DTRA test beds during collateral effects tests would eventually settle out on the land surface</p>		<p>Water resources</p>	<p>Under rare conditions, such as a heavy rainfall event immediately after dispersion of the test material, it is conceivable that part of the remainder may be entrained or dissolved in surface water runoff.</p>		<p>Groundwater should be analyzed annually for particular simulants tested at PHETS.</p> <p>Storm water samples should be taken annually and analyzed for the presence of recently-tested simulants used at the Capitol Peak HTD test bed.</p> <p>Ground water should be monitored at test sites frequently utilizing large quantities of perchlorate based explosives.</p> <p>with the exception of the immediate areas around the test material release points, it is expected that only very low concentrations would be deposited over downwind areas. Furthermore, losses from evaporation, reactions, and photodegradation; and the infrequency of heavy rains would prevent the concentration of substantial amounts of test materials in surface water runoff.</p> <p>Perennial surface water bodies in the Tularosa Basin are located several kilometers from</p>	
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						DTRA test sites and would not be significantly affected by collateral effects tests because of the distances involved.	
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	Repeated deposition of viable Bt over a period of time (Bacillus thuringiensis (Bt), a common bacterium occurring in soils, is used as a biological simulant)		Biological Resources	indirect effect to reproductive rates for some plants and population sizes of insectivorous animals with confined feeding areas		To avoid interfering with yucca pollination by the yucca moth it is proposed that the biological simulant Bt be excused from use during the month of June which is the peak flowering time of soap tree yucca (Yucca elata). To limit potential impacts, WSMR ES should be provided a list of individual strains and/or sources of all biological simulants for review, prior to each test.	
	Use of chemical simulants in proposed activities		Biological Resources	Fuel Oil No. 2 (FO) floats on the surface of water and may coat and kill waterfowl. Glyceryl tributyrates (Tributylin) was found to be toxic to chickens in feeding trials (USNLM, 2003). Bird species may also be affected indirectly through ingestion of contaminated insects.			

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	Use of chemical simulants in proposed activities		Biological Resources	toxic effects and the potential for bioaccumulation in fish			
	Use of chemical simulants in proposed activities		Biological Resources	toxic effects		Proposed mitigations for tests that could impact pupfish (<i>Cyprinodon tularosa</i>) habitat would include periodic sampling of the stream waters containing pupfish to assure little or no impact to aquatic life.	
	Large Blast/Thermal Simulator Testing		Biological Resources	Impacts to wildlife from noise and overpressure		<p>If a northern aplomado falcon (<i>Falco femoralis septentrionalis</i>) or the Baird's sparrow (<i>Ammodramus bairdii</i>) are sighted in an area where DTRA testing activities are planned, WS-ES will be consulted to determine further action.</p> <p>If a desert bighorn sheep (<i>Ovis canadensis mexicana</i>), a State listed endangered species is seen in proximity to a DTRA test bed, WS-ES will be contacted prior to testing.</p>	

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	Collateral effects testing		Air Quality	would release CBR simulant plumes into the air above DTRA test beds.		Plume concentrations would dissipate rapidly and reach extremely low levels near the northern WSMR boundary. In the case of biological simulants, spore concentrations would be well below levels of agricultural application. Effects to air quality from simulant releases would be transitory, occurring mainly near the point of release for a short time. Proposed mitigation to ensure hazardous quantities of test materials do not exit the range include developing prediction models before collateral effects tests, and monitoring weather conditions such as wind speed and direction. With this information a "no go" criteria will be developed for each test	
	Plume tracers and taggants		Air Quality	consist of inert gases and rare earth oxides		These materials, like the simulants, dissipate rapidly upon release, and concentrations would decrease to very low levels as the plume approached the WSMR boundary.	

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	Large-scale HE events (approximately 1 KT or larger)		Air Quality	potential to loft large amounts of dust that not only affect air quality, but also have the potential to obscure photographic coverage of the event and cause damage to sensitive experiments and instrumentation.		To minimize blast pressures effects resulting from high explosive tests over 20,000 lbs, weather and overcast conditions should be monitored and blast predictions be verified with distant off-range measurements.	
	Construction activities for a new test bed at Mockingbird South and improvements to the PHETS Administration Park		Air Quality	produce dust.		A proposed mitigation would be to apply a dust suppressant when practical to minimize excessive vehicle-generated dust levels, and vegetation cover would be retained on sites wherever possible.	
	operation of the concrete batch plant at PHETS		Air Quality	produces substantial dust		the plant is used only intermittently.	
	high quantity HE testing		Noise and Blast	possible impact on and off of the range from blast pressures during adverse weather conditions such as strong inversions		Proposed mitigations would require that weather and overcast conditions be monitored and blast predictions will be verified with distant offrange measurements when conducting HE tests over	

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						20,000 lbs.	
	An increase in DTRA testing activities		Transportation and Circulation	may require more frequent roadblocks of internal WSMR roads and of U.S. Highway 380		this will only be an occasional and temporary disruption of normal traffic flow.	

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			Physical Resources	<ul style="list-style-type: none"> • Minor disturbance to topography and visual aesthetics at the test beds • Increased erosion, soil compaction, and surface water runoff • Disturbance of bedrock at the test beds 		<ul style="list-style-type: none"> • Proposed mitigation to minimize impacts to topography, geology, soils, and visual resources test should limit support vehicles to existing roads and test bed boundaries. Off-road travel should be limited to placement of testing infrastructure, plume tracking and recovery activities using a single path in and out. • Following the end of their usefulness as test beds, all sites (craters and depressions) should be returned to their approximate original contours. • Appropriate surface water and erosion control measures should be implemented on at proposed test bed expansion areas. • Dust abatement measures could include the use of water spray trucks and application of soil stabilizers. The WS-ES land manager may also direct additional measures for dust abatement. • To address degradation of 	
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						<p>soil chemical quality an appropriate soil monitoring program should be implemented.</p> <ul style="list-style-type: none">● Ground water should be analyzed annually for particular simulants tested at PHETS.● Storm water samples should be collected annually and analyzed for the presence of recently-tested simulants used at the Capitol Peak HTD test bed.● Ground water should be monitored at test sites frequently utilizing large quantities of perchlorate based explosives.	
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			<p>Biological Resources</p> <ul style="list-style-type: none"> • A small amount of vegetation would be disturbed or destroyed • Impairment of plant growth, and reproductive success • Increased water and wind erosion • Simulants could affect insect pollinators causing indirect impacts to insectivores and insect pollinated plants. • Fauna located near test beds could be exposed to simulant materials • Craters from weapons testing could create a trap hazard for fauna • Fauna could be injured during test and construction 		<ul style="list-style-type: none"> • To assess the impacts of DTRA activities on flora, Land Condition Trend Analysis (LCTA) data collection plots inside the PHETS boundaries should be sampled annually. • During static high explosive testing the fire department would be on call to prevent the spread of wildfires. • Best management practices (BMPs) designed to reduce erosion would be implemented. Examples may include mulching, chemical stabilization, silt fences, reseeding, and diversion berms. • WSMR floral Species of Interest (SOI) may be given preferential treatment as determined by WS-ES, which may include avoidance or transplanting prior to construction activities. • To limit potential impacts, WS-ES should be provided a list of individual strains and/or sources of all biological simulants for review, prior to each test. 	
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				<p>activities</p> <ul style="list-style-type: none"> • Noise from construction and test activities would temporarily disturb fauna 		<ul style="list-style-type: none"> • To avoid interfering with yucca pollination by the yucca moth, tests using <i>Bacillus thuringiensis</i> (Bt) will not take place during the month of June, the peak flowering time of soap tree yucca. • To protect fauna and habitat support vehicles should use existing roads whenever possible. Off-road travel will be limited to placement of testing infrastructure and recovery activities using a single path in and out. • If a desert bighorn sheep (<i>Ovis canadensis mexicana</i>), a State listed endangered species is seen in proximity to a DTRA test bed, WS-ES will be contacted prior to testing. • Proposed mitigations for tests that could impact White Sands pupfish (<i>Cyprinodon tularosa</i>) habitat would include periodic sampling of the stream waters containing pupfish to assure little or no impact to aquatic life. 	
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						<ul style="list-style-type: none"> ● If a northern aplomado falcon (<i>Falco femoralis septentrionalis</i>) is sighted or if DTRA plans to conduct activities in areas classified as suitable aplomado habitat, they will contact WSMR's Environmental Stewardship Division to ensure compliance with the Endangered Species Act. 	
	Airspace activities		Airspace	would increase slightly over present levels		None	

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			Air Quality	<ul style="list-style-type: none"> • Release of simulant plumes, explosive byproducts, and dust from test activities • Construction and testing activities would generate dust and vehicular emissions 		<ul style="list-style-type: none"> • Proposed mitigation to ensure hazardous quantities of test materials do not exit the range include developing prediction models before collateral effects tests, and monitoring wind speed and direction. With this information a “no go” criteria will be developed for each test. • A proposed mitigation to minimize dust generated from construction activities would be to apply a dust suppressant when practical to minimize excessive vehicle-generated dust levels, and vegetation cover would be retained on sites wherever possible. 	
			Noise and Blast	<ul style="list-style-type: none"> • Personnel and fauna would be exposed to noise from test and construction activities 		<ul style="list-style-type: none"> • Employees would be enrolled in a hearing conservation program if noise exceeds 85 dBa expressed as an 8-hour TWA and would be required to wear hearing protection. • Personnel would be evacuated to a safe distance prior to explosive tests. 	

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						<ul style="list-style-type: none"> ● To minimize blast pressures effects resulting from high explosive tests over 20,000 lbs, weather and overcast conditions should be monitored and blast predictions be verified with distant off-range measurements. 	
			Radiation	<ul style="list-style-type: none"> ● Testing and support equipment would emit low-levels of ionizing or non-ionizing radiation ● Exposure could possibly result in damage to eyes, skin and organ tissue. 		<ul style="list-style-type: none"> ● Personnel should comply with safety procedures involving radars and other support equipment that emits non-ionizing and ionizing radiation. Safety zones should be established, and clearly delineated, to exclude entry into areas of hazardous radiation. 	
			Hazardous Materials and Waste,	<ul style="list-style-type: none"> ● Petroleum, oils, and lubricants (POL) waste would be generated from test and construction activities 		<ul style="list-style-type: none"> ● Vehicles, construction equipment, generators, and fuel storage units would employ a spill containment system (e.g., drip pans) in accordance with the WSMR Spill Prevention Plan. ● CBR simulants and other test materials would be used in the smallest amounts practicable so as to reduce the accumulation of 	

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						hazardous wastes.	
	DTRA activities		Human Health and Safety		areas adjacent to WSMR	chemical simulant plumes should dissipate at 2-3 miles from the source (EPA, 2004). Thus, if any of these chemical simulant were to persist beyond the borders of WSMR it would be at concentrations not considered to be harmful or cause adverse health effects in humans Personnel will remain in close contact with the PHETS Administrative Park, or other coordination center, through radios or cellular telephones in the event of a safety issue or the need for evacuation. Radios shall not be used in vicinity of blasting operations or explosive storage locations.	

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	marginal increase of DTRA activities		Socioeconomics	provide an added but relatively small stimulus to the local and regional economies, primarily for persons living in Las Cruces, Socorro, and Alamogordo, New Mexico			
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Appendix F - Military and Surrounding Area Activities Tables

Appendix F – Table1 Military Activities/Uses/Infrastructure Effects on Surrounding Areas – Generic

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non–Military)	Dataset
Air Quality			
Military commuter traffic	Road network surrounding installation	Residential areas Prevention of Significant Deterioration (PSD) Class 1 areas Non–attainment areas	Nonattainment area boundaries PSD Class 1 areas boundaries State nonattainment area boundaries
Air emissions from aircraft operations, training and test equipment	Military airfields High intensity airspace training areas (restricted, MOA, MTRs)		
Airspace (Hazardous Activity)			
Test trajectories and safety areas for missiles, high energy (HE), directed energy (DE), live fire weapons, and laser weapons	Restricted airspace Evacuation Areas Call up areas Debris fall–out areas	Developed areas Institutional facilities High–value national asset (infrastructure) Areas with concentrated activities Inhabited/occupied structures Field crews	Incorporated areas Small communities Schools, hospitals Institutional zoning Land use/zoning Transmission lines Windfarms Nuclear plant DOT/other construction project sites
High speed low–flying aircraft	MTRs	Obstructions/structures Physical infrastructure Birds	Transmission lines Towers >200 feet, >50feet<200 feet) Wetlands Avian fly–ways Waterfowl areas

Appendix F – Table1 Military Activities/Uses/Infrastructure Effects on Surrounding Areas – Generic

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Aircraft arrival and departure (high volume)	Military airfields Auxiliary airfields Accident zones, clear zones Airfield clearance zones	Avian habitat Obstructions/structures Landfills Residential areas Institutional uses High intensity commercial/ industrial use	Incorporated areas Zoning Residential areas Commercial areas Industrial areas Institutional uses (schools, hospitals) Outdoor public complexes, parks, amphitheaters, race tracks
Drop zone	Drop zones	Developed areas Occupied facilities Recreational use areas Urban areas	Incorporated areas Isolated homes High use recreational areas– developed sites (campgrounds) National/state parks, monuments, refuges
Missile flight path >60,000 feet MSL	Missile flight safety corridors	Non-participating aircraft High altitude weather equipment Satellites	Note: above the National Airspace area of concern Satellites and weather equipment airborne sites/orbits
Airspace (Non-Hazardous Activity)			
Helicopter operations areas (non-hazardous)	Alert Areas Helicopter operations areas (Non-hazardous)	Interface with civilian air traffic: Airfields/airports (controlled airspace Class A to E) Uncontrolled Airspace Class F, G	Airports Arrival and departure paths Class A–G airspace
Military aircraft operating areas	MOAs/ATCAAs	Interface with civilian air traffic: Enroute IFR, VFR routes, Victor routes	FAA air traffic routes
Military aircraft transit corridors/routes	Military air transit routes, UAS CoAs	Interface with civilian air traffic: Airfields/airports (controlled	Airports Arrival and departure paths

Appendix F – Table1 Military Activities/Uses/Infrastructure Effects on Surrounding Areas – Generic

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
		airspace Class A to E) Uncontrolled Airspace Class F, G Enroute IFR, VFR routes, Victor routes	Class A–G airspace
Developed Areas (cantonment, camps)			
Cantonment areas	Cantonment boundaries Cantonment expansion areas Access control points	Residential areas Construction zones Local roads and traffic	Local road network Incorporated areas Zoning–residential Congestion areas (roads with LOS <C) Aerial photography
Military airfields	Airfield areas APZs/CZs Noise contours	Accident potential in populated areas Noise sensitive land uses	Local zoning maps Residential areas Institutional infrastructure Outdoor recreational facilities and parks High density commercial and industrial use areas
Range camps, range centers	Military facility data	Nearby residential areas	Incorporated areas Census places
Frequency Spectrum generation			
Instrumentation sites	Laser and DE test envelopes Restricted airspace HE emitting equipment Radar sites	Radar communication Commercial radio and TV broadcasting equipment Personal communication devices	Radar sites Satellite towers Emergency dispatch facilities Communication towers
Radar sites			
Laser and HE test operations			

Appendix F – Table1 Military Activities/Uses/Infrastructure Effects on Surrounding Areas – Generic

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Communication sites	Instrumentation sites GPS jamming facility Communication towers Test facilities + buffers	Satellite services	(transmitting/receiving)
GPS equipment and test sites		GPS-dependent services	Frequency 90-mile border buffer zone
		Frequency 90 mile border buffer zone “quiet” zone	
Light/Glare generation			
Airfield	Airfield lighting Reflective surfaces (dishes, arrays, glazing)	Light sensitive facilities Dark sky areas Busy roadways (drivers) Residential areas	Observatories Major highways Counties with dark sky ordinances Isolated residential areas
Cantonment	Outdoor facility lighting Roadway lighting Reflective surfaces (dishes, arrays, glazing)		
Outdoor facility lighting, Reflective surfaces (dishes, arrays, glazing)	Isolated facilities with outdoor lighting Outdoor facility lighting Solar arrays, dishes, large glazing		
Natural Resource Protection areas			
Contextual information	Military installations: T&E habitat Soils classifications Floodplains Wetlands Protected/limited use areas Riparian areas	Not applicable-not an activity	Not applicable

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Noise/vibration			
Aviation Noise (Ldn)	MTRs MOAs Restricted airspace Military airfield Noise contours (L _{dn}) Helicopter flight paths/flying area Nap-of-the-earth training areas HAMETs training areas	Residential areas Wilderness areas/WSAs Protected areas Institutional infrastructure Cultural properties Recreational users	Urban areas Incorporated areas Residential areas Schools, hospitals Small communities, home sites Wilderness areas/WSAs National/state parks, monuments Zoning/land use (municipal/ETZ) Future land use Small communities, home sites Wilderness areas National/state parks, monuments Historic structures USFS lands
Range noise (munitions/impulsive/sonic boom) (CDNL)	Firing Ranges Bombing Ranges Noise contours Supersonic approved airspace		
Obstacles/Structures			
ATC towers	Military facilities including: ATC towers Transmission lines Communication towers Radar towers Instrumentation sites (off-site) Buildings >50 feet in height	Civilian aircraft operations: Airports, approach paths Public land open recreation areas Public land developed recreational sites Visual resource areas	Airports, approach paths Public land open recreation areas Public land developed recreational sites Visual resource areas Class I, II areas
Energy infrastructure/communication towers			
Instrumentation sites (off-site)			
Buildings >50 feet in height			

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Physical Infrastructure			
Off-road Heavy vehicle operations Heavy vehicle trails	Off-road training areas Military tank trails	Underground pipelines Dust sensitive areas	Underground pipeline (water, gas) Residential areas
Low flying military operations	MTRs Restricted airspace	Above ground physical infrastructures High-value national assets	Transmission lines Wind farms Communication towers/above ground lines Energy production sites Nuclear plants
Missile debris/impact areas	Restricted airspace Missile firing safety areas	Above ground physical infrastructures High-value national assets Wind farms	Transmission lines Solar arrays Wind farms Oil and gas fields Above ground pipelines Energy production sites, nuclear plants,
Airfield accident zones	APZs/CZs	Above ground physical infrastructures High-value national assets Wind farms Hospitals	Transmission lines Solar arrays Wind farms Oil and gas fields Above ground pipelines Hospitals Energy production sites
Military solar arrays Geothermal facilities Water treatment plant Waterwater treatment plant Landfills			

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Physical Security			
Ground operations on non-military lands Military sites on non-military land Use of public airports, facilities	Instrumentation sites (off-site) Airfield clearance zones Public airports Field operations areas on non-military land	Effects on high value resources and vandalism/nuisance attractions: Public airports (with mil use) Military use areas on non-military land Military sites on non-military land Proximity of military uses and assets to high-value non-military assets, high use public areas	Boundary/fence lines High-valued public assets (observatories, commercial test sites) Airports Surface training areas outside military land
Protected Area			
Riparian areas Limited Use areas on military land Cultural properties	T&E/critical habitat areas Fort Bliss red zones WSMR Trinity site	Wildlife refuges Parks, monuments Critical Habitat Conservation areas Wild and scenic rivers	Federal/state GIS sources: Wildlife refuges Parks, monuments Habitat/conservation areas Wild and scenic rivers
Quality of Life			
Cantonment expansion	Cantonment expansion areas Road network Access control points	Noise sensitive areas Traffic and congestion	Land use/zoning Residential areas
Military population growth	Installation population statistics/trends	Utility capacity issues Institutional infrastructure capacities Medical facilities Sports facilities Urban parks	Census block data / growth trends Census block density Census block population projections Urban areas: parks, medical facilities, sports facilities

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Recreational Resource			
Aviation noise (L _{dn})	MTRs, MOAs, Restricted airspace supersonic areas	Users of public recreational facilities, sites and natural areas: Co-use recreation areas on military land National parks, monuments Campgrounds Parks Wilderness areas Wild and scenic rivers Special recreation areas Trails (non-motorized) Amphitheaters National Parks and Monuments	State and federal land management data: Co-use recreation areas on military land National parks, monuments Campgrounds Parks Wilderness areas Wild and scenic rivers Special recreation areas Recreational opportunity areas Trails (non-motorized) Amphitheaters National Parks and Monuments Municipal GIS - parks Outdoor sports complexes
Range noise	Firing Ranges Off-road maneuver areas		
Vehicle maneuvers	Vehicle maneuver areas in co-use areas Range Roads		
Air drop operations	Air drop zones (off-site)		
Field training operations	Training areas, FTX sites		
Resource extraction/development			
Aircraft operations (hazardous)	Restricted airspace	Require evacuation or removal of non-participating persons during events Timber harvesting Oil and gas development Wind harvesting Industrial processing Solar power sites	Timber harvesting areas Oil and gas well fields Wind farms Industrial plants Mining sites Resource processing sites Timber areas Oil and gas fields (active lease areas) Wind farms Solar arrays Industrial plants Mining sites
Surface Danger zones	SDZs Test areas Impact areas Debris fallout areas		

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Surface Contamination			
Contamination from incidental spills and releases of hazardous substances Unexploded ordnance areas (current, former, potential)	FUDS areas RCRA/CERCLA sites UXO areas	Water supply sources (groundwater, surface water) Irrigation for food production Future development areas Publicly accessible lands	Aquifers, groundwater basins, well fields Agricultural areas Future development areas from plans State/BLM owned land
Water Resource			
Contamination from incidental spills and releases of hazardous substances	Airfields, field training spill incidents, mission maintenance areas	Water supply sources (groundwater, surface water)	Stormwater infrastructure, Aquifers, well fields, streams, water bodies
Water demand for troops	Aquifers, well fields, drawdown areas	Water supply quantities/supply capacity	Tabular data
Wildfires			
Use of incendiaries, live ammunition	Impact areas Bombing ranges	Critical habitat Protected grasslands Adjacent high fire risk areas High value public/commercial infrastructures	
Field operations with vehicles (ignition sparks)	FTX sites Off-road vehicle areas On-road training routes	Critical habitat Protected grasslands Adjacent high fire risk areas High value public/commercial infrastructures	

Military Activity/Uses EFFECTOR	Dataset	Incompatible RECEPTOR (Non-Military)	Dataset
Surface safety hazard			
Off-road maneuver areas Munitions Storage areas Launch sites Impact areas (existing, former) Surface Danger zones Firing ranges Test facilities Contamination Airfield accident zones Field training	Training areas approved for off-road maneuver Quantity distance areas Launch site safety areas (restricted airspace) Surface Danger zone footprints Exclusion areas (hazardous) UXO areas Contaminated sites Impact areas Surface Danger zones Firing ranges APZs/CZs Drop zones FTX sites	Public access and recreation on military land Developed areas Surrounding residential land Isolated communities, homes Surrounding developed sites/industrial uses Ranching operations Utility ROW maintenance operations Occupied facilities Field crews High-value public infrastructure Institutional infrastructure	Off-road maneuver approved areas Co-use areas on military land Hunting areas on military land Incorporated areas Municipal land use/zoning Aerial imagery Isolated home sites Grazing permit boundaries Private parcels Utility ROWs Transmission lines Solar arrays Wind farms Schools, hospitals

Appendix F– Table 2 Surrounding Area Uses and Activities – Effects on Military Mission, Activities and Resources

Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Air Quality			
Vehicular air emissions	Highway congested zones	Cantonment areas (QOL for military families) Military SIP budget	Cantonment areas
State Implementation Plan (SIP) user budgets	SIP budgets; regional air basins; NM Air Quality control Board areas		
Point source emissions from industrial sites	Major power/industrial sites		
Major construction sites (PM10)	Major construction zones (e.g., highways, shopping center)		
Regional haze, smog	Nonattainment areas		
Airspace (non–Hazardous Activity)			
Civilian air traffic–high levels of activity	VFR corridors around military airspace Arrival/departure corridors to airports	Pilots constrained by heavy civilian traffic in shared see–and–avoid airspace (both special use and Class G VFR airspace)	MOAs, Class G airspace, Alert Areas Airports
General aviation VFR, operations at <1,000 feet AGL	Class G airspace	Low level military operations in MTRs, MOAs (see and avoid) Low–level operations in Class G airspace (helicopter areas, transit routes) mostly around Fort Bliss	MTRs, MOAs (low minimum floor) EPIA airspace Biggs AAF airspace Alert Areas
Airspace (Hazardous Activity)			
Crop dusting	Agricultural lands	Low–flying military aircraft	MTRs, MOAs, Restricted airspace (surface)
Government/commercial research and test facilities (airborne functions)	Research sites + buffer Observatory, telescopes Laser safety envelopes (state and commercial sites) NMT EMRTC	Helicopter operations areas Alert areas Military air transit corridors Military air operations (hazardous) Military surface training areas	MTRs, MOAs, Restricted airspace (surface)

Appendix F– Table 2 Surrounding Area Uses and Activities – Effects on Military Mission, Activities and Resources

Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Commercial space vehicle operations	Spaceport boundaries Launch envelope safety footprints	Helicopter operations areas Alert areas Military air transit corridors Military air operations (hazardous) Military surface training areas	MTRs, MOAs, Restricted airspace
Airfield protection areas	FAA clear zones and airfield clearance areas	Helicopter operations areas Alert areas Military air transit corridors	MTRs, MOAs, Restricted airspace
Balloons (recreation, research, monitoring equipment) Aerostat (border control surveillance)	Airspace approved for recreational balloons Airborne commercial weather equipment Aerostat sites (Homeland Security)	Helicopter operations areas Alert areas Military air transit corridors Low-flying aircraft operations Pilot training – aircraft, tactics	MTRs, MOAs, Restricted airspace, Alert Areas, certificate of Authorization (CoA) areas for UASs, Aerostat/JLENS site
UAS test activities	NMSU UAS FTC operations area	Military helicopter operations areas	Helicopter operations areas Alert Areas
Airborne research/weather equipment	Tethered monitoring equipment	Helicopter operations areas Alert areas Future Alert areas Military air transit corridors	MTRs, MOAs, Restricted airspace JLENS site Alert areas Tethered equipment
Cultural Resources			
Trespass/vandalism	Military installation boundaries Fence lines	Cultural sites on military land NRHP structures on military land Traditional cultural properties (TCPs) Boundary encroachment areas	Fort Bliss red zones NRHP sites TCPs on military land Urban expansion areas Census tracks with increasing population trends on boundaries
Blasting	Active mines		
Loud noises from construction (vibration)	Major construction sites		

Appendix F– Table 2 Surrounding Area Uses and Activities – Effects on Military Mission, Activities and Resources

Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Impulsive noises from testing activities, sonic booms	Energetics research facility		
Developed Areas/Uses			
Areas with high density population/concentrated uses	Urban areas (existing, planned) Subdivisions (existing, planned) Residential areas Institutional land use Hospitals, hospices Schools, universities, colleges Government facilities	All operations constrained by presence of non-participating persons Test mission operations Aviation noise areas Impulsive noise areas Firing ranges Aircraft operations (hazardous) Surface hazard area Surface danger zone Troop training sites Airfield arrival and departure tracks Air drop operations Nap of the earth training sites sensitive to trespass	SDZs for test facilities (outside DoD boundary) Aviation noise areas (contours) Impulsive noise areas (contours) Firing ranges Aircraft operations (hazardous) QD areas Surface danger zone Troop training sites, FTX sites APZs/CZs Air drop zones Nap of the earth training areas
Industrial use/commercial use	Industrial land use Commercial land use	Aircraft operations (hazardous) Firing ranges Aircraft operations (hazardous) Surface hazard area Surface danger zone Troop training sites Airfield arrival and departure tracks Air drop operations	Military airfield Firing ranges Aircraft operations (hazardous) QD areas Surface danger zone Troop training sites, FTX sites APZs/CZs Air drop zones Nap of the earth training areas

Appendix F– Table 2 Surrounding Area Uses and Activities – Effects on Military Mission, Activities and Resources

Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
		Nap of the earth training	
Agriculture/food production	Cropland Grazing Areas	Surface contamination Surface activities (hazardous) Aircraft operations (hazardous)	UXO areas FUD sites SDZs Restricted airspace (surface)
Future subdivision and development	Future land use plans Proposals for subdivisions Existing subdivisions (not built up) Zoning revisions	Airspace activities (hazardous) Hazardous surface activities Missile/laser/HE test safety areas Aircraft operations at airfields	Evacuation areas + buffer zone Restricted airspace + buffer zone MTRs APZs/CZs SDZs Evacuation areas
Isolated communities, homesteads	Isolated communities, homesteads	Aviation noise areas Impulsive noise areas Firing ranges Aircraft operations (hazardous) Surface hazard area Troop training sites Airfield arrival and departure tracks Air drop operations Nap of the earth training	Aviation noise areas (contours) Impulsive noise areas (contours) Firing ranges Aircraft operations (hazardous) QD areas Surface danger zone Troop training sites, FTX sites APZs/CZs Air drop zones Nap of the earth training areas

Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Frequency Spectrum			
Communications towers	Satellite/ radio towers	Frequency conflicts interrupt test effectiveness, communications and curtail test envelopes:	Site/facility location & buffer distance UAV operating areas (CoA areas)
Medical equipment	Hospitals	Military communication sites	
GPS equipment use, emergency dispatch communications	Lookout towers	Instrumentation sites	
Welding operations	Commercial welding operations	Military radar sites	
Commercial radio and broadcasting operations	Cell phone towers, radio towers, commercial antennas, satellite dishes	Military GPS test facilities	
		Tests requiring frequency clarity	
		Tests requiring access to frequency spectrum	
		UAV/RPA operating areas (C-band uses)	
Personal communication devices, HDTV, medical devices, satellite dishes, cellular phones, GPS	Urban areas Isolated homes, communities Primary highways		
Ham radio operators (using military and shared spectrum without approval)		Interrupt test effectiveness, curtail test envelopes	
Institutional Infrastructure			
Commuter and construction traffic near/on installation (emissions, traffic, hindered access)	Road network/ construction routes in and around installation Highway repair sites Commuter routes LOS D, F roadways around installations	Military schools and daycare facilities Military medical facilities Military outdoor sports and recreation facilities	Schools, daycare, medical facilities, outdoor sports and recreation areas on installation from Master Plan/Civil Engineering
Noise (from traffic, aircraft)	Road network/ construction routes in and around installation Highway repair sites	Schools and daycare facilities on installation Military medical facilities	

		Military outdoor sports and recreation facilities	
Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Light/Glare			
Areas/spot locations with high lumen emissions	Highways Airfields Urban areas, solar panels	Alert areas Specialized light sensitive test facility Military air transit corridors Airfield approach and departure tracks	GEODSS Airfield arrival/departure tracks
Natural Resource Protection			
Natural resource management actions on military lands	Co–use areas (on McGregor Range) Grazing areas on McGregor Range	Low–flying aircraft Aviation noise Aircraft operations (hazardous) Munitions impact areas/debris areas	MTRs, MOAs, Restricted airspace Noise contours Impact areas, bombing ranges
Natural resource management actions outside military lands (e.g., burn areas, sensitive species monitoring areas,	Burn sites Others TBD	Localized constraints on military uses (may be temporary)	Case–by–case
Air quality maintenance, non–attainment areas	Maintenance and Nonattainment areas High congestion roads (LOS D, F) Construction sites	Military families QOL Cantonment areas	Cantonment areas
Noise/vibration			
Welding operations	Commercial welding operations	Noise & vibration sensitive facilities	Noise sensitive facility/equipment location & buffer distance (e.g., ARC on WSMR)
Construction sites (large scale)	Commercial construction sites		
Traffic corridors (high volume)	Traffic corridors (high volume) (BTS attributes)		

Blasting	Mining and oil and gas drilling		
Airport operations (aviation)	Airports and airstrips		
Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Obstacles/obstructions			
Communication towers	Radio towers, cell phone, radio, TV towers	Hazardous, non-hazardous airspace activities, missile debris/safety areas	MTRs MOAs Restricted airspace Alert Areas Test envelopes (case-by-case), Evacuation/Call up areas
High buildings	Cranes, lookouts	Hazardous, non-hazardous airspace activities	
Energy infrastructure	Windmills, electric transmission plants, coal burning plant, O&G operations	Hazardous, non-hazardous airspace activities	
Physical Infrastructure			
Trespass/vandalism to military infrastructure (surface penetration)	Fenced areas, border fence lines Dispersed recreation areas (public land) Public trails on periphery of installations State/national parks, monuments Evacuation areas	Air-to-ground bombing (weapons release) Instrumentation sites (off-site) Radar/equipment sites, launch sites Existing military roads Communication towers Wells, Well fields Surface water supplies	Bombing ranges Evacuation areas Radar and communication sites
Highway systems/road use	Highway network Railroad network	Surface danger areas Call-up/Evacuation areas Road closure points	Evacuation areas Road blocks
Wildfire	High fire danger areas Dispersed recreational areas on public lands	Existing military roads Instrumentation sites (off-site) Communication towers Wells, well fields	

		Launch sites, test facilities Transmission lines on military land Surface water supplies	
Non Military Activity/Uses- EFFECTOR	Dataset	Incompatible with (RECEPTOR- Military)	Dataset
Regional public utility infrastructures – operations, maintenance	Pipelines (above ground, underground) Utility ROWs Transmission lines	Damage/inference from or to: Off-road heavy vehicle operations areas	Off-road use approved areas Tank trail crossings ATC facilities/radar sites (line of site)
Regional public utility infrastructures – operations, maintenance	Wind farms	Military ATC radar	ATC facilities/radar sites (line of site)
Physical Security			
Intrusion, surveillance of military facilities	Line of sight viewing locations onto military installation Terrain data Fence lines Populated areas along boundaries Public use facilities, resources along boundaries Campgrounds, trails Parks, monuments, trails Co-use areas	Security of high-value test sites (near boundary) Cantonment areas Secure facilities (not releasable information) Bombing ranges Munitions storage areas	Access control points Research sites Cantonment areas Co-use/public use areas on installations Centennial Range QD arcs Airfields Railroads onto installation (active)
Inadvertent access to military land	WHSAs Co-use areas Adjacent public lands Populated areas on boundaries	High-value military assets/test facilities near boundaries (not releasable information) Military airfield	Airfields Cantonment areas Fence lines
Terrorism, protest threats	Populated areas Remote, unpatrolled areas Access control points	Cantonment areas Military sites on non-military land (e.g., Instrumentation sites)	Airfields Cantonment areas Fence lines Instrumentation sites (off-site)

Inadvertent access to evacuation areas	Evacuation areas Road blocks Road network in Call up areas	Clearing non-participating persons from SDZs	Evacuation areas Road blocks Road network in Call up areas
Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Protected Areas			
Public access to sensitive locations (most not applicable)	N/A	TCPs Cultural sites NRHP Critical habitat Burial sites Contamination sites Wetlands, floodplains Watershed protection	Installation GIS: TCPs Cultural sites NRHP Critical habitat Burial sites Contamination sites Wetlands, floodplains
Wildfire/development in watershed areas	Watershed boundaries Forested areas	Watershed recharge areas on military land Bonito lake	Bonito Lake
Recreational Resource			
Noise-generating commercial operations (blasting, construction etc.)	Mines Construction sites	Hunting areas on military land Public access areas on military land Outdoor recreation areas for military personnel/families	
Areas with high outdoor recreational use	Public parks Trails Reservoirs Boat launch Campgrounds, ski areas	High-value military infrastructure Instrumentation sites, noise Hazardous surface activities, hazardous airspace activities	Instrumentation sites, MTRs, MOAs, Restricted airspace Noise contours Impact areas, bombing ranges

Commercial/ public outdoor recreation facilities generating noise	Racing complexes, gun club, rifle range	Noise sensitive military sites	ARC facility on WSMR
Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Commercial/ public outdoor recreation facilities sensitive to noise	Amphitheaters, outdoor performance, sport complexes	Constraint on operations: Aviation noise Range noise Hazardous surface activities, hazardous airspace activities	Military airfields
Public parks	Federal, state, local parks	Constraint on noise-producing operations: Aviation noise Range noise Hazardous surface activities, hazardous airspace activities	MTRs, MOAs, Restricted airspace Noise contours Impact areas, bombing ranges DoD compatibility zones (LUPs, APZs, noise exposure)
Resource extraction/development			
Trespass/vandalism	Line of sight viewing locations onto military installation Terrain data Fence lines Populated areas along boundaries Public use facilities, resources along boundaries Campgrounds, trails Parks, monuments, trails Co-use areas	Energy/water development sites on military land (vulnerability of site and resource)	Water infrastructure on military land Energy productions sites (geothermal sites, wind, desalination plant,
Adjacent sensitive uses: Recreation areas, residential areas, airport	Airfields (ATC radars, equipment) Zoning/land use (residential) Future urban expansion areas	Military renewable energy development	Renewable energy potential areas
Resource contamination or depletion by non-military uses	Oil and gas drilling (lease areas, developed, undeveloped)	Water harvesting locations on military land	Well sites (conventional, deep well injection sites)

	Deep-well water injection sites Aquifer drawdown zones		Military well fields, wells Sweet water areas Aquifer
Non Military Activity/Uses- EFFECTOR	Dataset	Incompatible with (RECEPTOR- Military)	Dataset
Surface Contamination			
Industrial discharge	Manufacturing operations, grazing feedlots, mining slag heaps	Groundwater supply Surface water supply	Well field locations
Water Resource			
Civilian and commercial use; development and population growth	Water-intensive use areas, golf- courses, residential, commercial, and industrial (not necessarily GIS format) Future growth areas (non-serviced)	Groundwater supply Surface water supply	Well field locations
Ground water depletion		Groundwater supply Surface water supply	Well field locations
Wildfire prone areas	High fire risk areas Public dispersed recreation areas (forest, BLM land)	Watershed and surface water replenishment and quality (military supply)	Streams within watershed area for local aquifers Bonito lake (Holloman)
Drawdown from new residential wells in local aquifers	New well sites Private parcels Water service areas Residential subdivisions outside municipal service areas Expansion/growth areas	Groundwater supply and sustainability	Boles Water Well Field annex

Non Military Activity/Uses– EFFECTOR	Dataset	Incompatible with (RECEPTOR– Military)	Dataset
Wildfires			
Burn areas	Burn areas High fire hazard areas	Surface water supply High-value infrastructure Instrumentation sites (off-site)	Water supply lakes Off-site instrumentation sites
Surface safety hazard			
Hazardous commercial or research activities/sites	Spaceport America flight safety envelopes Airport airfield safety/clearance zones El Paso International Airport airfield protection zones Alamogordo airport airfield zones Alamogordo Airport helicopter operations areas Civilian airport runway expansion areas Chemical processing plants	Military hazardous air operation Operations or use of facilities in safety areas Interaction of military and non– military airfield arrival and departure operations (Biggs/EPIA, Holloman/Alamogordo Airport)	Restricted airspace Military airfields APZs/CZs Military aircraft transit routes (e.g., helicopter transit corridors from Biggs AAF)

Appendix F-Table 3A Fort Bliss Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Effect	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Air Quality	Developed Areas (concentrated activity/growth/urban)	Construction (dust)	Air Quality	Decrease in air quality due to fugitive dust from construction	Military construction sites	Air basin
Air Quality	Developed Areas (concentrated activity/growth/urban)	Off Road Vehicle	Air Quality	Decrease in air quality due to fugitive dust from off road vehicle use (training)	Subset of training areas: those with off road vehicle use	Air basin
Air Quality	Developed Areas (concentrated activity/growth/urban)	Troop increase (additional buildings, personnel & vehicles)	Air Quality	Decrease in air quality due to emissions from additional buildings & vehicles	Location of new buildings (cantonment expansion areas)	Air basin
Airspace (Non-Hazardous Activity)	Physical Infrastructure	Training (aircraft)	Decrease in available airspace	Increasing difficulty using airspace for private and commercial flights	MTRs, MOAs, other airspace	Commercial/Public airspace
Institutional Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop increase	Decrease in available medical services	Competition and reduced availability of medical services	Proximity to installation/concentration of military personnel	Medical facilities
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Construction	Decrease in landfill availability	Exceedance of landfill capacity due to construction/demolition waste	Construction sites	Landfills
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop increase	Decrease in landfill availability	Exceedance of landfill capacity due to household/office refuse	Proximity to installation/concentration of military personnel	Landfills

Appendix F-Table 3A Fort Bliss Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Effect	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Institutional Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop increase	Decrease in school (student space)	Exceedance of school capacity due to additional enrollment by troop families	Proximity to installation/concentration of military personnel	Schools
Water Resource	Developed Areas (concentrated activity/growth/urban)	Troop increase	Diminished Water Supply	Increased demands on potable water supply	Proximity to installation/concentration of military personnel	Water supply: wellfields, reservoirs, river, aquifer, desalination plant
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop increase	Electric Utility Interruption	Exceedance of utility capacity due to additional personnel	Proximity to installation/concentration of military personnel	Electrical Infrastructure
Wildfires	Surface safety hazard	Training (munitions)	Fire	Wildfire caused by munitions use	Firing points; bombing ranges; SDZ; impact areas	Area in Vicinity of geographic area of military cause
Wildfires	Surface safety hazard	Training (off-road vehicles)	Fire	Wildfire caused by off road vehicles	Subset of training areas: those with off road vehicle use	Area in Vicinity of geographic area of military cause
Wildfires	Surface safety hazard	Training (troop movement)	Fire	Wildfire caused by ground troops	Subset of training areas: those with ground troops and troop vehicles; range camps	Area in Vicinity of geographic area of military cause
Natural Resource	Surface safety hazard	Training (munitions)	Habitat Loss	Habitat loss caused by munitions	Firing points; bombing ranges; SDZ; impact areas	T&E Habitat
Natural Resource	Surface safety hazard	Training (off-road vehicles)	Habitat Loss	Habitat loss caused by off road vehicles	Subset of training areas: those with off road vehicle use	T&E Habitat

Appendix F-Table 3A Fort Bliss Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Effect	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Natural Resource	Surface safety hazard	Training (troop movement)	Habitat Loss	Habitat loss caused by ground troops	Subset of training areas: those with ground troops and troop vehicles; range camps	T&E Habitat
Water Resource	Developed Areas (concentrated activity/growth/urban)	Troop increase	Increased Wastewater	Exceedance of water system capacity	Proximity to installation/concentration of military personnel	Wastewater treatment facilities
Natural Resource	Developed Areas (concentrated activity/growth/urban)	Construction (fill material)	Invasive species	Introduction of invasive species in construction fill material	Construction sites where fill material is used	Area in Vicinity of geographic area of military cause
Light/Glare	Surface safety hazard	Night Training (flares, munitions)	Light Pollution	Light pollution caused by night time training activities	Subset of training areas where night training occurs	Viewshed of training activities
Noise/vibration	Water Resource	Desalination injection well	Localized Low-intensity Earthquakes	Damage caused by earthquakes	Desalination injection well sites	Area in Vicinity of geographic area of military cause
Recreational Resource	Developed Areas (concentrated activity/growth/urban)	Troop increase	Loss of Open Space due to new construction	Development caused by troop increase reducing open space in surrounding areas	Proximity to installation/concentration of military personnel	Open Space In Vicinity
Recreational Resource	Developed Areas (concentrated activity/growth/urban)	Training	Loss of Recreation Opportunities	Decrease in solitude and value of existing recreation sites	Training areas	Adjacent Public Recreation Sites
Noise/vibration	Developed Areas (concentrated activity/growth/urban)	Construction	Noise	Noise annoyance caused by construction	Construction sites; construction noise contours	Noise Sensitive Areas/Incompatible Land Use

Appendix F-Table 3A Fort Bliss Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Effect	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Noise/vibration	Surface safety hazard	FIREX [Training (munitions)]	Noise	Noise annoyance caused by munitions training	McGregor Range, training areas and ranges where missile use occurs; SEL noise contours (specific)	Noise sensitive areas/incompatible land use
Noise/vibration	Physical Infrastructure	Railway	Noise	Noise annoyance caused by railway	Rail ROW; SEL noise contours (specific)	Noise sensitive areas/incompatible land use
Noise/vibration	Airspace (Non-Hazardous Activity)	Training (aircraft)	Noise	Noise annoyance caused by training aircraft	Restricted airspace; SEL noise contours (specific)	Noise sensitive areas/incompatible land use
Noise/vibration	Surface safety hazard	Training (munitions)	Noise	Noise annoyance caused by munitions training	Firing points and bombing ranges; SEL noise contours (specific)	Noise sensitive areas/incompatible land use
Noise/vibration	Surface safety hazard	Training (off-road vehicles)	Noise	Noise annoyance caused by off-road vehicles	Subset of training areas: those with off road vehicle use; SEL noise contours (specific)	Noise sensitive areas/incompatible land use
Noise/vibration	Surface safety hazard	Training (troop movement)	Noise	Noise annoyance caused by troop movement	Subset of training areas: those with ground troops and troop vehicles; range camps; SEL noise contours (specific)	Noise sensitive areas/incompatible land use
Natural Resource	Developed Areas (concentrated activity/growth/urban)	Construction	Soil erosion	Loss of soil due to erosion caused by construction	Construction sites	Sensitive soils (NRCS SSURGO)
Natural Resource	Surface safety hazard	Training (munitions)	Soil erosion	Loss of soil due to erosion caused by munitions training	Firing points; bombing ranges; SDZ; impact areas	Sensitive soils (NRCS SSURGO)

Appendix F-Table 3A Fort Bliss Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Effect	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Natural Resource	Surface safety hazard	Training (off-road vehicles)	Soil erosion	Loss of soil due to erosion caused by off-road vehicles	Subset of training areas: those with off road vehicle use	Sensitive soils (NRCS SSURGO)
Natural Resource	Surface safety hazard	Training (troop movement)	Soil erosion	Loss of soil due to erosion caused by troop movement	Subset of training areas: those with ground troops and troop vehicles; range camps	Sensitive soils (NRCS SSURGO)
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Construction (impervious surface)	Stormwater Runoff	Increase in stormwater runoff caused by increase in impervious surface	Impervious surface created by construction: building footprints, pavements	Stormwater infrastructure
Surface safety hazard	Developed Areas (concentrated activity/growth/urban)	Training (munitions)	Surface Hazard	Danger caused by UXO or bombing activities	Firing points; bombing ranges; SDZ; impact areas	Area in vicinity of geographic area of military cause
Cultural Resource	Surface safety hazard	Training (munitions)	TCP preservation	Damage or limited access to TCPs by munitions	Firing points; bombing ranges; SDZ; impact areas	TCP locations
Cultural Resource	Surface safety hazard	Training (off-road vehicles)	TCP preservation	Damage or limited access to TCPs by off-road vehicles	Subset of training areas: those with off road vehicle use	TCP locations
Cultural Resource	Surface safety hazard	Training (troop movement)	TCP preservation	Damage or limited access to TCPs by troop movement	subset of training areas: those with ground troops and troop vehicles; range camps	TCP locations
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Training (troop movement)	Traffic	Traffic congestion/roadway closure due to troop movement	subset of training areas: those with ground troops and troop vehicles; range camps	Roadways in vicinity of geographic area of military cause

Appendix F-Table 3A Fort Bliss Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Effect	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop increase	Traffic	Traffic congestion due to increased personnel traveling to Fort Bliss	Subset of highways and roads identified to provide access to Fort Bliss	Roadways in vicinity of geographic area of military cause
Water Resource	Developed Areas (concentrated activity/growth/urban)	Desalination injection well	Water/Surface Contamination	Contamination of water supplies due to desalination effluent	Desalination injection well sites	Water supply: wellfields, reservoirs, river, aquifer, desalination plant
Water Resource	Physical Infrastructure	Railway (creosote, impedance to drainage)	Water/Surface Contamination	Contamination of water supplies due to creosote on railway ties	Rail ROW	Water supply: wellfields, reservoirs, river, aquifer, desalination plant
Water Resource	Surface safety hazard	Training (munitions)	Water/Surface Contamination	Contamination of water supplies due to munitions materials	Firing points; bombing ranges; SDZ; impact areas	Water supply: wellfields, reservoirs, river, aquifer, desalination plant
Water Resource	Surface Contamination	Training (off-road vehicles)	Water/Surface Contamination	Contamination of water supplies due to vehicle fuel and soil erosion	Subset of training areas: those with off road vehicle use	Water supply: wellfields, reservoirs, river, aquifer, desalination plant
Water Resource		Training (troop movement)	Water/Surface Contamination	Contamination of water supplies due to soil erosion	Subset of training areas: those with ground troops and troop vehicles; range camps	Water supply: wellfields, reservoirs, river, aquifer, desalination plant

Appendix F-Table 3A Fort Bliss Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Effect	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Water Resource	Surface safety hazard	Use of Restricted Airspace	Water/Surface Contamination	Contamination of water supplies due to air to ground bombing munitions materials	Restricted airspace	Water supply: wellfields, reservoirs, river, aquifer, desalination plant

Appendix F Table 3B Holloman Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Surface safety hazard	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation)	Aircraft Mishaps creating safety issues to communities	Clear Zones/APZs, airspace	Area in Vicinity of geographic area of military cause
Air Quality	Airspace (Non-Hazardous Activity)	Aircraft Operations & Training (Aviation)	Increase in greenhouse gasses due to aviation activities	Training Airspace Units	Air Basin
Air Quality	Surface safety hazard	Fugitive Dust emissions from Bombing	Decrease in air quality	Centennial Range, McGregor Range	Air Basin
Airspace (Non-Hazardous Activity)	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation)	Increasing difficulty using airspace for private and commercial flights	Training Airspace Units	Commercial/Public airspace
Airspace (Non-Hazardous Activity)	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation)	impacts to commercial operations at spaceport	Training Airspace Units	Commercial/Public airspace used by spaceport
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Increase in personnel may decrease available housing	Proximity to installation/concentration of military personnel	Available real estate
Institutional Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Fluctuations	Effects to local economy and services due to fluctuations in troops and therefore tax base	Proximity to installation/concentration of military personnel	Nearby communities and Otero County in proximity to installation/concentration of military personnel
Institutional Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Decreased availability of public services such as law enforcement, fire-fighting, and medical services due to increased demands from personnel	Proximity to installation/concentration of military personnel	Nearby communities and Otero County in proximity to installation/concentration of military personnel
Institutional Infrastructure	Noise/vibration	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	decrease in real property value due to noise from military operations	Proximity to installation/concentration of military personnel	Real property in vicinity of Holloman

Appendix F Table 3B Holloman Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Institutional Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Exceedance of school capacity due to additional enrollment by troop families	Proximity to installation/concentration of military personnel	Schools
Water Resource	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Exceedance of water supply due to increased demand	Proximity to installation/concentration of military personnel	Water supply: well fields, reservoirs, river, aquifer, desalination plant
Institutional Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Increased consumption of energy resources affecting local communities	Proximity to installation/concentration of military personnel	Utility infrastructure
Frequency Spectrum	Surface safety hazard	Electromagnetic radiation sources	Accidental detonation of explosives or fuels caused by EMI	Holloman AFB EMI sources	Fuel storage in Vicinity of geographic area of military cause
Wildfires	Airspace (Non-Hazardous Activity)	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Wildfire due to chaff used during training	Training Airspace Units	Area in Vicinity of geographic area of military cause
Wildfires	Surface safety hazard	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Wildfire due to munitions	Bombing ranges; SDZs	Area in Vicinity of geographic area of military cause
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Exceedance of wastewater infrastructure capacity	Holloman AFB and downstream	Wastewater infrastructure
Protected Area	Airspace (Hazardous Activity)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Degradation of Otero Mesa due to mission activities	Training Airspace Units, McGregor Range, Centennial Range	Otero Mesa
Recreational Resource	Airspace (Hazardous Activity)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Decrease in solitude and value of existing recreation sites	Training Airspace Units, McGregor Range, Centennial Range	Recreation sites
Recreational Resource	Airspace (Hazardous Activity)	Aircraft Operations & Training (Aviation,	Impacts to recreation facilities such as ski lift	Holloman AFB, Training Airspace	Recreation sites

Appendix F Table 3B Holloman Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
		Munitions/Chaff and Flare Use)	Gondolas, gaming locations, or the Spencer Theater		
Protected Area	Airspace (Hazardous Activity)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Annoyance/Damage to SULMAS	Training Airspace Units	SULMAs under airspace
Noise/vibration	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Annoyance due to Increase in noise levels	Training Airspace Units (general area); SEL noise contours (specific)	Incompatible land uses
Noise/vibration	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Disproportionate effects of noise on EJ populations	Training Airspace Units (general area); SEL noise contours (specific)	EJ populations
Noise/vibration	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Greater annoyance results from night-time noise	Subset of Training Airspace Units used for night time operations; noise contours	Incompatible land uses
Noise/vibration	Institutional Infrastructure	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Damage to water tanks used for grazing	Training Airspace Units (general area); SEL noise contours (specific)	Water tanks
Noise/vibration	Physical Infrastructure	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Damage to structures such as buildings, windmills, radio towers, etc.	Training Airspace Units (general area); SEL noise contours (specific)	Structures
Noise/vibration	Natural Resource	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Nest abandonment due to noise	Training Airspace Units (general area); SEL noise contours (specific)	Nests of T&E species
Noise/vibration	Institutional Infrastructure	Aircraft Operations & Training (Aviation, Munitions/Chaff and	Cracking of chicken eggs/decrease in hatchability due to noise	Training Airspace Units (general area); SEL noise contours (specific)	Chicken operations

Appendix F Table 3B Holloman Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
		Flare Use)			
Noise/vibration	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Startle response in privately owned animals	Training Airspace Units (general area); SEL noise contours (specific)	Animal pens/grazing areas
Noise/vibration	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Sonic booms effects on communities, residential areas	Supersonic airspace with buffer distance (10 nautical miles- assumption)	Developed areas Residential areas Communities Isolated homes Urban development areas
Noise/vibration	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Noise and startle effects on residents from low-level fast moving aircraft	MTRs; MOAs with low minimum altitudes; restricted airspace to surface outside DoD boundaries.	Residential areas Subdivisions Communities Isolated homes
Natural Resource	Surface safety hazard	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Soil erosion due to surface disturbance	Training Airspace Units, McGregor Range, Centennial Range	Sensitive soils
Surface safety hazard	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	UXO due to operations mishaps	Training Airspace Units	Area in Vicinity of geographic area of military cause
Surface safety hazard	Developed Areas (concentrated activity/growth/urban)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Surface hazard from munitions storage or use	QD areas; SDZs outside military boundaries	
Cultural Resource	Surface safety hazard	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Damage to TCP due to noise/vibrations/munitions	Training Airspace Units (general area); SEL noise contours (specific); bombing ranges; SDZs	TCP

Appendix F Table 3B Holloman Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
Cultural Resource	Airspace (Hazardous Activity)	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Decrease in TCP quality due to visual presence of aircraft	Training Airspace Units	TCP
Physical Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Traffic congestion due to increased personnel traveling to Holloman	subset of highways and roads identified to provide access to Holloman	Roadways in vicinity of geographic area of military cause
Institutional Infrastructure	Developed Areas (concentrated activity/growth/urban)	Troop Increase	Arnold Avenue school bus stop safety	subset of highways and roads identified to provide access to Holloman	School bus stops in vicinity of geographic area of military cause
Natural Resource	Surface safety hazard	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Soil contamination from munitions debris or chaff materials	Training Airspace Units	Area in Vicinity of geographic area of military cause
Water Resource	Surface safety hazard	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Water contamination from munitions debris or chaff materials	Holloman AFB	Area in Vicinity of geographic area of military cause
Airspace (Non-Hazardous Activity)	Natural Resource	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Aircraft mishap due to Wildlife Strike Hazard	Clear Zones/APZs	Area in Vicinity of geographic area of military cause
Airspace (Non-Hazardous Activity)	Natural Resource	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Habitat loss/disturbance to critical habitat/special-status species	Training Airspace Units	T&E species habitat
Airspace (Non-Hazardous Activity)	Natural Resource	Aircraft Operations & Training (Aviation, Munitions/Chaff and Flare Use)	Game-species Annoyance resulting in effects to Mescalero economy	Training Airspace Units, Dona Ana Range, McGregor Range	Game species habitat
Developed Areas (concentrated)	Natural Resource	Construction	Demolition of buildings could negatively affect	Construction/Demolition sites	Bat populations

Appendix F Table 3B Holloman Activities and Uses – Affects on Surrounding Areas

Factor	Incompatible With	Cause by Military	Specific Issue	Military Geographic area/GIS data for Cause	Surrounding GIS for Affected area
activity/growth/urban)			resident bat populations		
Airspace (Non-Hazardous Activity)	Natural Resource	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Negative effects to transient, migratory threatened, endangered, and sensitive species	Holloman AFB arrival and departure tracks MTRs MOAs	Migratory avian routes Waterfowl areas Refuges Wetland areas Landfills
Airspace (Non-Hazardous Activity)	Airspace (Hazardous Activity)	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Potential collision with low-flying aircraft	APZs/CZs around airfields, low-level MTRs, Restricted airspace to surface; SDZs outside military boundary	VFR and IFR routes Residential areas, homesites Areas with concentrated activity
Airspace (Non-Hazardous Activity)	Obstacles/Structures	Aircraft Operations & Training (Munitions/Chaff and Flare Use)	Potential collision with low-flying aircraft	APZs/CZs around airfields, low-level MTRs, Restricted airspace to surface	Energy infrastructure Planned utility corridors Transmission lines (above ground)

Appendix G - Department of Defense Land Use Compatibility Guidelines

Appendix G - Land Use Compatibility Table

Land Use Compatibility Guidelines

LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES (dB)			
		CLEAR ZONE	APZ 1	APZ 2	65-69	70-74	75-79	80+
10	Residential							
11	Household units							
11.11	Single units; detached	N	N	Y ¹	A ¹¹	B ¹¹	N	N
11.12	Single units; semi detached	N	N	N	A ¹¹	B ¹¹	N	N
11.13	Single units; attached row	N	N	N	A ¹¹	B ¹¹	N	N
11.21	Two units; side-by-side	N	N	N	A ¹¹	B ¹¹	N	N
11.22	Two units; stacked	N	N	N	A ¹¹	B ¹¹	N	N
11.31	Apartments; walk up	N	N	N	A ¹¹	B ¹¹	N	N
11.32	Apartments; elevator	N	N	N	A ¹¹	B ¹¹	N	N
12	Group quarters	N	N	N	A ¹¹	B ¹¹	N	N
13	Residential hotels	N	N	N	A ¹¹	B ¹¹	N	N
14	Mobile home parks or courts	N	N	N	N	N	N	N
15	Transient lodgings	N	N	N	A ¹¹	B ¹¹	C ¹¹	N
16	Other residential	N	N	N ¹	A ¹¹	B ¹¹	N	N
20	Manufacturing							
21	Food & kindred products; manufacturing	N	N2	Y	Y	Y12	Y13	Y14
22	Textile mill products; manufacturing	N	N2	Y	Y	Y12	Y13	Y14
23	Apparel and other finished products made from fabrics, leather, and similar materials; manufacturing	N	N	N2	Y	Y12	Y13	Y14
24	Lumber and wood products (except furniture); manufacturing	N	Y2	Y	Y	Y12	Y13	Y14
25	Furniture and fixtures; manufacturing	N	Y2	Y	Y	Y12	Y13	Y14
26	Paper & allied products; manufacturing	N	Y2	Y	Y	Y12	Y13	Y14
27	Printing, publishing, and allied industries	N	Y2	Y	Y	Y12	Y13	Y14
28	Chemicals and allied products; manufacturing	N	N	N2	Y	Y12	Y13	Y14
29	Petroleum refining and related industries	N	N	N	Y	Y12	Y13	Y14
30	Manufacturing							
31	Rubber and miscellaneous plastic products	N	N2	N2	Y	Y12	Y13	Y14
32	Stone, clay and glass products	N	N2	Y	Y	Y12	Y13	Y14
33	Primary metal industries	N	N2	Y	Y	Y12	Y13	Y14
34	Fabricated metal products	N	N2	Y	Y	Y12	Y13	Y14
35	Professional and scientific instruments	N	N	N2	Y	A	B	N
39	Miscellaneous manufacturing	N	Y2	Y2	Y	Y12	Y13	Y14
40	Transportation, communications and utilities							
41	Railroad, rapid rail transit and street railroad transportation	N3	Y4	Y	Y	Y12	Y13	Y14
42	Motor vehicle transportation	N3	Y	Y	Y	Y12	Y13	Y14
43	Aircraft transportation	N3	Y4	Y	Y	Y12	Y13	Y14

Appendix G - Land Use Compatibility Table

Land Use Compatibility Guidelines

LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES (dB)			
		CLEAR ZONE	APZ 1	APZ 2	65-69	70-74	75-79	80+
44	Marine craft transportation	N3	Y4	Y	Y	Y12	Y13	Y14
45	Highway & street right-way	N3	Y	Y	Y	Y12	Y13	Y14
46	Automobile parking	N3	Y4	Y	Y	Y12	Y13	Y14
47	Communications	N3	Y4	Y	Y	A15	B15	N
48	Utilities	N3	Y4	Y	Y	Y	Y12	Y13
49	Other transportation communications and utilities	N3	Y4	Y	Y	A15	B15	H
50	Trade							
51	Wholesale trade	N	Y2	Y	Y	Y12	Y13	Y14
52	Retail trade-building materials, hardware and farm equipment	N	Y2	Y	Y	Y12	Y13	Y14
53	Retail trade- general merchandise	N	N2	Y2	Y	A	B	N
54	Retail trade- food	N	N2	Y2	Y	A	B	N
55	Retail trade- automotive, marine craft, aircraft and accessories	N	Y2	Y2	Y	A	B	N
56	Retail trade- apparel and accessories	N	N2	Y2	Y	A	B	N
57	Retail trade- furniture, home furnishings and equipment	N	N2	Y2	Y	A	B	N
58	Retail trade- eating and drinking establishments	N	N	N2	Y	A	B	N
59	Other retail trade	N	N2	Y2	Y	A	B	N
60	Services							
61	Finance, insurance and real estate services	N	N	Y6	Y	A	B	N
62	Personal services	N	N	Y6	Y	A	B	N
62.4	Cemeteries	N	Y7	Y7	Y	Y12	Y12	Y14, 21
63	Business services	N	Y8	Y8	Y	A	B	N
64	Repair services	N	Y2	Y	Y	Y12	Y13	Y14
65	Professional services	N	N	Y6	Y	A	B	N
65.1	Hospitals, nursing homes	N	N	N	A*	B*	N	N
65.1	Other medical facilities	N	N	N	Y	A	B	N
66	Contract construction services	N	Y6	Y	Y	A	B	N
67	Governmental services	N	N	Y6	Y*	A*	B*	N
68	Educational services	N	N	N	A*	B*	N	N
69	Miscellaneous services	N	N2	Y2	Y	A	B	N
70	Cultural, Entertainment and Recreational							
71	Cultural activities (including churches)	N	N	N2	A*	B*	N	N
71.2	Nature exhibits	N	Y2	Y	Y*	N	N	N
72	Public assembly	N	N	N	Y	N	N	N
72.1	Auditoriums, concert halls	N	N	N	A	B	N	N
72.11	Outdoor music shell, amphitheaters	N	N	N	N	N	N	N

Appendix G - Land Use Compatibility Table

Land Use Compatibility Guidelines								
LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES (dB)			
		CLEAR ZONE	APZ 1	APZ 2	65-69	70-74	75-79	80+
72.2	Outdoor sport arenas, spectator sports							
73	Amusements	N	N	Y8	Y	Y	N	N
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y8, Y9, Y10	Y	Y*	A*	B*	N
75	Resorts and group camps	N	N	N	Y*	Y*	N	N
76	Parks	N	Y8	Y8	Y*	Y*	N	N
79	Other cultural, entertainment and recreation	N	Y9	Y9	Y*	Y*	N	N
80	Resources production and extraction							
81	Agriculture (except livestock)	Y16	Y	Y	Y18	Y19	Y20	Y20, 21
81.5-81.7	Livestock farming and animal breeding	N	Y	Y	Y18	Y19	Y20	Y20, 21
82	Agricultural related activities	N	Y5	Y	Y18	Y19	Y20	N
83	Forestry activities and related services	N5	Y	Y	Y18	Y19	Y20	Y20, 21
84	Fishing activities and related services	N5	Y5	Y	Y	Y	N	Y
85	Mining activities and related services	N	Y5	Y	Y	Y	N	Y