

# Fort Bliss

## Texas and New Mexico

### Mission and Master Plan



# FINAL

## SUPPLEMENTAL PROGRAMMATIC

### ENVIRONMENTAL IMPACT STATEMENT

VOLUME II: APPENDICES A THROUGH D

March 2007

# **Fort Bliss, Texas and New Mexico Mission and Master Plan**

## **FINAL SUPPLEMENTAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT**

### **Volume II: Appendices A through D**

**Prepared for:**

**U.S. Army Air Defense Artillery Center and Fort Bliss  
Fort Bliss, Texas and New Mexico**

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**March 2007**

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**APPENDIX A  
NATIONAL ENVIRONMENTAL POLICY ACT  
TERM DEFINITIONS, CONTRIBUTING FACTORS, AND METHODOLOGY  
FOR EVALUATING MISSION ACTIVITIES, PROJECTS, AND ENVIRONMENTAL  
MANAGEMENT ACTIONS**



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50           **A.0    NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) TERM DEFINITIONS,**  
51           **CONTRIBUTING FACTORS, AND METHODOLOGY FOR EVALUATING MISSION**  
52           **ACTIVITIES, PROJECTS, AND ENVIRONMENTAL MANAGEMENT ACTIONS**

53   This updated appendix from the *Fort Bliss Mission and Master Plan Programmatic Environmental*  
54   *Impact Statement (PEIS)* is included in its entirety because it will continue to guide compliance with  
55   NEPA at Fort Bliss. It is designed to be used in combination with the PEIS and this Supplemental  
56   Environmental Impact Statement (SEIS).

57           **A.1    DEFINITION OF KEY TERMS**

58   **Activity.** The terms “activity” and “activities” may refer to a mission activity such as a training exercise,  
59   a Master Plan project, or natural or cultural resource management practice. These terms are used  
60   throughout the PEIS, the SEIS, and this appendix.

61   **Adverse Impact.** A negative effect caused directly or indirectly by an action and may be long-term or  
62   short-term.

63   **Beneficial Impact.** A positive effect caused directly or indirectly by an action and may be long-term or  
64   short-term.

65   **Categorical Exclusion (CX).** Actions which do not individually or cumulatively have a significant  
66   effect/impact on the human environment and for which, therefore, neither an Environmental Assessment  
67   (EA) nor an Environmental Impact Statement (EIS) is required. Typically, excluded activities are small,  
68   routine undertakings with no potential significant environmental effect. For a list of CXs from Army 32  
69   Code of Federal Regulations (CFR) Part 651, Environmental Analysis of Army Actions, see **Attachment 1** to  
70   this appendix. **Attachment 2** contains the form used to document a CX.

71   **Cumulative Impact.** The effect on the environment which results from the incremental impact of the  
72   action when added to other past, present, and reasonably foreseeable future actions, regardless of what  
73   agency (federal or nonfederal, private industry, or individual) undertakes such other actions. Cumulative  
74   impacts can result from individually minor but collectively significant actions taking place over a period  
75   of time (40 CFR 1508.7).

76   **Description of Proposed Action and Alternatives (DOPAA).** A document prepared by the proponent  
77   of an action describing the purpose and need for the proposed action, components of the action that have  
78   the potential for affecting the environment (e.g., facilities construction, field training exercise), and  
79   identifying reasonable alternatives for accomplishing the purpose and need for the action. The DOPAA is  
80   reviewed by the Fort Bliss Directorate of Environment (DOE) to determine the NEPA analysis and/or  
81   other environmental analysis required. **Attachment 3** describes the Range Facility Management Support  
82   System (RFMSS) process used to request review of range and maneuver training area use.

83   **Direct Impact.** Direct effects which are caused by the action and occur at the same time and place.

84   **Draft Environmental Impact Statement (DEIS).** A public document describing the proposed action,  
85   alternatives, and environmental effects of the alternatives. The DEIS is prepared after the scoping process  
86   has been completed, in accordance with the scope decided upon in the scoping process, and is then  
87   circulated to the affected public for comment.

88   **Environmental Assessment.** A concise public document prepared by the installation to evaluate a  
89   proposed action and its potential effects on the environment when the significance of its impacts is  
90   uncertain. The EA includes brief discussions of the need for the proposal and alternatives and of the

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91 environmental effects of the proposal and alternatives. Also included, is a listing of the agencies and  
92 persons consulted during document preparation.

93 **Environmental Impact Statement (EIS).** A public document that describes a proposed action,  
94 alternatives, and their environmental effects. An EIS is prepared for major federal actions with  
95 significant or potentially significant environmental impacts.

96 **Final Environmental Impact Statement (FEIS).** The result of the analysis of comments concerning the  
97 DEIS. Comments received from designated federal, tribal governments, state, and local agencies, any  
98 agency that has requested copies of impact statements, and the public, including interested or affected  
99 persons and organizations, are included in the FEIS, along with responses, and the analysis in the DEIS is  
100 updated as appropriate based on the comments.

101 **Finding of No Significant Impact (FONSI).** When the environmental analyses in an EA demonstrate  
102 that an action, not otherwise excluded, does not require an environmental impact statement, a FONSI is  
103 prepared. The FONSI includes a summary of the conclusions of the EA and notes any environmental  
104 documents related to it. If the EA is attached to the FONSI, the FONSI need not repeat any EA  
105 discussion, but may incorporate it by reference. The FONSI is signed by the decision-maker.

106 **Impact.** The terms “impacts” and “effects” are synonymous as used in NEPA. Impacts may be  
107 beneficial or adverse, and may apply to the natural, aesthetic, historic, cultural, and socioeconomic  
108 resources of the installation and the surrounding communities. Where applicable, impacts may be  
109 classified as direct or indirect. The terms “impact” and “effect” are defined in 40 CFR 1508.8 and  
110 reproduced in 32 CFR 651.

111 **Indirect Impact.** An impact that is caused by a proposed activity but is later in time or farther removed  
112 in distance, but still reasonably foreseeable. Indirect impacts may include land use changes or population  
113 density changes and the related effects these changes will have on air, water, and other natural or social  
114 systems. For example, clearing trees may have an indirect impact on area streams by increasing soil  
115 erosion. The term “indirect” is defined in 40 CFR 1508.8 and reproduced in 32 CFR 651.

116 **Long-term Impact.** The effect of an action that is not temporary and generally endures beyond the time  
117 frame of the action itself. Long-term impacts may occur either during the construction or operational  
118 phases of an activity. For example, the construction of a new building may create long-term impacts  
119 during both the construction and operational phases. Draining of a wetland for the construction of a new  
120 building will create long-term and permanent impacts on biological resources. Likewise, once  
121 operational, the new building may create additional long-term impacts such as increased population  
122 density, waste generation, etc.

123 **Mitigation.** The term “mitigation” is defined in 40 CFR 1508.20 and reproduced in 32 CFR 651.  
124 Mitigation generally includes:

- 125 • Avoiding the impact altogether by stopping or modifying the proposed action;
- 126 • Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- 127 • Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- 128 • Reducing or eliminating the impact over time by preservation and maintenance operations during  
129 the life of the action; and
- 130 • Compensating for the impact by replacing or providing substitute resources or environments.

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131 **No Impact.** “No impact” implies that a particular activity creates neither a direct nor indirect impact,  
132 does not have long- or short-term implications, and is neither beneficial nor negative.

133 **Notice of Intent (NOI).** When a decision has been made to prepare an EIS, a NOI is written. It contains  
134 a description of the proposed action and possible alternatives, the proposed scoping process and schedule,  
135 and the name and address of the point-of-contact who can provide more information.

136 **Programmatic Environmental Impact Statement.** A legal document prepared in accordance with the  
137 requirements of Section 102(2)(C) of NEPA, which evaluates the environmental impacts of proposed  
138 federal actions that involve multiple decisions potentially affecting the environment at one or more sites.

139 **Record of Decision (ROD).** A document produced no less than 30 days after completion of an FEIS.  
140 Generally, the purpose of the ROD is to state the decision for the proposal. In doing so, it identifies all  
141 alternatives considered and specifies which alternative was environmentally preferable. It states if all  
142 practicable means have been taken to avoid or minimize environmental harm from the selected  
143 alternative, and if not, why not. It identifies the monitoring and mitigation program adopted (if needed)  
144 and may discuss preferences among alternatives based on nonenvironmental factors (i.e., economic and  
145 technological). The ROD is not exclusively an environmental document, since the decision-maker  
146 considers these other nonenvironmental factors in addition to environmental factors.

147 **Record of Environmental Consideration (REC).** A REC describes the proposed action and anticipated  
148 time frame, identifies the proponent, and explains why further environmental analysis and documentation  
149 is not required. It is a signed statement to be submitted with project documentation. It is used when the  
150 proposed action is exempt from the requirements of NEPA or has been adequately assessed in existing  
151 documents and determined not to be environmentally significant. For a REC format adopted by Fort  
152 Bliss, see **Attachment 4**.

153 **Scoping.** The scoping process occurs when planning for an Army project action indicates a need for the  
154 preparation of an EIS. Scoping determines the range of issues to be addressed in the EIS and identifies  
155 the significant issues related to the proposed action. The parties involved identify the range of actions,  
156 alternatives, and impacts to consider in the EIS.

157 **Short-term Impact.** An impact that is temporary or of short duration. Short-term impacts usually occur  
158 during the construction phase of the activity. For example, dust generated during construction would be  
159 considered a short-term impact if the site is subsequently covered or revegetated.

160 **Significance.** The term “significance” is defined in 40 CFR 1508.27 and reproduced in 32 CFR 651.  
161 Significance requires consideration of the context and intensity of the impact or effect. Significance can  
162 vary in relation to the context of the proposed action. The significance of a proposed action may include  
163 consideration of the effects on a national, regional, and local basis. Both short- and long-term effects may  
164 be relevant. Impacts may also be evaluated in terms of their intensity or severity. Factors contributing to  
165 the intensity of a project include:

- 166 • The degree to which the action affects public health or safety;
- 167 • The proximity of the action to resources that are legally protected by regulations and statutes,  
168 such as wetland provisions of the *Clean Water Act*, regulatory floodplains, properties included in  
169 or eligible for inclusion in the National Register of Historic Places (NRHP) (36 CFR 60.4), and  
170 federally listed threatened or endangered species;
- 171 • The degree to which the effects of the action on the quality of the human environment are likely  
172 to be highly uncertain or controversial;

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- 173       • Whether the action is related to other actions with individually insignificant but cumulatively  
174       significant impacts; and
- 175       • Whether the action threatens to violate federal, state, or local law imposed for the protection of  
176       the environment.

177 **Significant Impact.** A negative effect that is caused directly or indirectly by an action and meets the  
178 criteria for significance.

179 **A.2 THE NEPA EVALUATION METHODOLOGY AND CONTRIBUTING FACTORS**

180 The purpose of this document is to provide guidance and procedures for obtaining environmental  
181 clearance(s) and for allowing the time necessary for review of documentation of environmental impacts  
182 for proposed projects and actions. This process is required by NEPA; 32 CFR 651; applicable federal,  
183 state, and local environmental regulations; and other laws for which the Fort Bliss DOE on Fort Bliss has  
184 management responsibility. NEPA requires federal agencies to incorporate into their planning and  
185 decision making an analysis of the effects, if any, certain proposed actions would have on the  
186 environment and the possibilities for mitigating, or avoiding completely, any adverse environmental  
187 effects.

188 The evaluation methodology described in this section indicates the steps to be taken by a project  
189 proponent, or reviewer, to determine the potential environmental impacts of a proposed action. The result  
190 of this screening methodology can also be used by the proponent to identify potential mitigation measures  
191 and additional environmental documentation that may be required to implement the proposed action. The  
192 evaluation methodology is depicted in **Figure A-1** and described in the steps detailed below.

193 Contributing factors associated with each environmental resource area provided can be used as guidelines  
194 in determining the potential for significant adverse impact, adverse impact, no impact, or beneficial  
195 impact. The contributing factors can also be used as (1) a cursory screening tool for qualitative  
196 assessment of whether a project's potential impacts warrant more detailed evaluation, or (2) rigorous  
197 decision criteria for quantitative impact assessment.

198 **Step 1. Develop the DOPAA.** Commanders of units proposing to conduct field training exercises  
199 (FTXs) shall consult with DOE as early as possible to determine if their proposed training will require  
200 either an EA or EIS. DOE has streamlined the NEPA review process for actions occurring on the ranges  
201 by incorporating pre-NEPA review into the Fort Bliss RFMSS process (Attachment 3).

202 RFMSS does not bring all actions requiring NEPA to the attention of DOE, and not all range  
203 environmental requirements are NEPA issues, but they may require another form of environmental  
204 regulatory review. For example, New Mexico requires a permit for the release of 2,000 gallons or more  
205 of gray water (shower or kitchen) at any location. Thus, a unit using the Doña Ana Range-North  
206 Training Areas and planning to release this amount of gray water must obtain a permit from the State of  
207 New Mexico. To ensure compliance with NEPA or other environmental regulatory requirements,  
208 proponents should ensure DOE is aware of the proposed action.

209 Examples of actions that take place within the Main Cantonment Area that require a DOE NEPA review  
210 include construction work orders, U-Do-It projects, pest control actions, and landscaping in historic  
211 districts. Descriptions of each of these actions should be submitted through the Directorate of Public  
212 Works (DPW) to DOE. After a work order is submitted to DPW, it will be released to DOE for review  
213 for compliance with NEPA, hazardous materials, historic resources, and other environmental  
214 laws and regulations.

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215 Proponents of actions such as large or unusual training exercises, large or unique testing activities, or  
216 projects involving major construction must consult early in the planning process with the DOE NEPA  
217 Coordinator to determine if NEPA documentation is required.

218 If the DOE review determines NEPA action is required, the proponent of an action to occur on Fort Bliss  
219 must prepare a statement of the purpose and need for the proposed action and a detailed DOPAA of the  
220 action for use during the screening process. The DOPAA must specify details such as what, where, when,  
221 and how. For example: (what) a new proposal for military training ranges and training areas; (where)  
222 South Training Areas, Doña Ana Range–North Training Areas, specifically the multi-purpose range areas  
223 5 through 7; (when) once per quarter for 4 days; and (how) involving 30 personnel, 4-wheeled vehicles  
224 with trailers, and generators; the training will involve command and control exercises, field operations,  
225 and live firing of X rounds of munitions or missiles. In the case of a project that requires construction,  
226 demolition, or other ground-disturbing activities, answers to these four questions are equally required. In  
227 addition, the proponent must provide reasonable alternatives to the proposed action.

228 **Step 2. Determine if the Proposed Action is Eligible for a CX.** The Department of the Army has  
229 determined that actions covered by CXs (e.g., routine maintenance activities, construction that does not  
230 significantly alter land use, classroom training, routine movement of personnel) do not have an individual  
231 or cumulative impact on the environment and, therefore, do not require an EA or EIS. If a proposed  
232 action is covered by a CX, the proponent will consult with Fort Bliss DOE to confirm that NEPA  
233 coverage by a CX is appropriate and determine if a REC is required. Attachment 1 of this appendix  
234 contains the list of actions that can be categorically excluded as defined by 32 CFR 651. Although the  
235 CX is intended to reduce paperwork and to eliminate or reduce extensive documentation, limitations do  
236 apply. A CX cannot cover all circumstances and each CX must be considered individually to meet certain  
237 criteria. To use a CX, the proponent must satisfy the following screening conditions presented in 32 CFR  
238 651:

239 (a) The action has not been segmented. Segmentation can occur when an action is broken down into  
240 small parts making the effects appear less significant. The scope of a proposed action must  
241 include consideration of connected, cumulative, and similar actions.

242 (b) No exceptional circumstances exist. Extraordinary circumstances that preclude the use of a CX  
243 are:

244 (1) Reasonable likelihood of significant effects on public health, safety, or the  
245 environment.

246 (2) Reasonable likelihood of significant environmental effects (direct, indirect, and  
247 cumulative).

248 (3) Imposition of uncertain or unique environmental risks.

249 (4) Greater scope or size than is normal for this category of action.

250 (5) Reportable releases of hazardous or toxic substances.

251 (6) Release of petroleum, oils, and lubricants except from a properly functioning engine or  
252 vehicle, application of pesticides and herbicides, or where the proposed action results  
253 in the requirement to develop or amend a Spill Prevention, Control, and  
254 Countermeasures Plan.

255 (7) Air emissions exceed *de minimis* levels or a formal Clean Air Act conformity  
256 determination is required.

257 (8) Reasonable likelihood of violating any federal, state, or local law or requirements  
258 imposed for the protection of the environment.

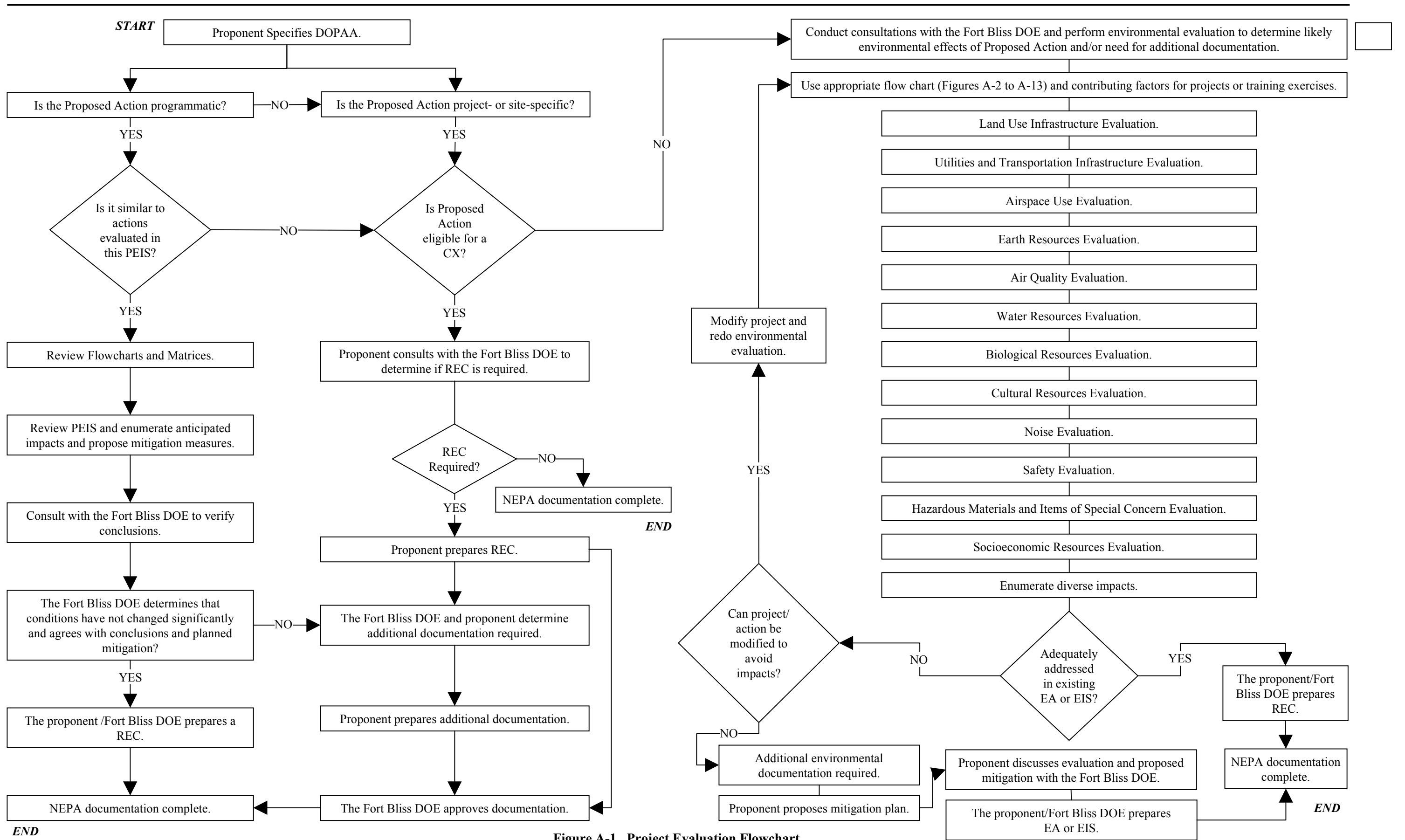


Figure A-1. Project Evaluation Flowchart.



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- 262 (9) Unresolved effect on environmentally sensitive resources, including  
263 (i) Proposed federally listed, threatened, or endangered species or their designated  
264 critical habitats;  
265 (ii) Properties listed or eligible for listing on the National Register of Historic Places;  
266 (iii) Areas having special designation or recognition such as prime or unique  
267 agricultural lands, coastal zones, designated wilderness or wilderness study areas,  
268 wild and scenic rivers, National Historic Landmarks designated by the Secretary  
269 of the Interior, 100-year floodplains, wetlands, sole source aquifers, National  
270 Wildlife Refuges, National Parks, areas of critical environmental concern, or  
271 other areas of high environmental sensitivity;  
272 (iv) Cultural Resources as defined in AR 200-4.  
273 (10) Involving effects on the quality of the environment that are likely to be highly  
274 controversial.  
275 (11) Involving effects on the environment that are highly uncertain, involve unique or  
276 unknown risks, or are scientifically controversial.  
277 (12) Establishes a precedent for future or subsequent actions that are reasonably likely to  
278 have a future significant effect.  
279 (13) Potential for degradation of already existing poor environmental conditions. Also,  
280 initiation of a degrading influence, activity, or effect in areas not already significantly  
281 modified from their natural condition.  
282 (14) Introduction/employment of unproven technology.  
283 (c) One or more CXs listed in Appendix B of 32 CFR 651 encompass the proposed action.

284 The Army and Fort Bliss DOE have developed a system that must be used to document this screening  
285 process. If, based on the foregoing screening criteria, the proposed action qualifies, the proponent must  
286 prepare the CX using Attachment 2.

287 In accordance with Appendix B to 32 CFR 651, some categories of actions will also require a REC (see  
288 Attachment 4), which will be prepared and used in conjunction with the CX. The REC describes the  
289 proposed action and anticipated timeframe, identifies the proponent, and explains why further  
290 environmental analysis and documentation is not required. It is signed by the Fort Bliss Director of  
291 Environment and the proponent of the action and submitted with project documentation. It is used when  
292 required by 32 CFR 651 or when the proposed action has been adequately assessed in existing documents  
293 and determined not to be environmentally significant.

294 When real estate transactions with parties outside the Army are proposed, and if the proposal or project  
295 involves potential release of hazardous substances (see Section A2.3.12 and Figure A-12) into the  
296 environment or structures, an Environmental Baseline Survey (EBS) will also be prepared (**Attachment**  
297 **5**). EBSs are prepared to determine the environmental conditions of properties being considered for  
298 acquisition, outgrants, and disposals. The EBS is used to identify the potential environmental  
299 contamination liabilities associated with real property transactions. The EBS serves as the basis for  
300 preparation of a Finding of Suitability to Lease, Environmental Condition of Property, or Finding of  
301 Suitability for Transfer as required for the transaction to proceed. Most property disposals divesting title  
302 are handled through the General Services Administration (GSA). Such disposal actions usually require an  
303 EBS accompanied by a REC. The GSA will complete the NEPA requirement in many of these cases.  
304 Where the Army completes the disposal or transfer action, the installation may be required to complete an  
305 EA or EIS. Easements, licenses, permits, reassignments with Department of Army, disposal of buildings  
306 and improvements without the underlying land, and privatization of utilities via easement do not require

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307 an EBS. These actions require documentation of an environmental screening in a REC to show  
308 compliance with the criteria for CXs as provided for in 32 CFR 651. Although the EBS is not specifically  
309 a NEPA-related document, it can be used to support decisions regarding NEPA requirements. Samples of  
310 Form 161 (CX), Range Facility Management Support System (RFMSS) review procedures, a REC, and  
311 an EBS are included as Attachments 2, 3, 4, and 5, respectively, to this appendix. All CXs and supporting  
312 documentation must be approved by Fort Bliss DOE prior to commencement of any project.

313 **Step 3. Consult with Fort Bliss DOE to Determine if the Proposed Action Has Been**  
314 **Programmatically Evaluated.** Chapters 2 and 3 of the PEIS and SEIS identify and describe a variety of  
315 known requirements for mission activities, master plan projects, resources management actions, and  
316 mobilization activities either underway or planned for Fort Bliss. Programs specifically analyzed in the  
317 PEIS and SEIS are shown in **Table A-1**. When considering potential impacts of a proposed action, the  
318 proponent should review the environmental consequences of the programmatic actions listed in Table A-1  
319 and described in Chapter 5 of the PEIS and/or SEIS (Environmental Consequences). This review should  
320 focus on determining if the proposed action's potential impacts have already been programmatically  
321 evaluated. Some projects that are consistent with land use designations and infrastructure improvements  
322 described in Chapters 3 of the PEIS and SEIS may require additional NEPA documentation (CX, EA,  
323 EIS). Fort Bliss DOE will confirm that the existing conditions and potential impacts have not changed,  
324 and that conclusions regarding the appropriate program or plan evaluated in the PEIS and SEIS are valid  
325 in regard to the action being proposed.

326 **Step 4. Review Flowcharts and Impact Evaluation Matrices.** If the proposed action is not specifically  
327 evaluated in the PEIS or SEIS and it is not subject to a CX, the proponent (in coordination with Fort Bliss  
328 DOE) will evaluate the potential environmental impacts associated with the action. Because the mission  
329 activities and Master Plan programs described in the PEIS and SEIS are considered to broadly represent  
330 future proposed actions, it is anticipated that many of the environmental impacts on various resource  
331 categories (such as air quality, biology, and cultural resources) described in the PEIS and SEIS will be  
332 similar to those expected for upcoming programs. Thus, the proponent will carefully review the activities  
333 described in the PEIS and SEIS and determine if the proposed action is similar to any of the programs  
334 evaluated in those documents (i.e., is a proposed program of a similar type or scale as those described in  
335 the PEIS/SEIS) or if the proposed project or activity is site-specific and requires additional NEPA  
336 documentation. Identification of project similarities may reduce the level of assessment required for  
337 evaluating potential environmental impacts. Prior to conducting a detailed evaluation, the proponent will  
338 consult with Fort Bliss DOE. The impact assessment guidance provided in the PEIS and SEIS is based on  
339 the use of the appropriate evaluation chart (i.e., for mission activities and projects) and evaluation criteria.  
340 The proponent will identify and determine the type of impacts the proposed action will have on individual  
341 resource categories and group attributes.

342 **Step 5. Enumerate Impacts and Propose Mitigation Measures.** Following completion of the impact  
343 evaluation matrices, the proponent, in coordination with Fort Bliss DOE, will enumerate the categories  
344 and specific actions that are judged to result in potentially significant adverse impacts. At this point, the  
345 proponent consults with Fort Bliss DOE to evaluate possible mitigation actions that may be proposed to  
346 address potential impacts. If project modifications are proposed, the proponent will re-evaluate the  
347 impact of the project beginning at Step 4.

348 **Step 6. Develop Additional Environmental Documentation.** After enumerating the impacts, the  
349 proponent will consult with Fort Bliss DOE regarding the results of the environmental evaluation and  
350 proposed mitigation measures. DOE will then review the environmental evaluation and proposed  
351 mitigation measures and make a determination as to whether any additional environmental documentation  
352 is required.

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353 The type of environmental documentation required may depend on the findings resulting from the impact  
354 analysis. The primary guidance for determining the type of documentation required is AR 200-1,  
355 Environmental Protection and Enhancement, and 32 CFR Part 651. Actions that are similar in nature to  
356 those described in the PEIS and SEIS will probably require limited documentation in the form of a REC.  
357 More extensive environmental documentation takes the form of a separate EA and a related FONSI, or an  
358 EIS and a related ROD. If an EA or EIS is required, the Fort Bliss DOE will be able to assist the  
359 proponent in identifying appropriate information sources and procedures.

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**Table A-1. Summary of Actions Evaluated in the Fort Bliss Mission and Master Plan PEIS and SEIS**

<i>PEIS and SEIS No Action Alternative</i>			
<i>Mission Activities</i>	<i>Facility Construction and Demolition</i>	<i>Environmental Resource Management</i>	<i>Real Estate Actions</i>
<ul style="list-style-type: none"> <li>• Mission and mission support activities described in the PEIS.</li> <li>• Land use and training uses described in the Training Area Development Concept (TADC).</li> <li>• Mobilization.</li> <li>• Air-to-ground bombing at Centennial Range.</li> <li>• Implementation of Real Property Master Plan adopted in the Record of Decision for the PEIS.</li> <li>• Mission support activities associated with the stationing of one Heavy Brigade Combat Team (BCT) at Fort Bliss.</li> <li>• Development of mission support facilities in TA 1B in the South Training Areas.</li> <li>• Development of mission support facilities in TA 16 on McGregor Range.</li> </ul>	<ul style="list-style-type: none"> <li>• Demolition, construction, facility renovation/rehabilitation, and related infrastructure improvements described in the PEIS.</li> <li>• Projects approved with NEPA documents tiered from the PEIS.</li> <li>• Projects approved with other NEPA documents prepared since the PEIS.</li> <li>• Development of facilities at Biggs AAF for one Heavy BCT.</li> <li>• Projects listed in Table 3.3-1 of the SEIS.</li> <li>• Development of a National Guard and Reserve Joint Training Center in the South Training Areas.</li> <li>• Upgrades to existing live-fire and qualification ranges and new ranges on existing range footprints and/or consistent with designated land use categories.</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of the Integrated Cultural Resources Management Program (ICRMP) and Programmatic Agreements.</li> <li>• Implementation of the Integrated Natural Resources Management Plan (INRMP).</li> <li>• Implementation of the Army's Integrated Training Area Management (ITAM) program.</li> <li>• Implementation of the plans and programs described in Chapter 2 of the SEIS.</li> </ul>	<ul style="list-style-type: none"> <li>• On-going actions utilizing existing procedures for issuing leases, licenses, permits, and easements as authorized in AR 405-80.</li> <li>• Demolition of 1,215 substandard housing units and construction or renovation and operation of up to 3,611 family housing units through the Residential Communities Initiative (RCI).</li> <li>• Enhanced Use Leasing (EUL) at William Beaumont Army Medical Center.</li> </ul>

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<i>SEIS Alternative 1</i>			
<i>Mission Activities</i>	<i>Facility Construction and Demolition</i>	<i>Environmental Resource Management</i>	<i>Real Estate Actions</i>
<p>Same as described for PEIS and SEIS No Action Alternative and:</p> <ul style="list-style-type: none"> <li>• Mission activities associated with the stationing of the units identified in Section 1.3.2 of the SEIS and personnel, equipment, and training described in Section 1.3.3, 1.3.4., and 1.3.5 of the SEIS.</li> <li>• Addition of Off-Road Vehicle Maneuver, Mission Support Facility, Weapons Firing, and SDZ/Safety Footprint training categories in Training Areas (TAs) 9, 25, 30, 31, 32, and portions of 11 and 29 south of Highway 506 on McGregor Range.</li> <li>• Expansion of the Main Cantonment Area to the north and east and change to mixed-use land use designation.</li> </ul>	<p>Same as described for PEIS and SEIS No Action Alternative and:</p> <ul style="list-style-type: none"> <li>• Projects listed in Tables 3.4-1, 3.4-3, and 3.4-4 of the SEIS.</li> <li>• Construction of approximately 1,750 additional family housing units.</li> <li>• Construction of additional support facilities and infrastructure at Doña Ana, Oro Grande, and McGregor Range Camps.</li> <li>• Upgrades to range roads, facilities, instrumentation, and other infrastructure.</li> </ul>	<p>Same as described for PEIS and SEIS No Action Alternative and:</p> <ul style="list-style-type: none"> <li>• Any updates to master plans and environmental plans, programs, and procedures to reflect the land use changes and mission activities encompassed in the selected SEIS alternative.</li> <li>• Development of a Range Complex Master Plan (RCMP) to replace the TADC.</li> </ul>	<p>Same as described for PEIS and SEIS No Action Alternative and:</p> <ul style="list-style-type: none"> <li>• Leasing of land for construction and operation of approximately 1,750 additional family housing units under RCI.</li> </ul>
<i>SEIS Alternative 2</i>			
<i>Mission Activities</i>	<i>Facility Construction and Demolition</i>	<i>Environmental Resource Management</i>	<i>Real Estate Actions</i>
<p>Same as described for Alternative 1 and:</p> <ul style="list-style-type: none"> <li>• Additional Off-Road Vehicle Maneuver, Mission Support Facility, Weapons Firing, and SDZ/Safety Footprint training categories in TA 10, portions of TAs 11 and 29 north of Highway 506, and western half of TA 12 on McGregor Range.</li> </ul>	<p>Same as described for Alternative 1 and:</p> <ul style="list-style-type: none"> <li>• Facilities and infrastructure on Biggs AAF for a second Combat Aviation Brigade.</li> </ul>	<p>Same as described for Alternative 1.</p>	<p>Same as described for Alternative 1.</p>

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<i>SEIS Alternative 3</i>			
<i>Mission Activities</i>	<i>Facility Construction and Demolition</i>	<i>Environmental Resource Management</i>	<i>Real Estate Actions</i>
Same as described for Alternative 1 and: <ul style="list-style-type: none"> <li>• Addition of Off-Road Vehicle Maneuver training category in TAs 24, 26, and 27 on McGregor Range.</li> <li>• Addition of Mission Support Facility, Weapons Firing, and SDZ/Safety Footprint training categories in all TAs approved for Off-Road Vehicle Maneuver.</li> </ul>	Same as described for Alternatives 1 and 2.	Same as described for Alternative 1.	Same as described for Alternative 1.
<i>SEIS Alternative 4 – Proposed Action</i>			
<i>Mission Activities</i>	<i>Facility Construction and Demolition</i>	<i>Environmental Resource Management</i>	<i>Real Estate Actions</i>
Same as described for Alternative 1 and: <ul style="list-style-type: none"> <li>• Addition of Off-Road Vehicle Maneuver training category in all of TAs 10, 11, 24, 26, 27, and 29 and western half of TA 12 on McGregor Range.</li> <li>• Addition of Mission Support Facility, Weapons Firing, and SDZ/Safety Footprint training categories in all TAs approved for Off-Road Vehicle Maneuver.</li> </ul>	Same as described for Alternatives 1 and 2 and. <ul style="list-style-type: none"> <li>• Facilities and infrastructure to support two additional BCTs.</li> </ul>	Same as described for Alternative 1.	Same as described for Alternative 1.

362 **A.2.1 Resource Groups and Attributes**

363 Fourteen resource groups and individual group attributes were established to provide a framework for the  
364 identification of baseline conditions and to facilitate identification of potential impacts. These resource  
365 groups are based on the similarity of attributes, a review of installation resources, related resource  
366 protection laws and regulations, and previous NEPA compliance documents. The resource groups and  
367 attributes are as follows:

368 **A.2.1.1 Land Use**

- 369 • On-Post Land Use
- 370 • Off-Post Land Use
- 371 • Visual Resources

372 **A.2.1.2 Main Cantonment Area Infrastructure**

- 373 • Ground Transportation
- 374 • Utilities
- 375 • Energy
- 376 • Communications

377 **A.2.1.3 Training Area Infrastructure**

- 378 • Ground Transportation
- 379 • Utilities
- 380 • Energy
- 381 • Communications

382 **A.2.1.4 Airspace Management and Use**

- 383 • Airport Operations
- 384 • Restricted Airspace
- 385 • Military Training Routes (MTRs)

386 **A.2.1.5 Earth Resources**

- 387 • Geology
- 388 • Soils

389 **A.2.1.6 Air Quality**

390 **A.2.1.7 Water Resources**

- 391 • Surface Water
- 392 • Groundwater

393 **A.2.1.8 Biological Resources**

- 394 • Vegetation
- 395 • Habitat
- 396 • Wildlife
- 397 • Threatened, Endangered, and Sensitive Species

398 **A.2.1.9 Cultural Resources**

399 **A.2.1.10 Noise**

400 **A.2.1.11 Safety**



401 **A.2.1.12 Hazardous Materials and Items of Special Concern**

- 402 • Hazardous Materials
- 403 • Hazardous Waste
- 404 • Items of Special Concern

405 **A.2.1.13 Socioeconomics**

- 406 • Population
- 407 • Economic Development
- 408 • Housing
- 409 • Community Services

410 **A.2.1.14 Environmental Justice**

- 411 • Minority Populations
- 412 • Low-Income Populations

413 **A.2.2 Project Impact Evaluation Parameters**

414 This section serves as guidance for performing Step 4 of the NEPA Evaluation Methodology described  
415 above and outlines how the Proposed Action in the SEIS was analyzed for potential impacts. The flow  
416 charts and contributing factors were used as a framework to qualitatively evaluate the potential impacts of  
417 the Proposed Action on the resource groups and attributes, and to determine whether more extensive  
418 documentation, in the form of an EIS, was necessary. The flow charts guided the process of  
419 characterizing the baseline status and the impact potential for each resource group and related attributes.  
420 The contributing factors were used to screen project activities and assess the level of environmental  
421 impact. This process can also be followed by proponents of future actions. These matrices provide a  
422 ranking of potential impact for each resource group attribute (1) during siting, construction, and operation  
423 of projects and (2) during training activities.

424 In addition to the programmatic guidance described above, the Fort Bliss NEPA Coordinator will use  
425 various “local” environmental resource categories based on typical installation projects to evaluate  
426 impacts. The following is a general classification of this local evaluation framework. The lists are not  
427 exhaustive, but they contain example projects likely to be proposed on Fort Bliss. Initially, proponents  
428 will consult this list to determine how their project would be evaluated under the programmatic  
429 framework.

430 **A.2.2.1 Air Quality, Noise, Hazardous Materials, and Items of Special Concern**

- 431 • Sandblasting;
- 432 • Spray painting (outdoors);
- 433 • Structural painting (outdoors);
- 434 • Road repair/reconstruction;
- 435 • Construction;
- 436 • Asphalt operations;
- 437 • Projects involving demolition, renovation, removal or repair of building materials (wall
- 438 coverings, floor tile, base cover, roofing materials, building sidings, ceilings, paint) in any man-
- 439 made structure;
- 440 • New source/increase in emissions (vehicles, paint booths, boilers, incinerators);
- 441 • Facility demolition;
- 442 • Ordnance demolition;
- 443 • Training activities or projects with potential for emitting hazardous air pollutants, volatile organic
- 444 compounds, or ozone-depleting chemicals;

- 445       • Projects with potential to generate significant noise, such as new industrial operations, changes in  
446       firing points, flight paths, or new flight paths;  
447       • Off-road vehicle maneuvers in the Fort Bliss Training Complex.

448   **A.2.2.2 Water Resources, Storage Tanks, and Environmental Restoration**

- 449       • Oil/water separators;  
450       • Replacement of exterior water lines;  
451       • Projects impacting/installing wells;  
452       • Projects near groundwater monitoring wells;  
453       • Removal, repair or maintenance of underground storage tanks (USTs) or above ground storage  
454       tanks (ASTs);  
455       • Moving ASTs;  
456       • Projects involving installation of plumbing systems, upgrades, especially drinking water or  
457       sewage connections;  
458       • Projects near any known solid waste management unit (SWMU).

459   **A.2.2.3 Biological Resources**

- 460       • Projects that take place in or near reservoirs, creeks, drainages, Waters of the U.S., or other bodies  
461       of water;  
462       • Areas that may contain migratory bird nests;  
463       • Downrange projects in previously undisturbed areas;  
464       • Projects in or near prairie dog towns;  
465       • Changes in aircraft/airspace use;  
466       • Projects that involve potential effects on sensitive species or their habitats;  
467       • Projects that involve disturbance or removal of natural vegetation;  
468       • Projects that involve removal or control of animals or birds by any means (chemical, physical);  
469       • Projects that disturb or impact wetlands or drainages or areas where protected plants are found;  
470       • Arroyo-riparian crossings;  
471       • Threatened and endangered species;  
472       • Ground-disturbing activities on ranges and undisturbed areas on post;  
473       • Renewals and grants of leases and rights-of-way (ROWs) for ranges and undisturbed areas on  
474       post.

475   **A.2.2.4 Cultural Resources (Prehistoric and Historic Archaeological Resources, Architectural and  
476       Landscape Resources)**

- 477       • Ground-altering activities;  
478       • Main Cantonment Area construction in areas with potential historic archaeological sites;  
479       • New leases or land transfers;  
480       • Undertakings that will directly or indirectly affect facilities and landscapes (including rural  
481       ranges, and training areas) that are eligible for, or included in, the NRHP (historic properties);  
482       • All exterior work that can be seen from historic facilities or from which historic facilities can be  
483       seen;  
484       • Landscapes, roads, walkways, etc., within historic districts or that can be seen from historic  
485       facilities;  
486       • Cold War facilities and landscapes (including ranges and training areas) which retain integrity,  
487       including military missions or Research and Development (R&D) functions;  
488       • Demolition or relocation of properties eligible for inclusion in the NRHP, unevaluated properties  
489       that are more than 45 years old, and Cold War properties which retain integrity that included  
490       military mission or R&D functions.

491 **A.2.2.5 Hazardous Materials and Items of Special Concern**

- 492 • Projects involving disposal of possibly hazardous wastes;
- 493 • Projects in motor pools, especially involving hazardous waste, or petroleum, oils, and lubricants
- 494 (POLs) disposal or storage;
- 495 • Insect or plant control under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA);
- 496 • Any project involving a requirement for a spill plan by a contractor or use of hazardous materials;
- 497 • Standard Operating Procedures (SOPs) for hazardous wastes;
- 498 • Management of pesticides, polychlorinated biphenyls (PCBs), asbestos, and radon;
- 499 • Use of the open detonation pit;
- 500 • Projects built on or near closed landfills or other installation restoration projects;
- 501 • Projects involving the use or storage of hazardous materials;
- 502 • Projects with the potential to generate hazardous waste or hazardous materials;
- 503 • Landfill projects dealing with fill material, reclamation, and erosion;
- 504 • Contracting projects with the potential to generate solid waste or involve items of special
- 505 concern;
- 506 • Projects near active landfills.

507 **A.2.2.6 Training Area Management**

- 508 • Project management and control: training requirements identification, monitoring, data
- 509 collection;
- 510 • Development and program use of GIS data layers and remote imagery: land use management,
- 511 map production;
- 512 • Land maintenance: soil stabilization/protection, maneuver damage repair, erosion control, range
- 513 and training facility repair, maneuver corridor development, low water crossings, field work;
- 514 • Awareness training: video, pamphlets/field cards, classroom instruction.

515 **A.2.3 Contributing Factors for Projects or Training Exercises**

516 The following sections contain a summary of key issues related to potential impacts for each resource  
517 group described in Section A.2.1. In addition, a detailed description of some examples of contributing  
518 factors that can be used to rank impacts is provided. These factors are ranked on a scale ranging from  
519 “potentially significant impact,” “impact,” through “no impact” to “beneficial impact,” depending on the  
520 intensity of impact. The significance of the impact will vary with the context and intensity of the  
521 proposed action. Context means the action must be analyzed within the region of influence (ROI),  
522 affected interests, and site-specifically. The intensity of the impact refers to the severity of its  
523 environmental effect. Proposals with potentially significant impacts generally require preparation of an  
524 EA and may require preparation of an EIS.

525 **A.2.3.1 Land Use**

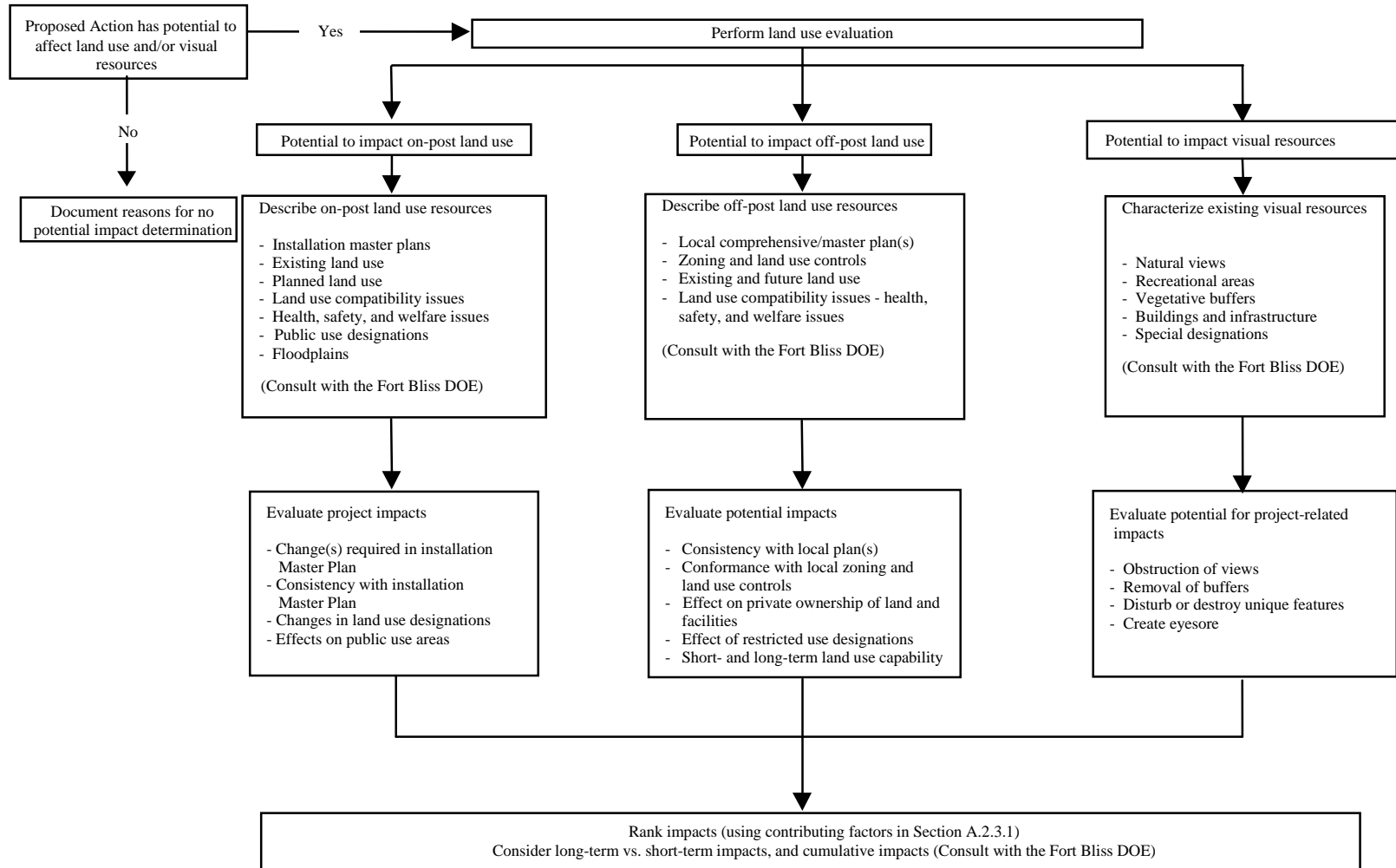
526 The land use resource group includes on-post and off-post land use and visual resources (**Figure A-2**).  
527 Land use plans address the integration of the built and natural environments and the human activities  
528 occurring in a community. In general, a community land use plan is implemented to protect the health,  
529 safety, and welfare of the population. In recent years, land use plans have been used to address protection  
530 of environmental resources and aesthetics.

531 **On-Post Land Use.** When evaluating the project, it is important to consider whether the project is  
532 consistent with the designated land use and compatible with neighboring land uses. If the project is not  
533 appropriate for and compatible with the designated land use, then changes in the project or changes in  
534 zoning may be necessary. The contributing factors for ranking impacts associated with on-post land are  
535 presented below.

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**LAND USE  
(On-Post and Off-Post Land Use and Visual Resources)**



**Figure A-2. Land Use Evaluation Flowchart**

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<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity is inconsistent with the installation Real Property Master Plan and has the potential to adversely affect the health, safety, and welfare of the population or the quality of the environment.</li> <li>• The activity creates a direct conflict among neighboring land use activities, for example, family housing areas and range/training areas.</li> <li>• The activity will permanently alter the existing land use designation, for example, convert open space to commercial facilities.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity is inconsistent with the Real Property Master Plan but does not have the potential to adversely affect the health, safety, and welfare of the population or the quality of the environment.</li> <li>• The activity requires a change in a local land use plan.</li> <li>• The activity requires a change in local military zoning.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity is consistent with the installation Real Property Master Plan and does not affect local land use planning or military zoning.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity is consistent with all planning guidelines and has the potential to have positive effects on public welfare and environmental quality.</li> </ul>

571 **Off-Post Land Use.** When evaluating the activity for land use compatibility, it is also important to  
 572 consider off-post land use plans. Contributing factors for ranking impacts associated with off-post land  
 573 use are presented as follows.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity is inconsistent with off-post land use plans or incompatible with existing land uses and may adversely affect the health, safety, and welfare of the population or the quality of the environment.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity is inconsistent with off-post land use plans or incompatible with existing off-post land uses, but will not adversely affect the health, safety, and welfare of the population or the quality of the environment.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity is consistent with land use plans and compatible with existing land uses.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity is consistent with all land use plans and existing uses and may positively affect public welfare and environmental quality.</li> </ul>

574 **Visual Resources.** Aesthetics, in a broad sense, involve the visual, audio, and tactile environment and  
 575 their emotional or psychological effect on people. Visual resources refer to the structures, landscapes,  
 576 and spaces of an area that provide information for an individual to develop perceptions of the area. When  
 577 considering a project or activity for development, it is important to determine if it will adversely affect the  
 578 visual setting perceived by residents of the surrounding area. Contributing factors for ranking impacts on  
 579 visual resources are provided below.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will degrade the visual scene of the surrounding area, including interfering with natural views, destroying natural vegetative buffers, contributing smoke, causing odors and noise, or discoloring water bodies.</li> <li>• The activity will destroy, damage, or obscure scarce or unique geological features, landscapes, or other objects of particular aesthetic value.</li> <li>• The activity will deny accessibility to aesthetic resources, including recreational access.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity will cause temporary disruption of the visual scene of the surrounding area, but will not disturb natural vegetative buffers.</li> </ul>

<u>Rank (Continued)</u>	<u>Contributing Factors</u>
No Impact	<ul style="list-style-type: none"> <li>• The activity will degrade the visual scene of the surrounding area, but architectural and landscaping techniques are employed to minimize the impact.</li> <li>• The activity will limit accessibility to aesthetic resources, including restricted recreational access.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will not alter the visual or aesthetic character of the area.</li> <li>• The activity will improve or enhance natural landscape views and/or vegetative buffers and will improve the aesthetic character of the area.</li> </ul>

580 **A.2.3.2 Main Cantonment Area Infrastructure**

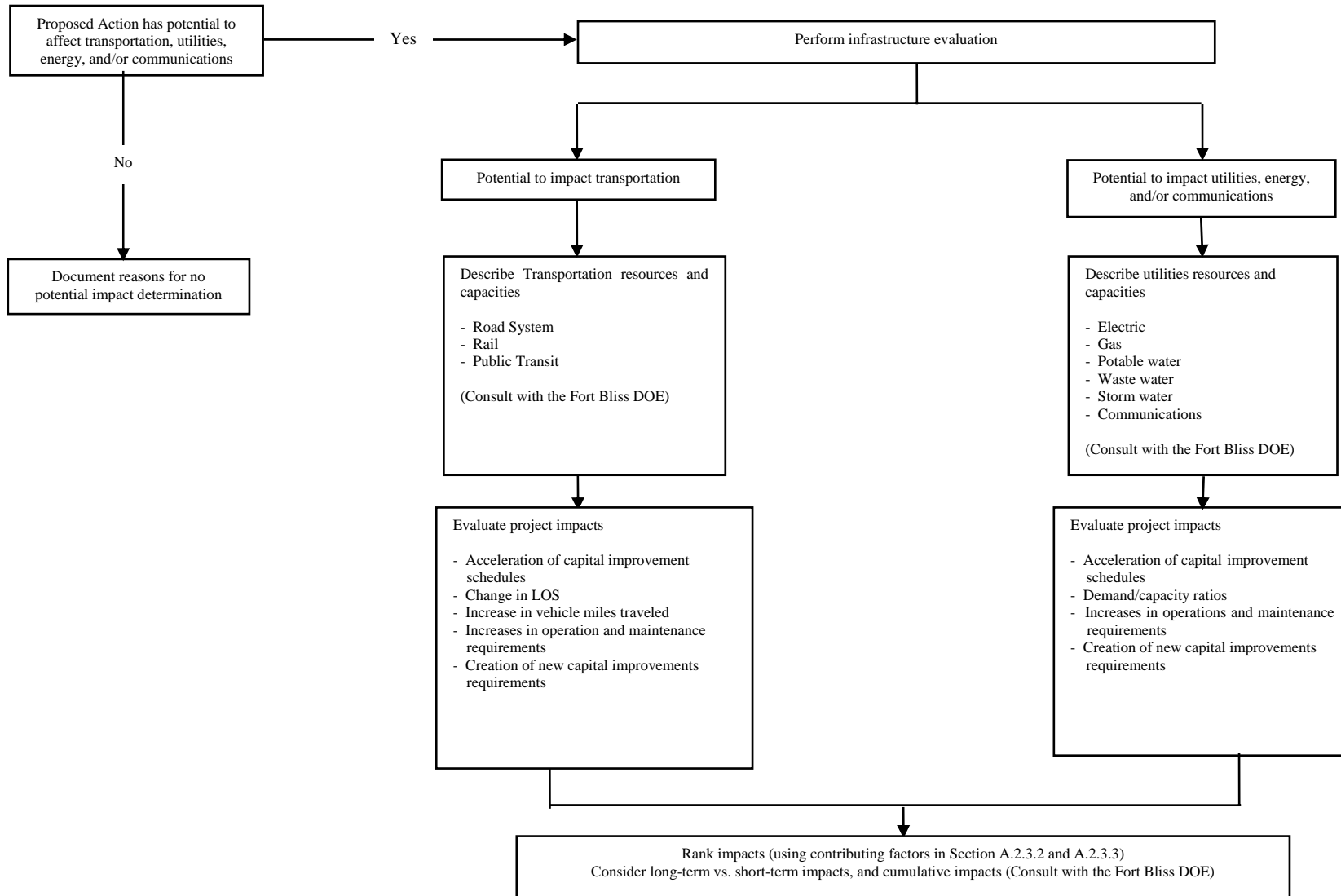
581 The Main Cantonment Area infrastructure resource group includes ground transportation, utilities, energy,  
582 and communications (**Figure A-3**).

583 **Ground Transportation.** Transportation networks include road systems and railroads. Transportation  
584 services facilitate the movement of people and goods. Transportation networks can have high social costs  
585 such as noise, safety hazards, and air pollution. The travel ways can cause aesthetic problems and create  
586 physical barriers to groundwater movement and human and wildlife passage. When evaluating potential  
587 impacts associated with transportation, it is important to consider (1) the extent to which the project's  
588 transportation improvements are consistent with applicable local and regional transportation plans and (2)  
589 the level of service (LOS) resulting from the assignment of project-induced travel demand to the existing  
590 transportation network. Contributing factors for ranking impacts associated with transportation issues are  
591 presented as follows.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity requires transportation services and/or infrastructure that are nonexistent and will need to be constructed before construction of the project.</li> <li>• The activity is likely to result in increased use of a public road such that the LOS would decrease to an unacceptable level, as defined in county or local comprehensive plans.</li> <li>• The activity is likely to result in increased use of railways beyond existing or projected capacity.</li> <li>• The activity requires the acceleration of planned capacity improvements by more than 5 years.</li> <li>• The activity requires development of new or significantly expanded transportation services, which will cause cumulative impacts on air quality, water quality, and biological resources.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity is likely to result in increased utilization of a public road which may cause a decrease in the LOS, but the LOS will not degrade from acceptable to unacceptable levels.</li> <li>• The activity is likely to result in increased utilization of railways but is not projected to exceed existing or projected capacity.</li> <li>• The activity is likely to limit expanded transportation services, which are not projected to increase impacts on air quality, water quality, and biological resources.</li> <li>• The activity requires the acceleration of planned capacity improvements by 1 to 5 years.</li> </ul>

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**MAIN CANTONMENT AREA INFRASTRUCTURE  
(Ground Transportation, Utilities, Energy, and Communications)**



**Figure A-3. Main Cantonment Area Infrastructure Evaluation Flowchart**

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**Rank (Continued)**

**Contributing Factors**

No Impact

- The activity will not increase utilization of transportation services.
- The activity requires related increases in transportation services that are not anticipated to decrease the LOS projected in county or local comprehensive plans.
- The activity requires the acceleration of planned capacity improvements by less than 1 year.

Beneficial Impact

- The activity will enhance existing services and/or infrastructure.

630 **Utilities.** Utilities refer to the public services such as water and sanitation that are located in the areas that  
 631 serve and are used by residents and installation activities. Utility services provided at Fort Bliss include:  
 632 potable water, sewage collection and treatment, storm water collection, and trash collection and disposal.  
 633 A key consideration in evaluating the impacts associated with a project is to compare the increased or  
 634 decreased demand for utility services with the unused capacity of the provider. Contributing factors for  
 635 ranking impacts associated with utility issues regarding water, sewage, and storm water collection are  
 636 provided below, followed by factors for ranking impacts associated with solid waste and landfills.

**Rank**

**Contributing Factors**

Potentially

- The activity will require utility services that are nonexistent.
- The immediate and/or long-term utility needs of the activity have the potential to exceed the actual or projected capacity of the utility to provide service, without a major system modification such as additional generation capacity.
- The activity requires the acceleration of planned capacity improvements by more than 5 years.

Significant Impact

- The activity is likely to increase immediate and or long-term demand for service of one or more utilities beyond current or projected capacity, without minor system modifications such as increasing capacity to existing distribution systems or the extension of distribution systems.
- The activity requires the acceleration of planned capacity improvements by 1 to 5 years.

Impact

- The activity does not affect demand for any utilities.
- The immediate and/or long-term increases in demand for service are not expected to warrant any system modification.
- The activity requires the acceleration of planned capacity improvements by less than 1 year.

No Impact

- The activity will result in improved efficiencies or conservation.

Beneficial Impact

637 **Solid Waste and Landfills.** When considering the impact of a project on the generation of solid waste, it  
 638 is important to determine the volume and rate of waste generation and the capacity of solid waste landfills  
 639 and waste management practices, including recycling.

**Rank**

**Contributing Factors**

Potentially

- Recyclable solid wastes generated by the activity will not be recycled because the volume generated will exceed the capacity of recycling operations.
- Accommodating the increased solid waste generated will cause a substantial increase in consumer cost of waste management.
- Storage and handling of wastes increases the potential for spills or leaks and that may potentially contaminate soil, groundwater, or surface water.

Significant Impact



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**Rank (Continued)**

**Contributing Factors**

- |                   |   |
|-------------------|---|
| Impact            | <ul style="list-style-type: none"> <li>• Solid waste volumes generated will reduce the life of existing waste management and disposal operations.</li> <li>• Accommodating the increased waste generated will cause a nominal increase in consumer cost of waste management.</li> </ul> |
| No Impact         | <ul style="list-style-type: none"> <li>• The activity will not increase the waste stream.</li> </ul>  |
| Beneficial Impact | <ul style="list-style-type: none"> <li>• The activity will reduce the economics and environmental costs and/or effects of solid waste management.</li> </ul>  |

640 **Energy.** Energy refers to public services such as electricity and natural gas. A key consideration in  
 641 evaluating the impacts associated with a project is to compare the increased or decreased demand for  
 642 energy services with the unused capacity of the provider. Contributing factors for ranking impacts  
 643 associated with energy issues are presented below.

**Rank**

**Contributing Factors**

- |                                |  |
|--------------------------------|--|
| Potentially Significant Impact | <ul style="list-style-type: none"> <li>• The activity will require energy services that are nonexistent.</li> <li>• The immediate and/or long-term energy needs of the activity have the potential to exceed the actual or projected capacity of the energy supplier to provide service, without a major system modification such as additional generation capacity.</li> <li>• The activity requires the acceleration of planned capacity improvements by more than 5 years.</li> </ul> |
| Impact                         | <ul style="list-style-type: none"> <li>• The activity is likely to increase immediate and/or long-term demand for service of one or more energy utilities beyond current or projected capacity without minor system modifications such as increasing capacity to existing distribution systems.</li> <li>• The activity requires the acceleration of planned capacity improvements by 1 to 5 years.</li> </ul>   |
| No Impact                      | <ul style="list-style-type: none"> <li>• The activity does not affect demand for any energy utilities.</li> <li>• The immediate and/or long-term increases in demand for service are not expected to warrant any system modification.</li> <li>• The activity requires the acceleration of planned capacity improvements by less than 1 year.</li> </ul>   |
| Beneficial Impact              | <ul style="list-style-type: none"> <li>• The activity will improve economic and/or environmental efficiencies associated with energy services.</li> </ul>  |

644 **Communications.** This refers to public communication services that are located in the areas that serve  
 645 and are used by residents and installation activities. A key consideration in evaluating the impacts  
 646 associated with a project is to compare the increased or decreased demand for public communication  
 647 services with the unused capacity of the provider. In addition, radio frequency interference from radar,  
 648 instrumentation, and communication transmitters can affect communications within the region.  
 649 Contributing factors for ranking impacts that are associated with communication issues are provided below.

**Rank**

**Contributing Factors**

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|--------------------------------|--|
| Potentially Significant Impact | <ul style="list-style-type: none"> <li>• The activity will require communication services that are nonexistent.</li> <li>• The action will stop activity of other regional users.</li> <li>• The immediate and/or long-term communication needs of the activity have the potential to exceed the actual or projected capacity of the system to provide service, without a major system modification such as additional capacity.</li> <li>• The activity requires the acceleration of planned capacity improvements by more than 5 years.</li> </ul> |
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<u>Rank (Continued)</u>	<u>Contributing Factors</u>
Impact	<ul style="list-style-type: none"> <li>• The activity is likely to increase immediate and/or long-term demand for service beyond current or projected capacity, without minor system modifications such as increasing capacity to existing distribution systems or the extension of distribution systems.</li> <li>• The activity results in regional radio frequency interference that requires adaptation by other regional frequency users.</li> <li>• The activity requires the acceleration of planned capacity improvements by 1 to 5 years.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity does not affect demand for or quality of regional communications.</li> <li>• The immediate and/or long-term increases in demanded for service are not expected to warrant any system modification.</li> <li>• The activity requires the acceleration of planned capacity improvements by less than 1 year.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will enhance the immediate and/or long-term communication needs or quality of the activity.</li> </ul>

650 **A.2.3.3 Training Area Infrastructure**

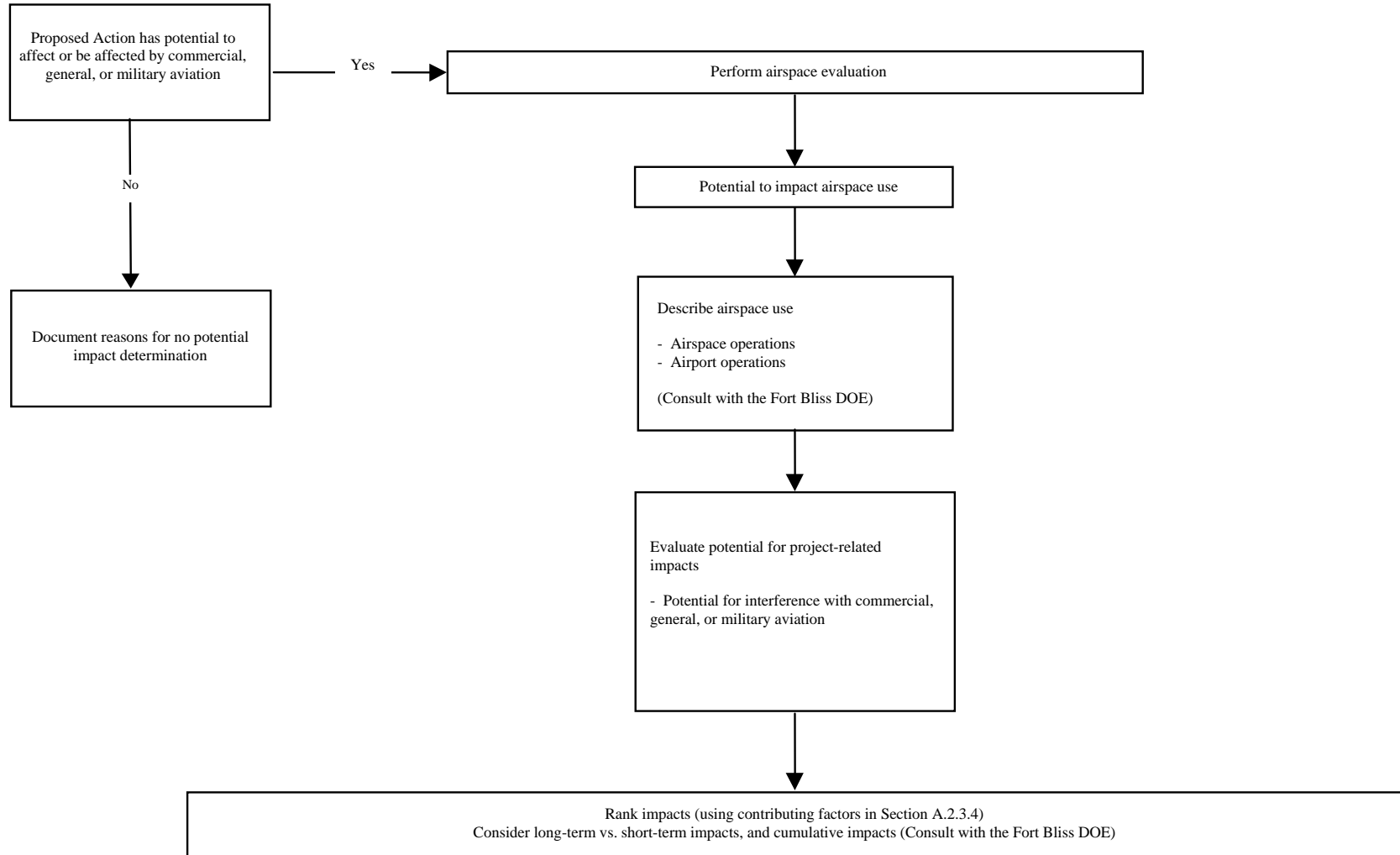
651 The Training Area infrastructure resource group includes ground transportation, utilities, energy, and  
 652 communications (see Figure A-3). The criteria for ranking these resources are the same for the training  
 653 area as for the Main Cantonment Area described in A.2.3.2.

654 **A.2.3.4 Airspace Management and Use**

655 Airspace must be managed and used in a manner that best serves the competing needs of commercial,  
 656 general, and military aviation (**Figure A-4**). The Federal Aviation Administration (FAA) is responsible  
 657 for the overall management of airspace and has established different airspace designations that are  
 658 designed to protect aircraft during flights to or from an airport, transiting between airports, flying in the  
 659 enroute airspace system, or operating within “special use” areas identified for defense-related purposes.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will restrict, limit, or otherwise delay other air traffic in the region.</li> <li>• The activity will require major modifications to airspace or air traffic control systems and/or facilities.</li> <li>• The activity will encroach on airspace designated for special use in the area.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity will require airspace realignment or air traffic control procedural changes which do not disrupt the general flow of air traffic in an area.</li> <li>• The activity will require temporary changes to air traffic operations that do not significantly delay or restrict aircraft movements.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity will not restrict enroute or airport air traffic operations, require airspace Air Traffic Control (ATC) or navigational modifications, encroach upon adjacent airspace, or affect airport capacity.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will improve/enhance ATC systems/facilities, or improve flow of air traffic.</li> </ul>

**AIRSPACE MANAGEMENT AND USE**  
**(Airport Operations, Restricted Airspace, MTRs)**



**Figure A-4. Airspace Management and Use Evaluation Flowchart**

696 **A.2.3.5 Earth Resources**

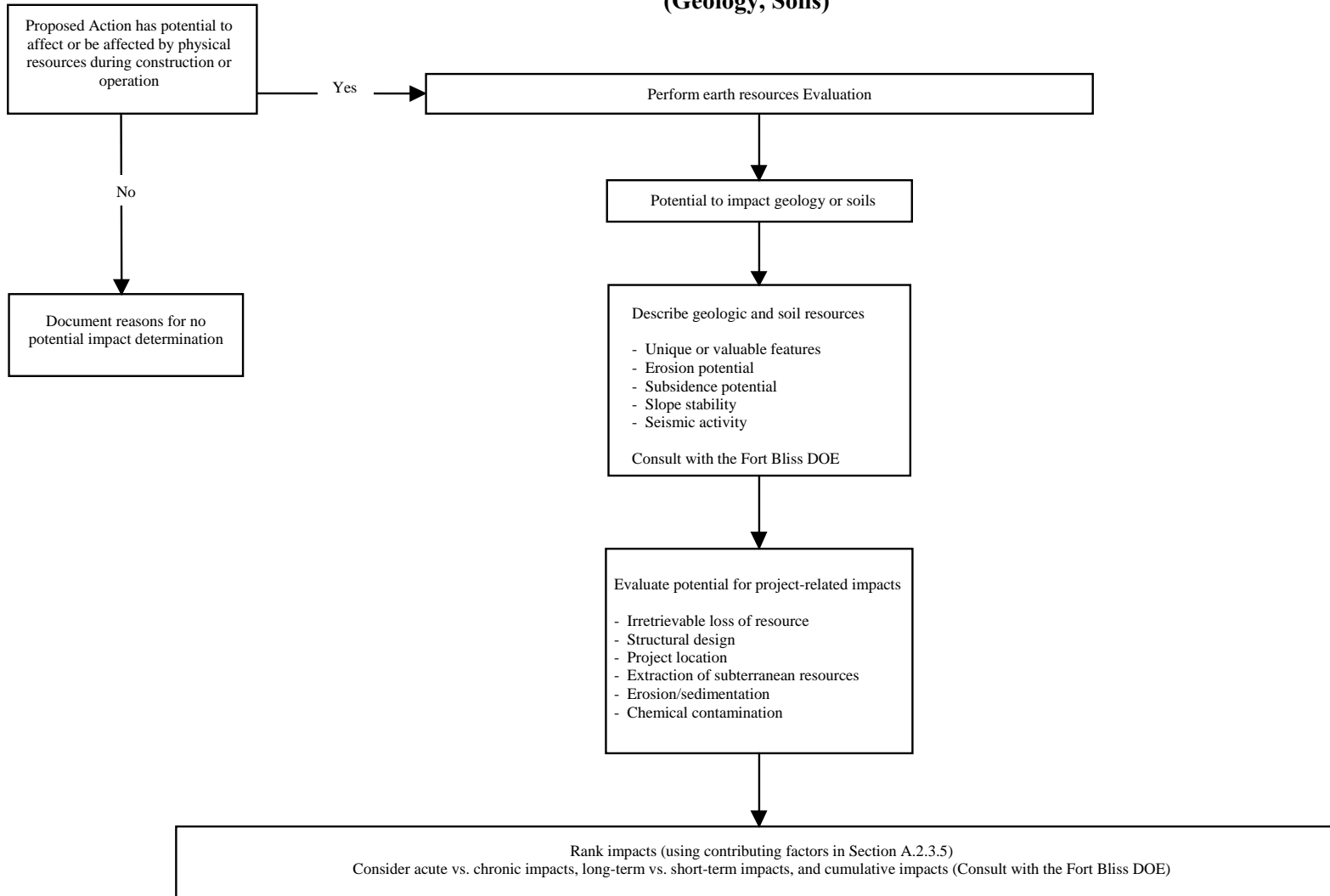
697 Earth resources include geologic features and resources and soils (**Figure A-5**).

698 **Geology.** The geologic features (topography, stratigraphy, etc.) of an area can both impact and be  
 699 impacted by Fort Bliss activities. Geologic features include surface and subsurface formations like  
 700 mineral reserves and fault lines. Additional examples include unique surface formations with aesthetic  
 701 value or fossils with paleontological value. A project can be impacted by changes in geologic features  
 702 such as seismic activity along fault lines or structural failure due to slope instability. In addition, a project  
 703 can have an impact on geologic resources by destroying features of aesthetic or scientific value or by  
 704 precluding access to mineral resources of economic value. A listing of contributing factors used to  
 705 evaluate potential impacts and their relative significance to geological resources is presented below.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity results in irretrievable loss of important mineral or paleontological resources.</li> <li>• The activity will locate structures within a seismic impact zone, and the structures are not designed to withstand maximum recorded horizontal acceleration.</li> <li>• The activity is subject to or is likely to contribute to subsidence and subsidence is likely to cause loss of life or property.</li> <li>• The activity will locate structures in areas subject to slope instability and slope failure is likely to result in loss of life or property, or have an adverse impact on water or biological resources.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity is located within a seismic impact zone, but structures are designed to withstand the maximum recorded horizontal acceleration.</li> <li>• The activity is located in areas subject to slope instability, but the project has been designed to minimize the likelihood and/or impacts of slope failure.</li> <li>• The activity will reduce the extent of geological features of scientific, educational, and aesthetic interest.</li> <li>• The activity will create localized and temporary construction-related impacts.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity does not include construction of structures in seismic impact zones, on or near unstable slopes, or in areas subject to subsidence.</li> <li>• The activity will not occur in areas with surface formations, mineral resources, or paleontological resources.</li> <li>• The activity does not involve extraction of subsurface resources.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity improves/enhances geologic or paleontological values or access to mineral resources.</li> </ul>

706 **Soils.** Soils are the thin layer of unconsolidated material on the land surface. Their properties result from  
 707 the interaction of underlying geology, topography, local climate, microbial action, and vegetation. Soils  
 708 can be altered by natural processes of weathering, water movement, and biological activity; and by human  
 709 activities such as tilling, grazing, construction, compaction, and removal of vegetation. Key soil  
 710 properties to consider include permeability, leachability, thickness, fertility, and erodibility. Construction  
 711 and other activities on unsuitable soils can cause a variety of problems from groundwater contamination,  
 712 erosion, sedimentation, landslides, and irretrievable loss of agricultural or rangeland. A listing of  
 713 contributing factors used to evaluate potential soil impacts is presented below.

**EARTH RESOURCES  
(Geology, Soils)**



**Figure A-5. Earth Resources Evaluation Flowchart**

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<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will locate structures in areas subject to slope instability, and slope failure is likely to result in loss of life or property or have an adverse impact on water or biological resources.</li> <li>• The activity will result in erosion, which will likely cause loss of sensitive species, loss of sensitive habitat, loss of cultural resources, infrastructure or facilities, or human life.</li> <li>• The activity will result in sediment loading to stream courses, which will result in exceedances of state or federal standards.</li> <li>• Chemical contamination of soil resources is likely to cause contamination of groundwater or surface water resources.</li> <li>• The activity will result in irretrievable loss of soils sustaining valuable grazing or forest lands.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity will result in erosion, which will increase sediment loading to stream courses but is not likely to result in exceedances of state or federal water quality standards or alteration of aquatic habitat.</li> <li>• The activity is likely to cause short-term erosion but will not cause the loss of sensitive species, sensitive habitat, cultural resources, infrastructure, or human life.</li> <li>• The activity is located in areas subject to slope instability, but the project has been designed to minimize the likelihood and/or impacts of slope failure.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity will result in no erosion or in short-term, localized erosion that does not result in increased loadings to stream courses.</li> <li>• The activity does not have the potential to release chemicals onto soils.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will reduce problems from groundwater contamination, erosion, sedimentation, landslides, or loss of grazing or forest lands.</li> </ul>

750 **A.2.3.6 Air Quality**

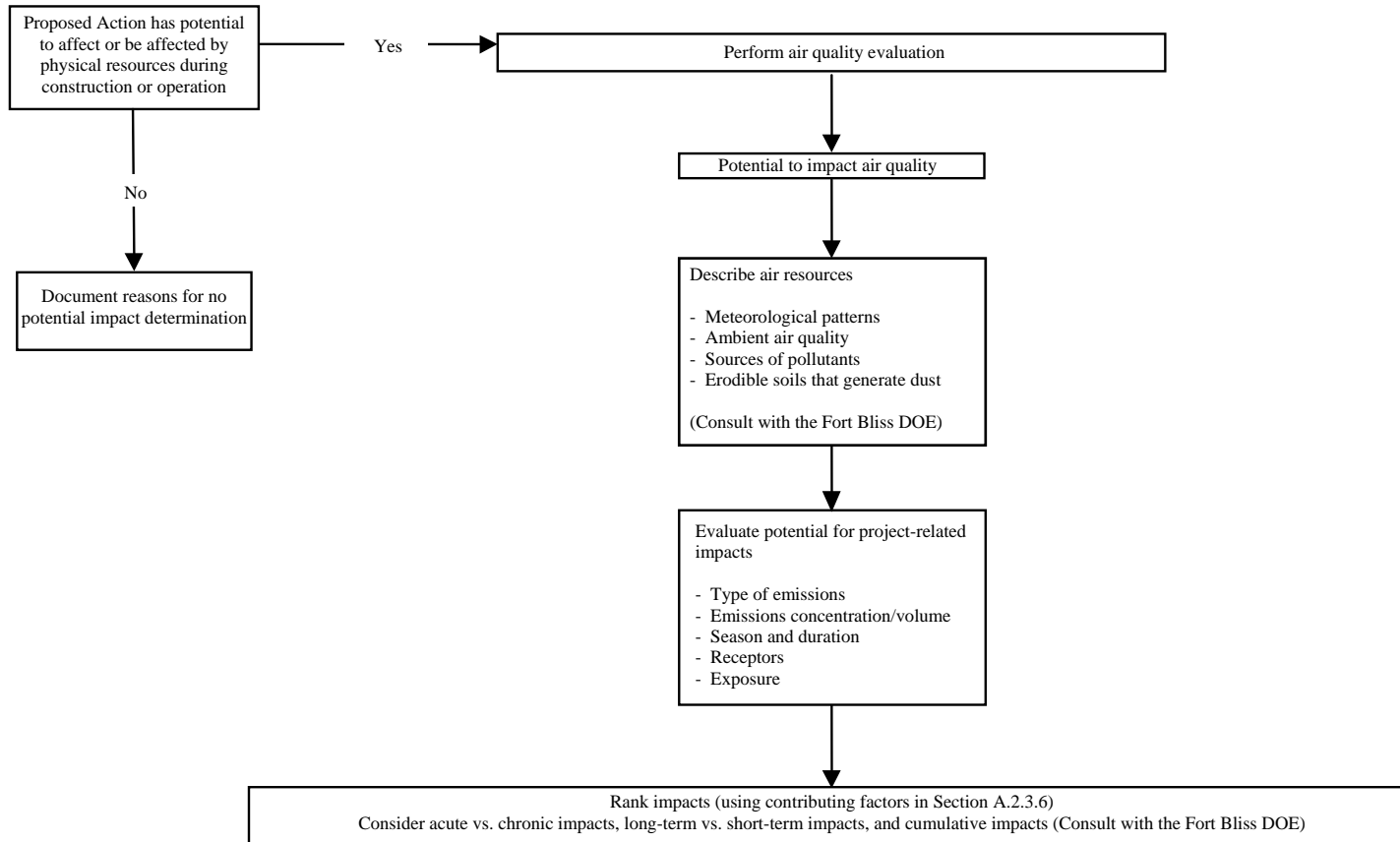
751 Air resources are impacted by releases of gases and particulates from stationary and mobile sources and  
 752 are influenced by meteorological conditions such as prevailing wind, sunlight, and temperature inversions  
 753 (**Figure A-6**). A proposed mission, project, or environmental-management activity can act as a source  
 754 and/or receptor of air pollutants. Contributing factors used to evaluate potential impacts to air resources  
 755 are presented below.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will introduce pollutants to the air that will cause ambient air quality to exceed levels established by the National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), lead, ozone, or particulates.</li> <li>• The activity will release air pollutants in levels that exceed the National Emission Standards for Hazardous Air Pollutants (NESHAP); for example, beryllium, mercury, arsenic, asbestos, benzene, radionuclides, and vinyl chloride.</li> <li>• The activity will introduce NAAQS pollutants to an area designated as a nonattainment area.</li> <li>• The activity will introduce pollutants to the air that, in combination with other sources, will contribute to exceedance of NAAQS.</li> <li>• The activity will introduce pollutants that exceed Occupational Safety and Health Act (OSHA) (29 CFR 1910.95) exposure limits into indoor air.</li> </ul>

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**AIR QUALITY**



**Figure A-6. Air Quality Evaluation Flowchart**

<u>Rank (Continued)</u>	<u>Contributing Factors</u>
Impact	<ul style="list-style-type: none"> <li>• The activity is subject to New Source Performance Standards (NSPS) and is not expected to comply with NSPS upon commencement of operation.</li> <li>• Deposition of atmospheric pollutants (either directly to surface water or to land) is likely to contribute to ambient water quality problems (e.g., nutrient enrichment, acidification, toxic accumulation).</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity will introduce pollutants that do not exceed OSHA exposure limits into indoor air.</li> <li>• The activity will introduce NAAQS or NESHAP pollutants but will not exceed limits either alone or in conjunction with other sources.</li> <li>• The activity will result in a temporary increase in ambient concentrations of pollutants, but will not violate NAAQS.</li> <li>• The activity will cause ground disturbance that generates dust.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will not release pollutants into the air.</li> <li>• The activity will improve overall air quality and reduce pollutants.</li> </ul>

790 **A.2.3.7 Water Resources**

791 Watershed resources that may be impacted by mission activities and master planning projects include,  
 792 surface water and groundwater (**Figure A-7**). Evaluating water resources includes an analysis of impacts  
 793 to the physical, chemical, and biological properties of the water body. An evaluation of an activity's  
 794 impact on water resources should consider short-term, long-term, and cumulative impacts. Following, are  
 795 general descriptions of water resources and factors to consider when evaluating the potential impacts of  
 796 project activities to water resources.

797 **Surface Water.** Surface water includes streams, rivers, ponds, lakes, wetlands, and Waters of the U.S.  
 798 When evaluating project activities, it is important to consider physical and chemical impacts. Inputs that  
 799 deteriorate water quality and impact aquatic life include nutrients, heat, changes in pH, sediments, and  
 800 oxygen-consuming substances, in addition to toxic compounds such as petroleum, PCBs, chlorinated  
 801 pesticides, and heavy metals. Sources of contamination to surface water include point source discharges,  
 802 non-point source runoff, marine vessels, and groundwater. Changes in the volume or velocity of water in  
 803 a water body can erode stream banks, increase siltation/sedimentation, change salinity regimes, and  
 804 ultimately modify or destroy habitat.

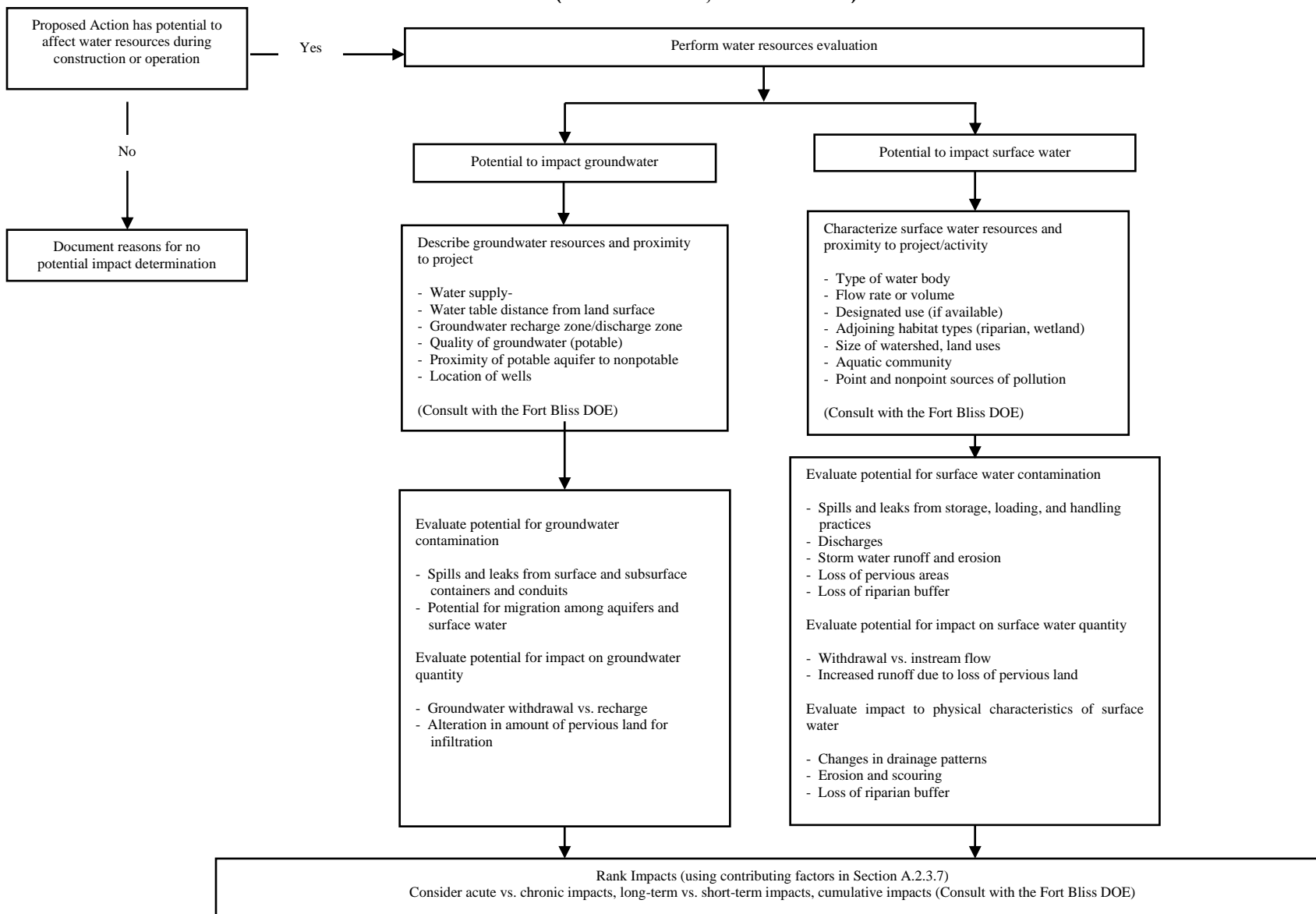
805 Withdrawals from surface water bodies can reduce in-stream flows below critical levels that are necessary  
 806 to maintain riparian and in-stream communities. Contributing factors for ranking potential impacts to  
 807 surface water are presented below.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will result in introduction of pollutants (through contaminated discharge, contaminated runoff, or dredging of contaminated sediments) to surface water and is likely to cause exceedance of state ambient Water Quality Standards (WQS), including chemical-specific standards and physical characteristics like turbidity, pH, dissolved oxygen.</li> <li>• The activity will result in discharge that exceeds National Pollutant Discharge Elimination System (NPDES) permit limitations.</li> <li>• The activity will result in modification to flow volume or velocity such that scouring occurs in the water body and is likely to result in modification of stream channel, bottom substrate, and/or bank stability.</li> </ul>



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**WATER RESOURCES  
(Surface Water, Groundwater)**



**Figure A-7. Water Resources Evaluation Flowchart**

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<u>Rank (Continued)</u>	<u>Contributing Factors</u>
Impact	<ul style="list-style-type: none"> <li>• The activity is likely to impede natural drainage patterns or the direction of flow of surface water body.</li> <li>• The activity will result in point or nonpoint source discharge of sediments, nutrients, chemicals or other parameters that result in modification or destruction of critical habitat of threatened or endangered species.</li> <li>• Withdrawal of surface water or groundwater that supplies surface water will result in disruption of riparian vegetation.</li> <li>• Introduction of pollutants, including sediment, will contribute to exceedance of ambient WQS in combination with other sources.</li> <li>• Introduction of nutrients into a water body will result in the occurrence of algal blooms more frequently, for extended time periods, or during critical intervals.</li> <li>• Withdrawal of surface water will result in reduction of sufficient flow to support sensitive habitats, threatened or endangered species, or their habitats.</li> <li>• The activities will change local drainage patterns.</li> <li>• The activity will result in introduction of pollutants (through contaminated discharge, contaminated runoff, or dredging of contaminated sediments) to surface water, but introduction is not likely to cause exceedance of ambient WQS, including chemical-specific standards and physical characteristics like turbidity, pH, and dissolved oxygen.</li> <li>• Pollutant discharges will not exceed NPDES permit limitations.</li> <li>• The activity will result in point or nonpoint source discharge of sediments, nutrients, chemicals, or other parameters that result in modification or destruction of habitat of indigenous species.</li> <li>• An influx of nutrients will result in periodic algal blooms.</li> <li>• Withdrawal of surface water will result in reduction of flow but is not likely to impact riparian vegetation, aquatic life, sensitive habitats, or threatened or endangered species.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity will not result in introduction of pollutants or withdrawal of surface water.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will improve overall surface water quality/quantity and/or reduces pollutants.</li> </ul>

847 **Groundwater.** Groundwater is water contained in a saturated zone at some depth below the ground  
848 surface. When evaluating the project activity, it is important to determine if either the quantity or quality  
849 of groundwater supplies will be impacted. Pollutants can be introduced to groundwater by seepage  
850 through soils and by injection through wells. It is also important to consider the interaction between  
851 surface water and groundwater to identify the potential for cross contamination. Contributing factors for  
852 ranking potential impacts to groundwater resources are presented below.

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<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<p>The activity will result in introduction of pollutants to potable groundwater and is likely to cause groundwater to exceed maximum contaminant level (MCL).</p> <ul style="list-style-type: none"><li>• Introduction of pollutants to potable groundwater will not exceed MCL, but will continue over life of project.</li><li>• Introduction of pollutants to potable or nonpotable groundwater will contribute to exceedances of MCL and/or QQS in combination with other sources.</li><li>• Withdrawal of groundwater that supplies surface water will result in disruption of riparian vegetation.</li><li>• Introduction of pollutants, including sediment, will contribute to exceedance of ambient WQS in combination with other sources.</li><li>• The activity will result in withdrawal of groundwater, reduction of infiltration, or change in groundwater flow direction such that it diminishes seepage or spring-water inflow into an ecologically significant habitat, such as wetlands, or that results in modification of threatened or endangered species habitat.</li><li>• Withdrawal of groundwater is likely to result in salt water intrusion to potable aquifer.</li></ul>
Impact	<ul style="list-style-type: none"><li>• Introduction of pollutants to potable groundwater is not likely to cause groundwater to exceed MCL.</li><li>• Introduction of pollutants to groundwater source that discharges to surface water is not likely to cause surface water to exceed ambient WQS.</li><li>• The activity will result in withdrawal of groundwater, reduction of infiltration, or change in groundwater flow direction that reduces or eliminates inflow to streams that are not ecologically significant habitat.</li><li>• Withdrawal of groundwater or reduction in infiltration that will lower the depth of the groundwater table in unconfined aquifers but will not impact vegetation or stream flow or result in salt water intrusion.</li><li>• Withdrawal of groundwater will result in a reduction of the potentiometric surface (water-level elevations in wells tapping a confined aquifer).</li></ul>
No Impact	<ul style="list-style-type: none"><li>• No introduction of pollutants to groundwater.</li><li>• No withdrawal of groundwater.</li></ul>
Beneficial Impact	<ul style="list-style-type: none"><li>• Increase in the quality, quantity, and availability of groundwater and/or reduction of pollutants.</li></ul>

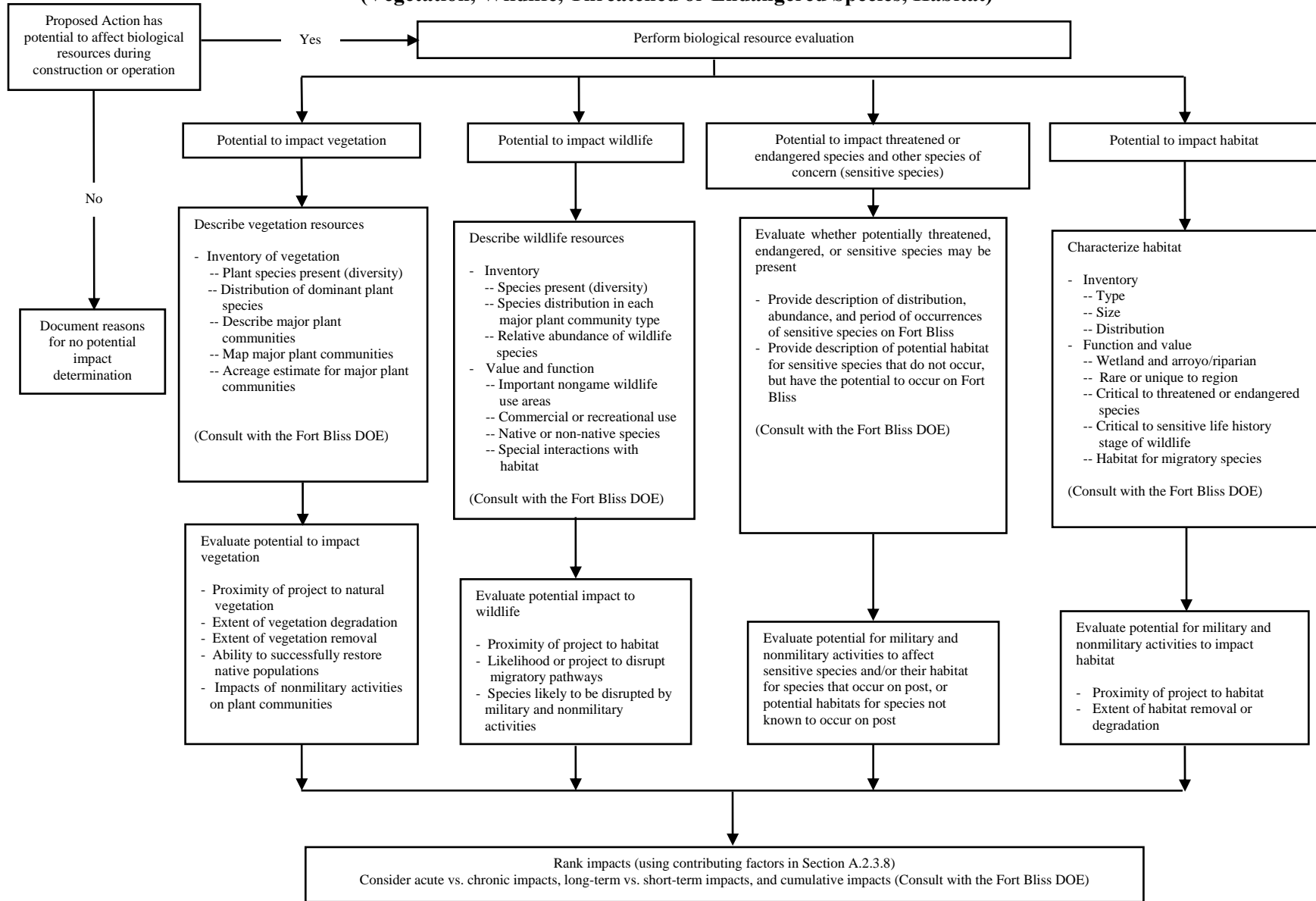
853 **A.2.3.8 Biological Resources**

854 Biological resources that may be impacted by military and nonmilitary activities include upland and  
855 riparian vegetation, wildlife and/or their habitat, and threatened and endangered species and/or their  
856 habitat (**Figure A-8**). Proper management of vegetation, habitat, wildlife, and threatened and endangered  
857 species contributes to the biodiversity and ecosystem integrity of Fort Bliss. Evaluating impacts to  
858 biological resources requires knowledge of the types of plant and animal species present and their  
859 distribution throughout the area, and an understanding of the relationships among species, populations,  
860 and habitat. The evaluation should consider short-term, long-term, and cumulative impacts. Following  
861 are examples of factors that contribute to an activity's impact to biological resources. In addition, if  
862 sensitive species are involved, biological consultation under Section 7 of the Endangered Species Act  
863 may be required. This involves communication with the U.S. Fish and Wildlife Service (USFWS) to  
864 obtain a listing of such species in the area. If the project or activity has the potential to affect a listed  
865 species, ongoing consultation may be necessary.

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**BIOLOGICAL RESOURCES**

**(Vegetation, Wildlife, Threatened or Endangered Species, Habitat)**



**Figure A-8. Biological Resources Evaluation Flowchart**

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904 **Vegetation.** Vegetation provides food and shelter for animals. It also prevents erosion and protects water  
905 quality. Some plant species provide food or habitat during critical life history stages of invertebrate and  
906 vertebrate species. Impacts to vegetation result from clearing land, construction, disturbances associated  
907 with training activities, such as off-road vehicle maneuvers and fire, and from nonmilitary activities such  
908 as livestock land grazing. Aquatic vegetation can be impacted directly through water-based construction  
909 and indirectly through increased sedimentation or pollutant loading from land-based activities. When  
910 evaluating the impacts of a project on vegetation, it is important to consider the value of the vegetation in  
911 terms of ecosystem function and its abundance and distribution. A listing of contributing factors used for  
912 evaluating impacts to vegetation is presented below.

<b><u>Rank</u></b>	<b><u>Contributing Factors</u></b>
Potentially Significant Impact	<ul style="list-style-type: none"><li>• The activity will result in long-term (greater than 5 years) reduced diversity of terrestrial or aquatic vegetation.</li><li>• The activity will permanently reduce or eliminates native species or their habitat.</li><li>• The activity will create conditions conducive to proliferation of non-native, invasive species.</li><li>• The activity will permanently replace native vegetation that served as food source or habitat with vegetation that does not provide food or habitat.</li><li>• The activity is located in proximity to unique plant populations or communities or isolated plant populations of scientific interest.</li><li>• The activity will result in the removal of vegetation, which will likely cause erosion and transport of sediment to waterways, resulting in large-scale degradation to water resources including arroyo/riparian areas.</li></ul>
Impact	<ul style="list-style-type: none"><li>• The activity will temporarily (1-5 years) replace native vegetation with non-native, but non-invasive, species.</li><li>• The activity will temporarily replace native vegetation that served as food source or habitat with vegetation that provides food or habitat of lesser value.</li><li>• The activity will require removal of vegetation, which will likely cause erosion and transport of sediment to waterways, resulting in the degradation of a limited amount of water resources including arroyo/riparian areas.</li></ul>
No Impact	<ul style="list-style-type: none"><li>• The activity will not remove vegetation, or the project activity is restricted to previously developed areas of the Main Cantonment Area and Fort Bliss Training Complex (e.g., firing ranges, impact areas, range camps) that have already been disturbed.</li></ul>
Beneficial Impact	<ul style="list-style-type: none"><li>• The activity will improve/enhance native vegetation communities or biodiversity in the ecosystem.</li></ul>

913 **Habitat.** Habitat includes the biological community and the abiotic components within an area. The  
914 biological community is comprised of microbes, fungi, plants, and animals. The abiotic components  
915 consist of the geological features, soil, hydrology, climate, and nutrient cycles. Habitat can be defined for  
916 an individual organism, a population, or an entire biological community. Maintenance of the habitat is  
917 essential to maintenance of the community, population, and individual. When evaluating the impact of a  
918 project on habitat, it is important to consider the type and size of the habitat, the abundance and  
919 distribution of similar habitat types in the local area, and the importance of the habitat to the components  
920 of the biological community, including resident and migratory species. A listing of contributing factors  
921 used to rank habitat impacts is presented below.

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<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will destroy or damage rare or unique ecosystems (e.g., wetlands, arroyo/riparian habitat, conifer forests, pristine areas, important breeding or nesting grounds, or important habitat used during migration).</li> <li>• The activity, alone or in combination with other activities, will impact the integrity of an ecological system by removing or degrading a large percent of an ecological association.</li> <li>• The activity will disrupt the flow of resources (e.g., nutrients, water) to or from unique ecosystems.</li> <li>• The activity will cause or contribute to the introduction of nuisance, invasive, or pest flora or fauna that may displace native species and alter existing habitat.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity, alone or in combination with other activities, will impact the integrity of an ecological system by removing or degrading a relatively small percent of an ecological association.</li> <li>• The activity will exert a localized and temporary impact on rare or unique ecosystems.</li> <li>• The activity involves introduction of pollutants, including sediments and nutrients, to water bodies that may in turn impact aquatic vegetation that serves as habitat for non-sensitive indigenous species.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity is located within the Main Cantonment Area or developed areas of the Fort Bliss Training Complex and will not modify or otherwise encroach on natural habitat.</li> <li>• There are no rare or unique ecosystems located at or near the proximity of activity.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will improve/enhance the biological community and abiotic components within an area.</li> </ul>

922 **Wildlife.** Wildlife includes the amphibians, reptiles, birds, and mammals that reside in the area. It also  
923 includes numerous bird species that migrate through and to the area. When evaluating the impact of a  
924 project on wildlife it is important to consider such factors as the species or species group distribution and  
925 abundance in the area of influence, the areas of use of important species or species groups, and potential  
926 effects of a project on wildlife diversity.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will reduce or destroy food or habitat of importance to terrestrial, riparian, or aquatic wildlife.</li> <li>• The activity will eliminate or degrade important wildlife breeding areas and migratory routes.</li> <li>• The activity will eliminate a native population.</li> <li>• The activity will result in a long- and/or short-term reduction in populations of wildlife over a relative large area.</li> <li>• The activity will result in the alteration of habitat structure resulting in a shift and/or reduction in wildlife species diversity.</li> <li>• The activity will create favorable conditions for nuisance, exotic, or pest species.</li> <li>• The activity will result in a short- and/or long-term reduction in populations of wildlife in a localized area.</li> </ul>

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**Rank (Continued)**

**Contributing Factors**

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| Impact            | <ul style="list-style-type: none"><li>• The activity will reduce the areal extent of wildlife breeding areas in a localized area but does not eliminate them.</li><li>• The activity will result in temporary alteration of wildlife habitat, but not during critical stages of the species' life cycle.</li><li>• The activity is located outside of the Main Cantonment Area or developed areas of the Fort Bliss Training Complex within a migratory pathway, but will not occur during migrations.</li></ul> |
| No Impact         | <ul style="list-style-type: none"><li>• The activity is located within the Main Cantonment Area and will not disturb the habitat, food source, or migratory pathways of wildlife.</li></ul>  |
| Beneficial Impact | <ul style="list-style-type: none"><li>• The activity will improve or enhance the continued existence of wildlife and/or its habitat.</li></ul>   |

927 **Threatened, Endangered, and Sensitive Species.** Sensitive species can either be plants or animals and  
928 can be listed by the federal and/or state governments. A list of federal threatened and endangered species  
929 is published in 50 CFR 17 (the states of New Mexico and Texas maintain their own lists). To ensure the  
930 project will not impact federally listed threatened or endangered species or their habitat, consultation with  
931 the USFWS will take place. The results of this consultation process will be published in a separate  
932 document called a Biological Assessment. Contributing factors used to rank impacts to sensitive species  
933 follow.

**Rank**

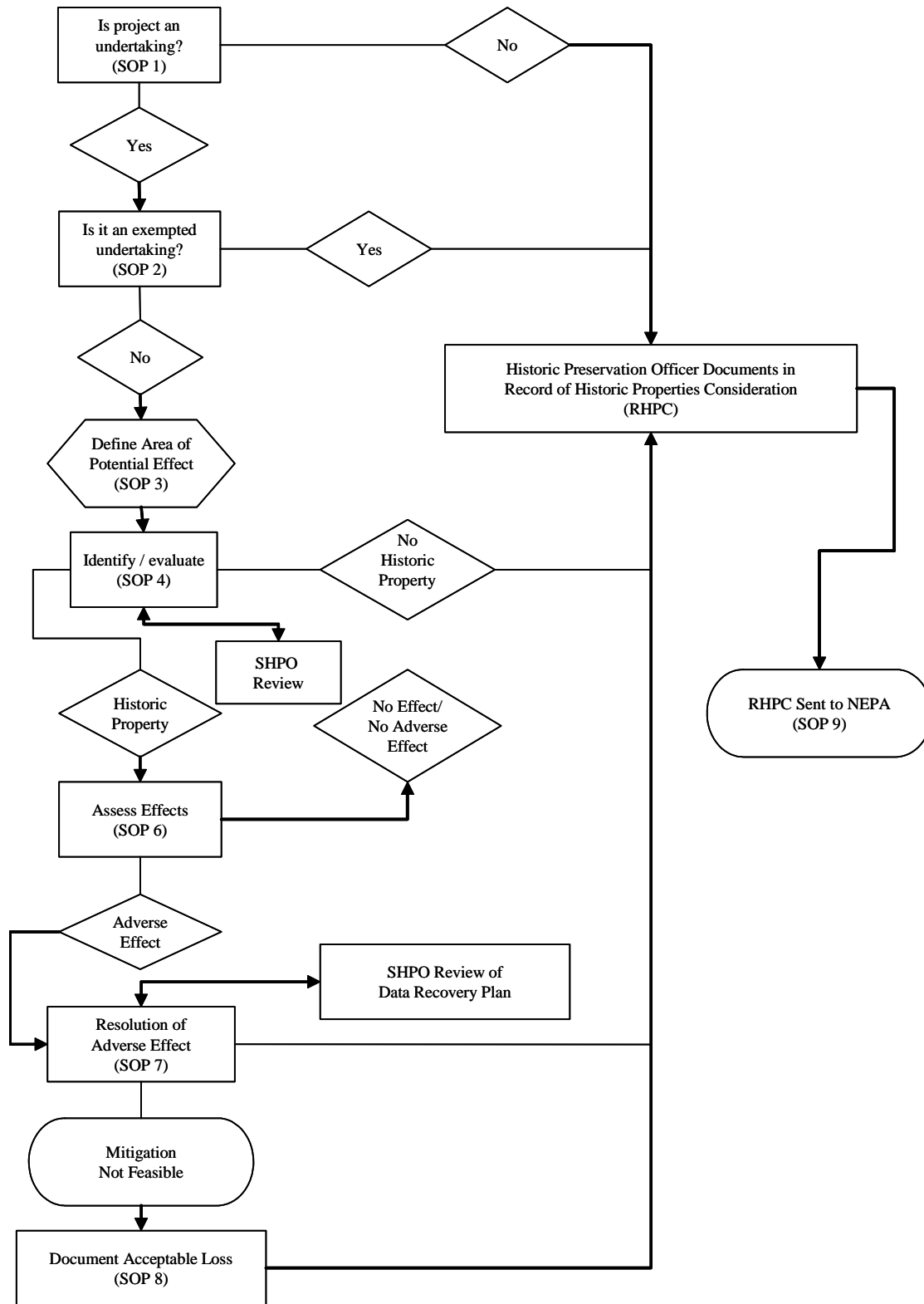
**Contributing Factors**

- |                                   |   |
|-----------------------------------|---|
| Potentially<br>Significant Impact | <ul style="list-style-type: none"><li>• The activity is located in an area where sensitive species are present and the activity is known to have an adverse affect on those species.</li><li>• The activity will destroy or degrade important habitat of sensitive species.</li><li>• The activity will fragment or encroach over time on important habitat of sensitive species.</li><li>• The activity, alone or in combination with other activities, is likely to inhibit a species' recovery or the recovery of its habitat.</li><li>• The activity involves introduction of pollutants, including sediments and nutrients, to water bodies that may in turn impact sensitive species habitat.</li></ul> |
| Impact                            | <ul style="list-style-type: none"><li>• The activity is likely to have a short-term direct or indirect affect on a small percent of a sensitive species or its habitat but not have a long-term effect.</li><li>• The activity will result in temporary disturbance of the habitat of sensitive species.</li></ul>  |
| No Impact                         | <ul style="list-style-type: none"><li>• The activity is located in an area where sensitive species are present but they are not sensitive to the actions associated with the activity.</li><li>• There are no sensitive species or sensitive species habitat (including potential habitat) in the proximity of the activity.</li></ul>  |
| Beneficial Impact                 | <ul style="list-style-type: none"><li>• The activity will improve/enhance the continued existence of a sensitive species or its habitat.</li></ul>  |

934 **A.2.3.9 Cultural Resources**

935 Cultural resources address attributes that are considered important to the nation, state, and/or local  
936 populations' sense of history and well-being. Historic properties are historic or prehistoric archaeological  
937 sites, buildings, structures, landscapes, or properties of traditional cultural and religious importance that  
938 are determined eligible for inclusion in the National Register of Historic Places (**Figures A-9 and A-9A**).  
939 These resources are primarily affected by the siting and construction of new buildings and infrastructure.  
940 Sometimes they can be affected by changes in use of, or access to, resource areas. When evaluating the

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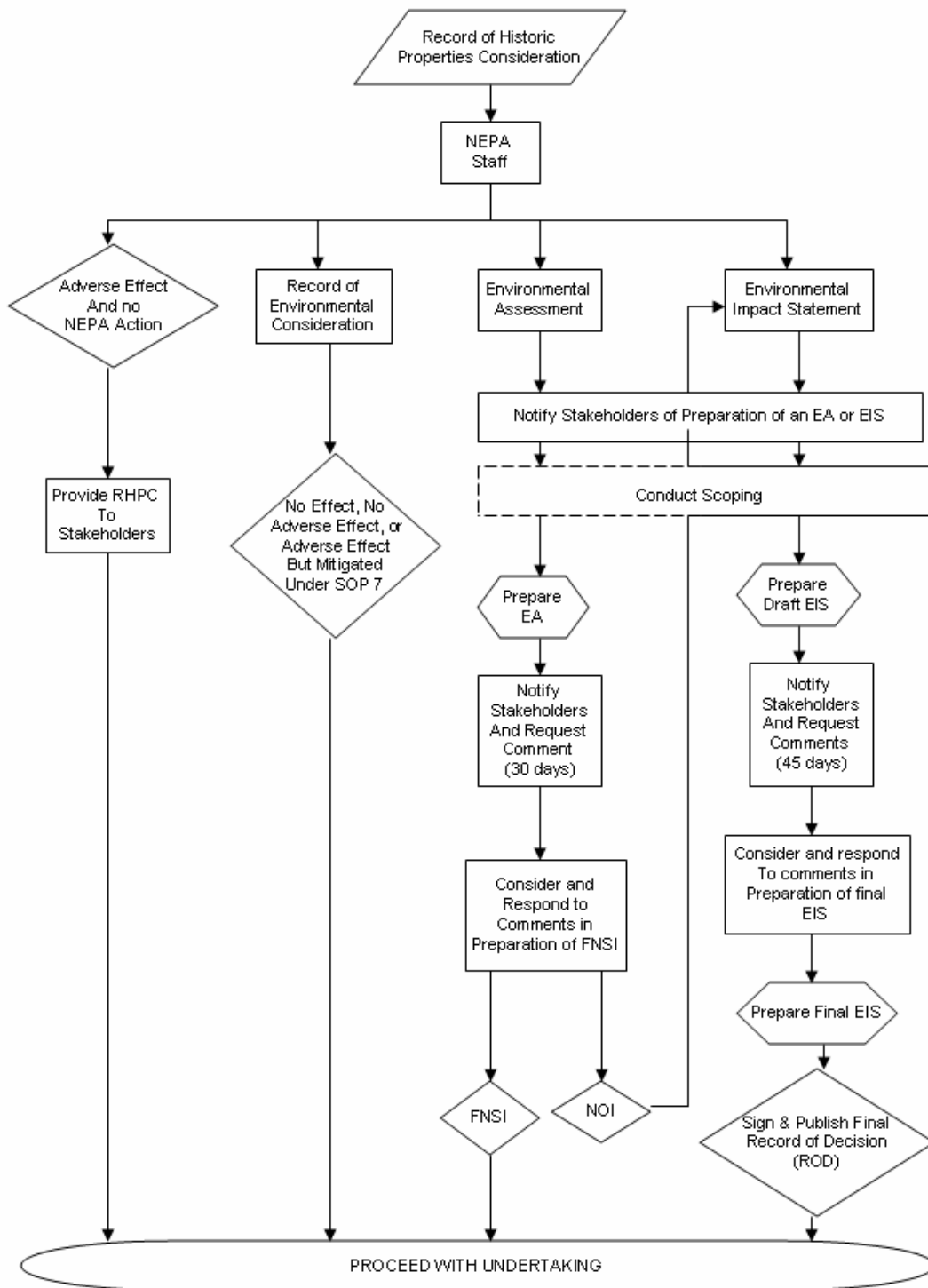


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**Figure A-9. Cultural Resources Evaluation Flowchart**



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**Figure A-9A. Cultural Resources Evaluations Consultation Flowchart Under NEPA**

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947 potential impact of a project on historic properties, it is important to consider the proximity of the project  
948 site and the potential to discover previously unanticipated or undocumented cultural resources. These  
949 considerations must take place in accordance with Section 106 of the National Historic Preservation Act  
950 of 1966 (as amended) and its implementing regulation 36 CFR Part 800 and specifically to the  
951 Programmatic Agreement (PA) among Fort Bliss, the Advisory Council on Historic Preservation, and the  
952 New Mexico and Texas SHPOs, and associated Standard Operating Procedures (SOPs) that guide Fort  
953 Bliss on meeting Section 106 requirements. Contributing factors for ranking impacts associated with  
954 cultural resources are provided below.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"><li>• The activity will destroy a historic property, and that cannot be mitigated under standard mitigation measures as provided by the PA.</li><li>• The activity involves construction, repair, or maintenance affecting features that contribute to a historic property's significance, and the activity does not meet the Secretary of the Interior's Standards for the Treatment of Historic Properties and cannot be mitigated under standard mitigation measures as provided by the PA.</li><li>• The activity will permanently introduce visual, audible, atmospheric elements or other indirect impacts that are out of character with the historic property, and that cannot be mitigated under standard mitigation measures as provided by the PA.</li><li>• The activity will permanently restrict access, as appropriate to the property type, to a historic property, and that cannot be mitigated under standard mitigation measures as provided by the PA.</li><li>• The activity will degrade the landscape (setting) around a historic property, and that cannot be mitigated under standard mitigation measures as provided by the PA.</li><li>• The activity is located in an area with a high probability of containing historic properties, and no efforts are proposed for meeting PA requirements prior to the start of the project.</li></ul>
Impact	<ul style="list-style-type: none"><li>• The activity will temporarily restrict access to or change the historic integrity of a historic property, and that can be mitigated under the standard mitigation measures as provided by the PA.</li><li>• The activity involves construction, repair, or maintenance affecting features that contribute to the historic property's significance but in a way that meets the Secretary of the Interiors Standards for the Treatment of Historic Properties or that can be mitigated under the standard mitigation measures as provided by the PA.</li><li>• The activity will alter the setting of a historic property and can be mitigated under the standard mitigation measures as provided by the PA.</li><li>• The activity is located in an area where there is a high probability of finding historic properties, and procedures as set forth in the PA are implemented prior to the start of the project.</li></ul>
No Impact	<ul style="list-style-type: none"><li>• The activity will not affect access, as appropriate to property type, to a historic property.</li><li>• The activity does not involve construction, repair, or maintenance affecting features that contribute to defining a historic property.</li><li>• The activity will have no impact on the visual or audio setting or other indirect affect on a historic property.</li><li>• The activity is not located in the vicinity of a historic property.</li></ul>
Beneficial Impact	<ul style="list-style-type: none"><li>• The activity will benefit/enhance a historic property.</li></ul>

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955 **A.2.3.10 Noise**

956 Aircraft and ground training activities are major sources of environmental noise. Besides the potential for  
957 damage to human hearing, noise also interferes with communication, interrupts sleep, causes stress, and  
958 generally impacts the quality of life. Noise can also have an adverse impact on domestic animals and  
959 wildlife. When considering a project, it is important to determine if the project will create unacceptable  
960 noise levels (**Figure A-10**). The review should evaluate both non-impulsive (e.g., overflights) and  
961 impulsive noise (sonic boom, explosion). Contributing factors for noise are provided below.

**Rank**

**Contributing Factors**

Potentially  
Significant Impact

- The activity will expose populated areas to A-weighted Day Night Average Sound Level (ADNL) (non-impulsive) of 75 decibels (dB) or greater.
- The activity will expose populated areas to C-weighted Day Night Average Sound Level (CDNL) (impulsive noise) of 70 dB and greater.
- The activity (e.g., artillery, munitions, blasting) will expose populated areas to a single peak sound pressure level (dBP) greater or equal to 130 dBP.
- The activity will cause speech interference because indoor sound levels are expected to exceed 82 dB.
- The activity will result in substantial likelihood of hearing loss because indoor sound levels will be above 84 dB.
- Noise levels associated with the activity are expected to cause domestic animals and wildlife injury, abandonment of habitat, or mortality.

Impact

- The activity will expose populated areas to ADNL between 60 and 75 dB.
- The activity will expose populated areas to CDNL between 57 and 72 dB.
- The activity (e.g., artillery, munitions, blasting) will expose populated areas to a single dBP between 115 and 130 dB.
- The activity will cause speech interference because indoor sound levels will be between 60 and 82 dB.
- The activity will create a slight to moderate likelihood of hearing loss when indoor sound levels are between 75 and 80 dB.
- The activity will cause wildlife or domestic animals to display startle effects, including fleeing the area, alteration in productivity, reproduction, growth, or parenting behavior.

No Impact

- The activity will expose populated areas to ADNL of 60 dB or less.
- The activity will expose populated areas to CDNL of 57 dB or less.
- The activity (e.g., artillery, munitions, blasting) will expose populated areas to a single dBP lower than 115 dB.

Beneficial Impact

- The activity will eliminate or reduce a noise source.

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NOISE

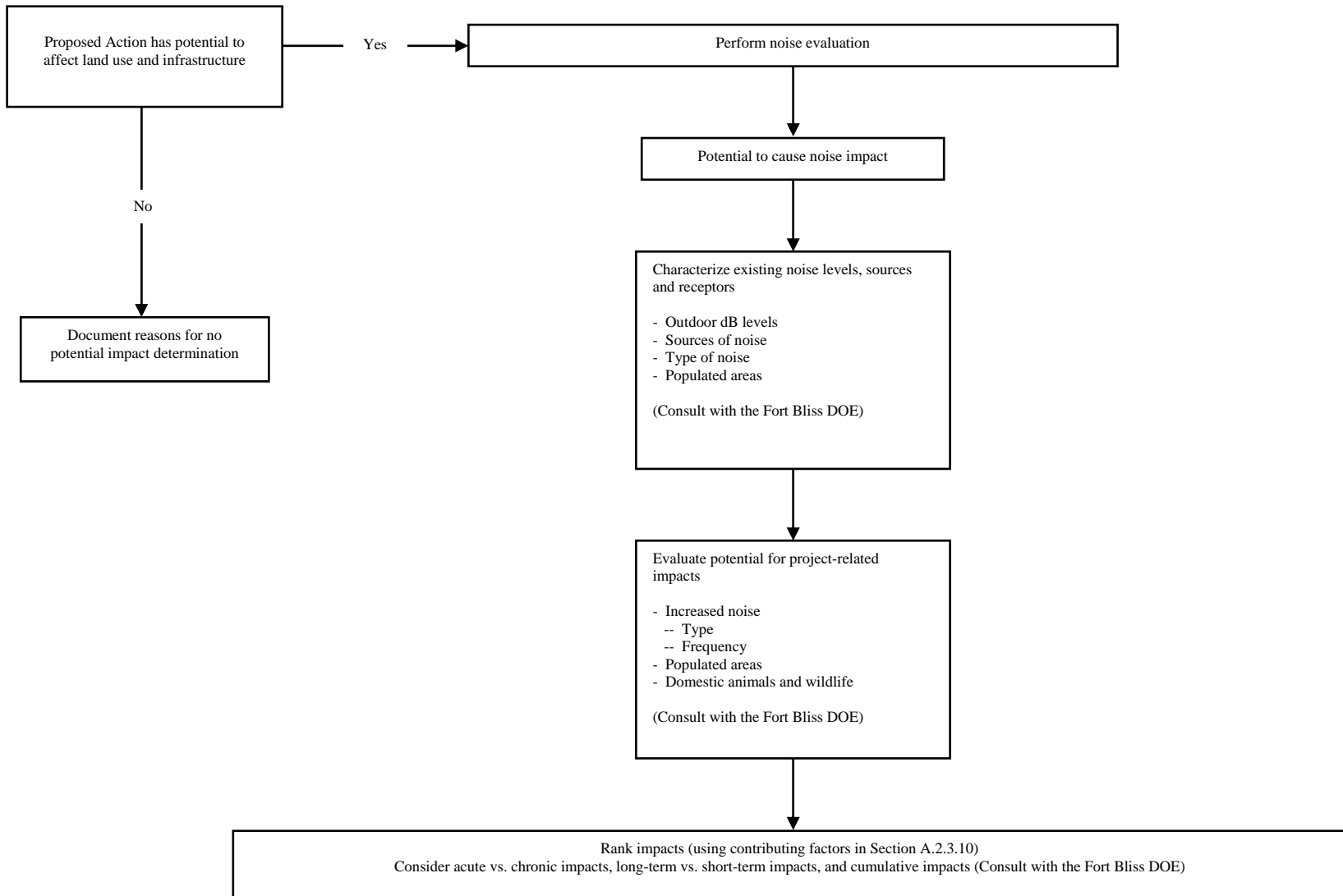


Figure A-10. Noise Evaluation Flowchart

998 **A.2.3.11 Safety**

999 The elements of the proposal that have the potential to affect safety are evaluated relative to the degree to  
 1000 which the activity increases or decreases safety risks to military personnel, the public, and property  
 1001 (**Figure A-11**). Ground and fire safety are assessed for the potential to increase risk and the unit's  
 1002 capability to manage that risk by limiting exposure, respond to emergencies, and suppress fires. In  
 1003 considering explosive safety, projected changed uses and handling requirements are compared to current  
 1004 issues and practices. If a unique situation is anticipated to develop as a result of a proposal, the capability  
 1005 to manage that situation is assessed. Analysis of aircraft flight risks correlates projected Class A mishap  
 1006 rates with current use of the airspace to consider the magnitude of change in risk associated with the  
 1007 proposal. Finally, when the changes in risk arising from the proposal are considered individually and  
 1008 collectively, assessments can be made about the adequacy of disaster response planning and the need for  
 1009 new or modified procedures and requirements. Contribution factors for ranking safety impacts are  
 1010 presented below.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• Fire protection/fire response requirements will exceed existing infrastructure capability.</li> <li>• Explosive storage locations and capacities will exceed levels that are applicable or suitable for waivers.</li> <li>• Ordnance or missile use potentially exposes land areas beyond installation boundaries to projectile, overflight, or ground impact.</li> <li>• Flight risks around airfields are incompatible with adjacent land uses.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity will create needs for waivers SDZ safety requirements.</li> <li>• The activity will increase aviation to the extent that airspace congestion results or projected Class A mishaps indicate a substantially increased risk to public safety.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• All fire safety standards will be satisfied.</li> <li>• All explosive safety standards will be satisfied.</li> <li>• Adequate safety buffers (SDZs) exist for use of all ordnance and missiles.</li> <li>• Although levels of aviation may change, projected Class A mishaps associated with these changed levels do not reflect any significant increased risk.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will decrease or eliminate a safety risk to military personnel, the public, and/or property.</li> </ul>

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**SAFETY**

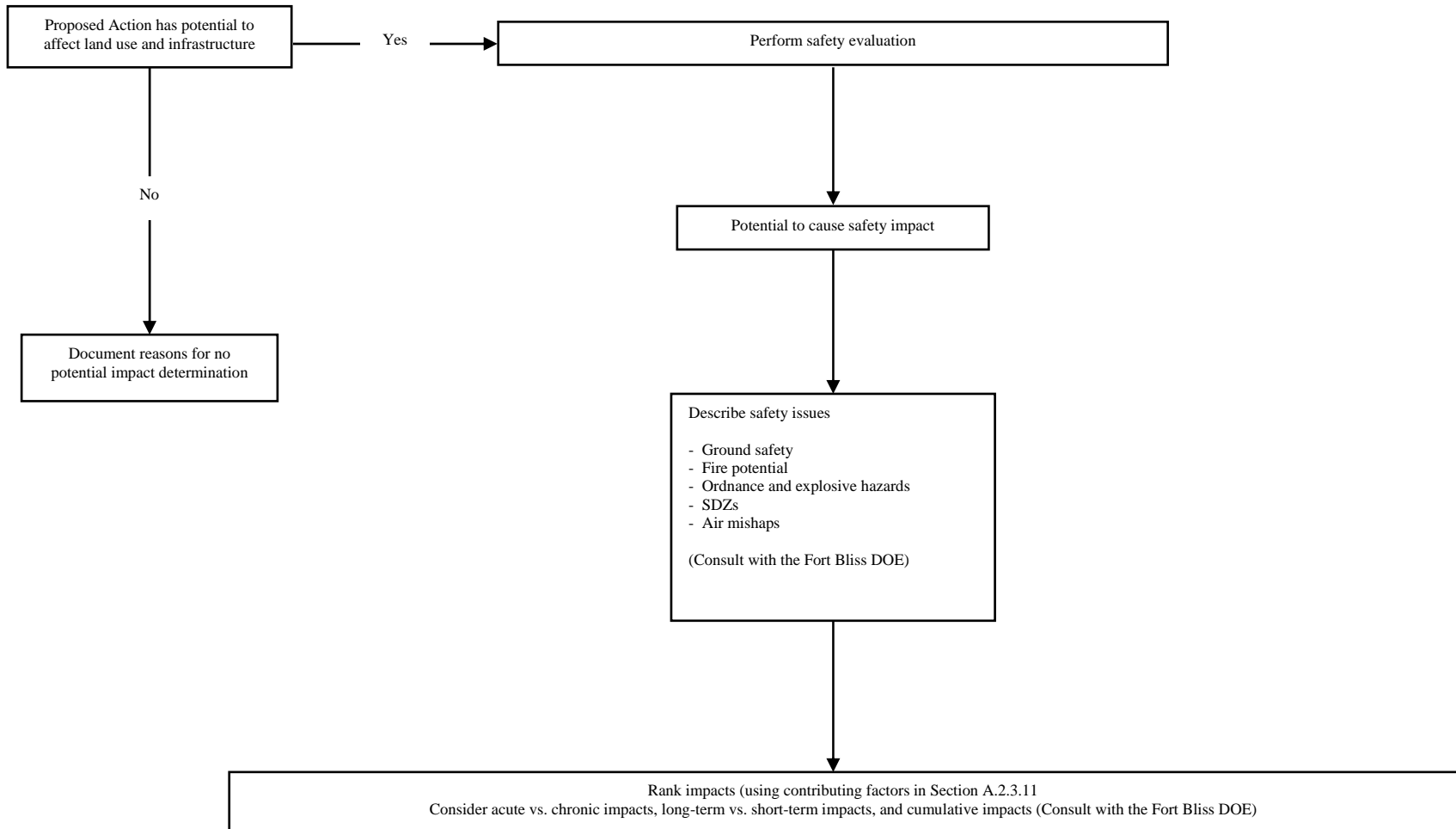


Figure A-11. Safety Evaluation Flowchart

1045 **A.2.3.12 Hazardous Materials and Items of Special Concern**

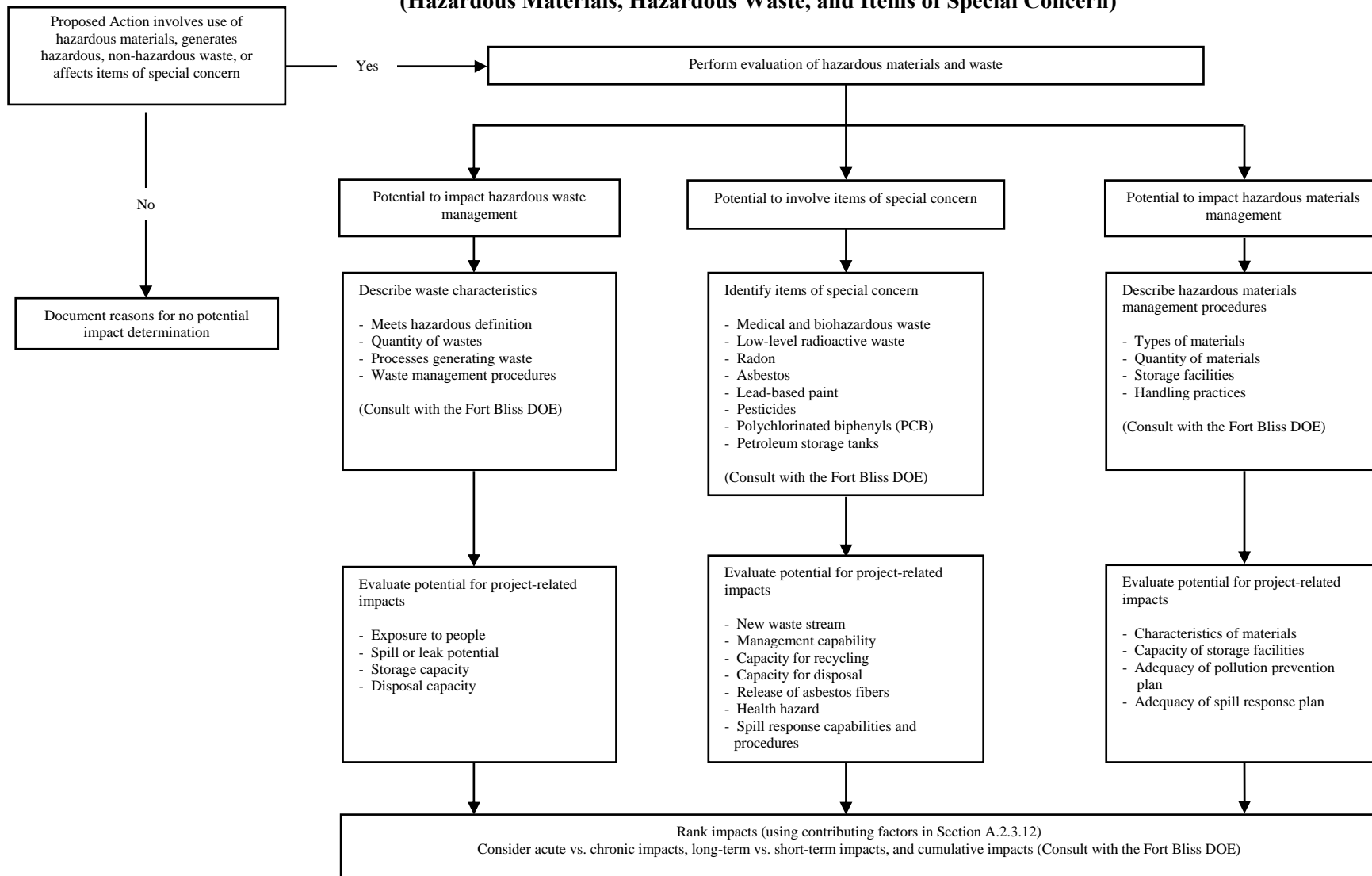
1046 When considering the impact of an activity on the management of hazardous materials, hazardous waste,  
1047 and items of special concern (**Figure A-12**), it is important to evaluate the usage and storage of hazardous  
1048 materials in addition to the storage and disposal requirements for hazardous waste. Items of special  
1049 concern include medical and biohazardous waste, low-level radioactive waste, radon, asbestos, lead-based  
1050 paint, pesticides, PCBs, and petroleum storage tanks. Contributing factors for ranking impacts from  
1051 hazardous materials and waste and items of special concern are:

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"><li>• Permanent or temporary storage tanks at the activity site are not equipped with leak detection mechanisms, secondary containment systems, spill and overfill protection, or other safety services.</li><li>• Hazardous material or hazardous waste handling, storage, or disposal systems or practice will pose a threat of release to the environment and/or to public health.</li></ul>
Impact	<ul style="list-style-type: none"><li>• The activity involves exceptions to approved long-term generation, storage, and/or disposal of large quantities of hazardous waste.</li><li>• The activity involves exceptions to approved long-term management of large quantities of hazardous materials.</li><li>• The activity requires exceptions to approved removal and disposal of structural materials that contain hazardous elements (e.g., lead-based paint, asbestos).</li><li>• The activity requires exceptions to the management approved handling, storage, and/or use of hazardous materials.</li></ul>
No Impact	<ul style="list-style-type: none"><li>• The activity will not generate hazardous waste.</li><li>• The activity will not require hazardous materials management.</li></ul>
Beneficial Impact	<ul style="list-style-type: none"><li>• The activity will reduce or eliminate the use, generation, storage, or disposal of hazardous materials, hazardous waste, and/or items of special concern.</li></ul>

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**HAZARDOUS MATERIALS AND ITEMS OF SPECIAL CONCERN  
(Hazardous Materials, Hazardous Waste, and Items of Special Concern)**

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**Figure A-12. Hazardous Materials and Items of Special Concern Evaluation Flowchart**



1089 **A.2.3.13 Socioeconomics**

1090 This resource group includes population, economic development, housing, and community services and  
 1091 facilities (**Figure A-13**). Socioeconomic impacts that are not also accompanied by environmental impacts  
 1092 do not in and of themselves trigger a requirement for NEPA analysis. However, if an EIS is prepared, it  
 1093 must consider socioeconomic effects. Furthermore, socioeconomic changes often indirectly affect  
 1094 environmental resources through such consequences as construction of housing, increased traffic that  
 1095 emits air pollutants, increase in water consumption and waste generation, etc. Those indirect impacts do  
 1096 require consideration under NEPA.

1097 **Population.** A socioeconomic analysis typically includes an evaluation of potential impacts of the  
 1098 project on population. This information contributes to the evaluation of the other elements of  
 1099 socioeconomic and environmental resources. Contributing factors for ranking impacts pertaining to  
 1100 population changes are presented as follows.

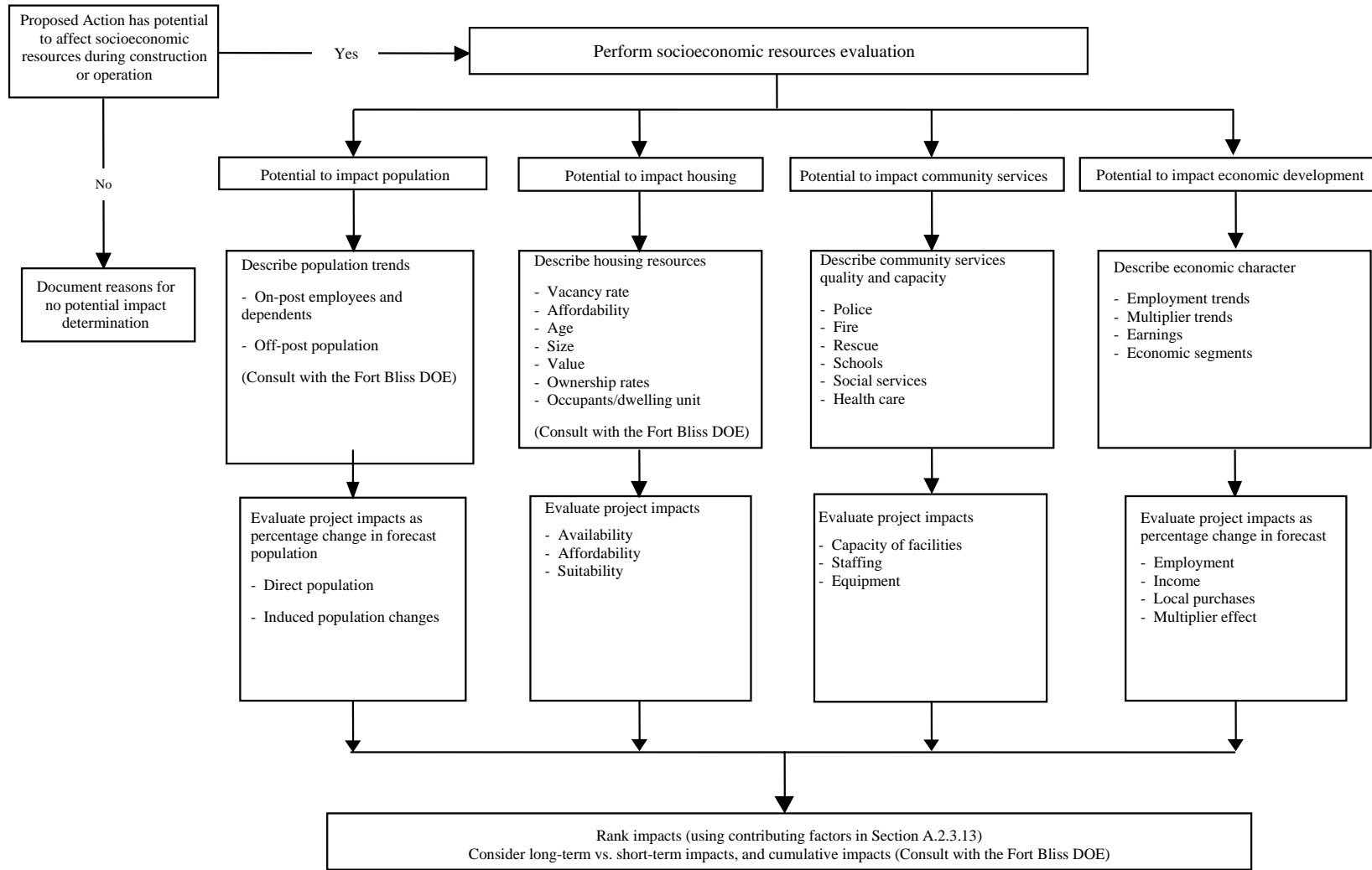
<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will create or contribute to an excursion above or below the existing forecasted population beyond a community's historic ability to accommodate change.</li> <li>• The activity will cause a change in the population that could potentially disrupt employment patterns or provision of services.</li> <li>• The activity will result in the dislocation of portions of the local population due to loss of jobs or increases in property values.</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• The activity will create or contribute to an excursion above or below the existing forecasted population that is within a community's historic ability to accommodate change.</li> <li>• The activity will result in a short-term influx of workers.</li> </ul>
No Impact	<ul style="list-style-type: none"> <li>• The activity will create or contribute to an excursion above or below the existing forecasted population that is substantially less than a community's historic fluctuations in population.</li> <li>• The activity does not require additional people to be permanently or temporarily introduced to the area.</li> </ul>
Beneficial Impact	<ul style="list-style-type: none"> <li>• The activity will improve population stability and/or related factors.</li> </ul>

1101 **Economic Development.** The effects of a project on the economy depend on the size, in terms of project  
 1102 expenditure and employment, and the duration of the project. In evaluating the potential economic  
 1103 impacts of the project, it is important to quantify any direct impacts associated with the project and to  
 1104 evaluate the ability of the region of concern to accommodate such changes. In general, a more rigorous  
 1105 analysis of economic impacts is required for larger, more complex projects. Contributing factors for  
 1106 ranking impacts associated with economic issues are presented below.

<u>Rank</u>	<u>Contributing Factors</u>
Potentially Significant Impact	<ul style="list-style-type: none"> <li>• The activity will cause unemployment to increase beyond a community's historic ability to accommodate change.</li> <li>• The activity will cause household income to decrease beyond a community's historic ability to accommodate change.</li> <li>• The activity will reduce the bond rating of local municipalities.</li> </ul>

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**SOCIOECONOMIC RESOURCES  
(Population, Economic Development, Housing, and Community Services)**



**Figure A-13. Socioeconomic Resources Evaluation Flowchart**

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**Rank (Continued)**

**Contributing Factors**

- The multiplier effect of direct unemployment associated with the activity will dampen economic activity.
  - Reduced economic activity associated with the unemployment caused by the activity will cause secondary unemployment.
  - The activity will cause a permanent reduction in military personnel which will significantly reduce expenditures in the local economy, causing reduced economic growth and secondary unemployment.
- Impact
- The activity will cause unemployment to increase to a degree within a community's historic ability to accommodate change.
  - The activity will cause household income to decrease within a community's historic ability to accommodate change.
- No Impact
- Beneficial Impact
- The activity does not result in changes to employment or income.
  - The activity will increase employment/income, economic growth, and secondary employment.

1145 **Housing.** When evaluating the potential impact of the project on housing, it is important to consider the  
 1146 availability of housing and the cost of housing relative to demand and income. It is also important to  
 1147 identify whether existing housing meets Army regulation standards or if the project has the potential to  
 1148 impact the value of residential property. Contributing factors for ranking impacts associated with housing  
 1149 issues are presented below.

**Rank**

**Contributing Factors**

- Potentially Significant Impact
- The activity will create a shortage of affordable housing or will substantially increase housing prices.
  - The activity will result in housing that does not meet Army standards.
  - The activity will cause property values to decline.
  - The activity will adversely affect the availability of mortgages or mortgage insurance.
  - The activity will cause forecasted vacancy rates to increase or decrease beyond a community's historic ability to accommodate change.
- Impact
- No Impact
- The activity will cause forecasted vacancy rates to increase or decrease within a community's historic ability to accommodate change.
  - The activity will not impact property values.
  - The activity does not involve an influx of new inhabitants or relocation of existing ones, therefore the housing resource will not be impacted.
  - The activity will cause forecasted vacancy rates to increase, but remain below a community's historic fluctuations.
- Beneficial Impact
- The activity will improve property values, increase availability of affordable housing, and/or improve the community's ability to accommodate growth/change.

1150 **Community Services.** Community services refer to both public and private services on and off post that  
 1151 serve area residents. Community services include primary, secondary, and adult education; health care;  
 1152 social services; and police, fire, and rescue. When evaluating a project, it is important to consider  
 1153 existing and projected capacity to provide services, current and future changes in demand, and access to  
 1154 and cost of community services. Contributing factors for ranking impacts associated with community  
 1155 service issues are presented as follows.

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<b><u>Rank</u></b>	<b><u>Contributing Factors</u></b>
Potentially Significant Impact	<ul style="list-style-type: none"><li>• Changes caused by the activity will result in a shortage of community services.</li><li>• Changes caused by the activity will result in long-term unused capacity of community services.</li><li>• The activity will provide redundant services and will result in long-term excess capacity of community services.</li><li>• The activity will result in a change in the number of service positions for any category (e.g., teachers, fire, police) to increase beyond a community's historic ability to accommodate change.</li></ul>
Impact	<ul style="list-style-type: none"><li>• Changes caused by the activity will result in short-term changes in demand, either increased or decreased, for community services.</li><li>• The activity will provide redundant services, but any unused capacity is expected to be temporary.</li><li>• The activity will result in a change in the number of service positions for any category (e.g., teacher, fire, police) within a community's historic ability to accommodate change.</li></ul>
No Impact	<ul style="list-style-type: none"><li>• The activity will not impact demand for community services.</li><li>• The activity will result in a change in the number of service positions for any category (e.g., teacher, fire, police) that is substantially below a community's historic fluctuations.</li></ul>
Beneficial Impact	<ul style="list-style-type: none"><li>• The activity will improve/enhance services such as education, health care, and/or police/fire protection.</li></ul>

1156 **A.2.3.14 Environmental Justice**

1157 Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations  
1158 and Low-income Populations, provides that federal agencies address, as appropriate, disproportionately  
1159 high and adverse human health or environmental effects of its programs, policies, and activities on  
1160 minority populations and low-income populations. Methodologies for evaluating environmental justice  
1161 are generally developed on a project-specific basis and reviewed by federal agencies as part of the NEPA  
1162 documentation process.

1163 Significance criteria are not utilized for Environmental Justice. However, factors to be considered in  
1164 determining disproportionately high and adverse effects on minority or low-income populations include  
1165 the following: whether potential health and environmental effects are significant or above generally  
1166 accepted norms; whether the risk or rate of exposure or the impact to minority or low-income populations  
1167 appreciably exceeds or is likely to appreciably exceed that of the general population; how ecological,  
1168 cultural, human health, economic, or social impacts are related to impacts on the natural or physical  
1169 environment; and whether the effects would occur in populations affected by cumulative or multiple  
1170 adverse exposures from environmental hazards.

1171 **A.2.4 Impact Evaluation**

1172 The analysis of environmental impacts in the PEIS and the SEIS is based on the contributing factors  
1173 defined for each of the resource groups described above. This section describes how implementation of  
1174 planning, construction, and demolition programs and changes in mission activities are evaluated for  
1175 potential impacts. **Table A-2** provides a tool for evaluating impacts from mission activities and other  
1176 projects, using the contributing factors listed in Section A.2.3.

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**Table A-2. Project Evaluation Matrix**

<b>Project Title:</b>					
<i>Environmental Resource Category</i>		<i>Mission Activity</i>	<i>Facility Construction and Demolition</i>	<i>Environmental Resource Management</i>	<i>Real Estate Action</i>
Land Use and Visual Resources	Fort Bliss Land Use				
	• Main Cantonment Area				
	• Fort Bliss Training Complex				
	Off-Post Land Use				
	Visual Resources				
Infrastructure	Transportation				
	Utilities				
	Energy				
	Communications				
Airspace Use	Airspace Management and Use				
	• Airport Operations				
	• Controlled/Uncontrolled Airspace				
	• Restricted Airspace				
	• MTRs				
Earth Resources	Geology				
	Minerals and Energy Resources				
	Soils				
Air Quality	Criteria Pollutants				
	Fugitive Dust				
Water Resources	Surface Water				
	Groundwater				
Biological Resources	Vegetation				
	Habitat				
	Wildlife				
	Sensitive Species				
Cultural Resources	Archaeological Sites, Historic and Prehistoric Archaeological Resources				
	Architectural and Landscape Resources				
	Properties of Traditional Cultural and Religious Importance				
Noise	Aircraft				
	Weapons Firing/Explosives				
	Equipment Use				
Safety	Ground Safety				
	Flight Safety				
	Ordnance and Explosive Safety				
	Compatible Land Use				
Hazardous Materials and Items of Special Concern	Hazardous Materials				
	Hazardous Waste				
	Items of Special Concern				
Socioeconomic Resources	Population				
	Economic Development				
	Housing				
	Community Services and Facilities				

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<b>Project Title:</b>						
<i>Environmental Resource Category</i>		<i>Mission Activity</i>	<i>Facility Construction and Demolition</i>	<i>Environmental Resource Management</i>	<i>Real Estate Action</i>	
Environmental Justice	Minority Populations					
	Low-Income Population					
Operations	Ability to Meet Mission					
<b>Totals</b>						
	✓					
	+					

LEGEND: = Potentially Significant Impact. = Impact. ✓ = No Impact (no effect on resource attribute, or attribute not present). + = Beneficial Impact: S = Short-term, L = Long-term.

1178 This table can be used to summarize the impacts of the projects being evaluated. The highest level of  
 1179 impact associated with any project component or resource determines the level of NEPA analysis  
 1180 required. For example, a project that has a potentially significant impact from operations and less impact  
 1181 during construction, receives an overall rank of potentially significant impact.

1182 **Mission Activities.** Impacts from mission operations and training are assessed for the major military  
 1183 units' activities and training exercises that are conducted. It is important to note that not all group  
 1184 attributes are impacted by mission activities occurring at Fort Bliss. The criteria used to evaluate training  
 1185 and exercise activities are based on ranks and parameters described in Training Circular 5-400, Unit  
 1186 Leaders' Handbook for Environmental Stewardship.

1187 **Facility Construction and Demolition Projects.** When evaluating facility construction and demolition  
 1188 projects, the potential impacts to each resource group and group attributes are evaluated for project siting,  
 1189 construction, and operation phases. The projects evaluated in the PEIS and SEIS represent the types of  
 1190 projects that would typically occur at Fort Bliss.

1191 **Environmental Resource Management.** Impacts associated with changes in environmental  
 1192 management plans, policies, procedures, or projects are assessed for both beneficial effects and potential  
 1193 impacts on or conflicts with other resources. In some cases, environmental management policies can  
 1194 adversely affect a resource, for example a decision that leads to potential loss of isolated archaeological  
 1195 deposits.

1196 **A.2.5 Fort Bliss Environmental Management Programs**

1197 The Fort Bliss environmental management programs are directly applicable to all lands in the Main  
 1198 Cantonment Area, the South Training Areas, the Doña Ana Range–North Training Areas, and military  
 1199 activities on McGregor Range. The environmental management program on McGregor Range interfaces  
 1200 with the Bureau of Land Management's (BLM) *Final Resource Management Plan Amendment (RMPA)*  
 1201 *for McGregor Range* (May 2006). The responsibilities of Fort Bliss and BLM are specified in a 1990  
 1202 Memorandum of Understanding (MOU) concerning policies, procedures, and responsibilities related to  
 1203 land use planning and resource management of McGregor Range. Agency responsibilities are  
 1204 summarized in **Table A-3**.

1205 BLM recognizes Fort Bliss missions have priority use of McGregor Range and will secure Fort Bliss  
 1206 concurrence before authorizing any nonmilitary uses. BLM has managerial responsibilities for the public  
 1207 uses of the withdrawn land as enumerated in Public Law (PL) 106-65. However, non-military uses are  
 1208 subordinate to the military missions and uses of McGregor Range. Fort Bliss must concur with and/or  
 1209 provide stipulations or approval modifications to BLM managed actions prior to BLM approval of the action.

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1210 A cooperative agreement exists for management of the Area of Critical Environmental Concern (ACEC)  
 1211 between BLM, Fort Bliss, and New Mexico State University (NMSU), as referenced in the MOU. Similarly,  
 1212 BLM and Fort Bliss recognize the New Mexico Department of Game and Fish (NMDGF) as the agency  
 1213 responsible for wildlife (including game species) population management.

1214 **Table A-3. Agency Responsibilities for Environmental Resource Management on McGregor Range**

	<i>Withdrawn Lands</i>	<i>Army Fee-Owned Lands</i>
<b>Lands</b>		
NEPA compliance lead agency		
• Non-military and third party activity	BLM	BLM
• Military activity	Fort Bliss	Fort Bliss
Non-military demand leases	BLM	Fort Bliss
<b>Minerals</b>		
Salable (sand, gravel, fill dirt, borrows, caliche, and building stone)	BLM	BLM
Leasable (oil and gas, geothermal)	BLM	BLM
Locatable (precious metals, etc.)	BLM	BLM
<b>Vegetation Management</b>		
ACEC	BLM/Fort Bliss/ NMSU	N/A
<b>Rangeland Management</b>		
Livestock grazing	BLM	N/A
Rangeland improvements	BLM	N/A
• Wildlife and livestock water	BLM/Fort Bliss	BLM/Fort Bliss
• Maintenance and construction of livestock control fences, water pipelines, tanks, tubs, wells, windmills, wildlife waters	BLM	N/A
Outside impact and military use areas	BLM	BLM
Inside impact and military use areas	Fort Bliss	Fort Bliss
• Fire breaks along McGregor Range boundary where appropriate	Fort Bliss	Fort Bliss
<b>Wildlife</b>		
Game species population management	NMDGF/BLM	NMDGF/BLM/ Fort Bliss
<b>Habitat Management</b>		
Wildlife habitat management activities	BLM	Fort Bliss
Wildlife and habitat monitoring	BLM	Fort Bliss/BLM
<b>Special Status Species Management</b>		
Compliance with federal and state laws affecting endangered, threatened, candidate, or sensitive plants and animals		
• Non-military actions	BLM	Fort Bliss
• Military actions	Fort Bliss	Fort Bliss
Recovery plans	BLM	Fort Bliss
Sikes Act Stamp Program	NMDGF/BLM/ Fort Bliss	NMDGF/BLM/ Fort Bliss
Animal damage control	BLM	BLM
Activities administered by BLM	BLM	BLM
Military activities	Fort Bliss	Fort Bliss
<b>Recreation</b>		
General	BLM	BLM/Fort Bliss
Hunting	NMDGF/BLM/ Fort Bliss	NMDGF/BLM/ Fort Bliss

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	<i>Withdrawn Lands</i>	<i>Army Fee-Owned Lands</i>
<b>Cultural Resources</b>		
Compliance or third party undertakings	BLM	BLM/Fort Bliss
Military undertakings	Fort Bliss	Fort Bliss
<b>Wilderness Study Area Management</b>		
Management	BLM/Fort Bliss	N/A
Compliance	BLM/Fort Bliss	N/A
<b>Watershed Management</b>	BLM	Fort Bliss
<b>Fire</b>		
Non-military fire suppression	BLM	BLM
Military fire suppression	Fort Bliss	Fort Bliss
Prescribed burns	BLM	BLM/Fort Bliss
<b>Law Enforcement</b>		
Non-military activities/personnel	BLM	Fort Bliss/BLM
Military activities/personnel	Fort Bliss/BLM	Fort Bliss
<b>Roads</b>		
Maintenance	BLM/Fort Bliss	BLM/Fort Bliss
Planning	BLM/Fort Bliss	BLM/Fort Bliss

1215 In a combined effort, the Fort Bliss ITAM team developed the SiteRep system as a means to identify and  
 1216 prioritize degraded training sites/areas for potential rehabilitation based on the requirements of the training  
 1217 mission, environmental influences, and resources available. This system is based upon two Army regulations:

- 1218 • AR 200-3, Chap. 3, Natural Resources-Land, Forest and Wildlife Management, 20 June 2005
- 1219 • AR 350-19, The Army Sustainable Range Program, 30 August 2005.

1220 The following describes the Fort Bliss SiteRep process and the basic steps involved its implementation.

- 1221 1. Upon observing degradation of a training area, an assessor completes the data survey sheet,  
 1222 SiteRep Form A (**Attachment 6**), and sends the form to the ITAM Coordinator.
- 1223 2. After receiving SiteRep Form A, the ITAM team will investigate the site and complete SiteRep  
 1224 Form B (**Attachment 7**). The data will be entered into digital format using Microsoft Office -  
 1225 Access data forms. The permanent digital record of the observation, known as the SiteRep file,  
 1226 can be used later in other applications such as assessment of cumulative impacts. A high score  
 1227 for a given site is an indicator of a potential need for rehabilitation.
- 1228 3. The ITAM team will use a GIS to evaluate the digital data. The GIS will analyze the SiteRep  
 1229 data for locational relationships with threatened, endangered, or sensitive species, Waters of the  
 1230 U.S., wetlands, riparian, soils, vegetation, precipitation, terrain, regulatory conflicts, and national  
 1231 historic register issues. The sensitivity of protected locational data will be respected.
- 1232 4. After the GIS analysis is complete, the SiteRep data will be returned to the ITAM Coordinator for  
 1233 potential inclusion as a rehabilitation project. For those projects assigned high priority for action,  
 1234 the ITAM team, working with available expertise and resources, will develop a proposed  
 1235 rehabilitation prescription.
- 1236 5. The DOE NEPA team will review all proposed rehabilitation prescriptions to determine  
 1237 concurrence or further requirements. Concurred rehabilitation prescriptions will be briefed to the  
 1238 Commander, U.S. Army Combined Arms Support Battalion (USACAS) for input/feedback and  
 1239 prioritized by the Director of Plans, Training, Mobilization, and Security (DPTMS) for potential  
 1240 implementation (resource dependent).



1241 **Attachment 1. Project Screening Criteria and List of Categorical Exclusions**  
1242 **From 32 CFR 651**

1243 **Project Screening Criteria**

1244 The action has not been segmented. Segmentation can occur when an action is broken down into small  
1245 parts making the effects appear less significant. The scope of a proposed action must include  
1246 consideration of connected, cumulative, and similar actions.

1247 No exceptional circumstances exist. Extraordinary circumstances that preclude the use of a CX are:

- 1248 1. Reasonable likelihood of significant effects on public health, safety, or the environment.
- 1249 2. Reasonable likelihood of significant environmental effects (direct, indirect, and cumulative).
- 1250 3. Imposition of uncertain or unique environmental risks.
- 1251 4. Greater scope or size than is normal for this category of action.
- 1252 5. Reportable releases of hazardous or toxic substances.
- 1253 6. Release of petroleum, oils, and lubricants except from a properly functioning engine or vehicle,  
1254 application of pesticides and herbicides, or where the proposed action results in the requirement  
1255 to develop or amend a Spill Prevention, Control, and Countermeasures Plan.
- 1256 7. Air emissions exceed de minimis levels or a formal Clean Air Act conformity determination is  
1257 required.
- 1258 8. Reasonable likelihood of violating any federal, state, or local law or requirements imposed for the  
1259 protection of the environment.
- 1260 9. Unresolved effect on environmentally sensitive resources.\), including
  - 1261 (i) Proposed federally listed, threatened, or endangered species or their designated critical  
1262 habitats;
  - 1263 (ii) Properties listed or eligible for listing on the National Register of Historic Places;
  - 1264 (iii) Areas having special designation or recognition such as prime or unique agricultural lands,  
1265 coastal zones, designated wilderness or wilderness study areas, wild and scenic rivers,  
1266 National Historic Landmarks designated by the Secretary of the Interior, 100-year  
1267 floodplains, wetlands, sole source aquifers, National Wildlife Refuges, National Parks,  
1268 areas of critical environmental concern, or other areas of high environmental sensitivity;
  - 1269 (iv) Cultural Resources as defined in AR 200-4.
- 1270 10. Involving effects on the quality of the environment that are likely to be highly controversial.
- 1271 11. Involving effects on the environment that are highly uncertain, involve unique or unknown risks,  
1272 or are scientifically controversial.
- 1273 12. Establishes a precedent for future or subsequent actions that are reasonably likely to have a future  
1274 significant effect.
- 1275 13. Potential for degradation of already existing poor environmental conditions. Also, initiation of a  
1276 degrading influence, activity, or effect in areas not already significantly modified from their  
1277 natural condition.
- 1278 14. Introduction/employment of unproven technology.

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1279 **List of Categorical Exclusions**

- 1280 (a) For convenience only, the CXs are grouped under common types of activities (for example,  
1281 administration/ operation, construction/demolition, and repair and maintenance). Certain CXs  
1282 require a REC, which will be completed and signed by the proponent. Concurrence on the use of a  
1283 CX is required from the appropriate environmental officer (EO), and that signature is required on  
1284 the REC.
- 1285 (b) Administration/operation activities:
- 1286 (1) Routine law and order activities performed by military/military police and physical plant  
1287 protection and security personnel, and civilian natural resources and environmental law  
1288 officers.
- 1289 (2) Emergency or disaster assistance provided to federal, state, or local entities (REC required).
- 1290 (3) Preparation of regulations, procedures, manuals, and other guidance documents that implement,  
1291 without substantive change, the applicable HQDA or other federal agency regulations,  
1292 procedures, manuals, and other guidance documents that have been environmentally evaluated  
1293 (subject to previous NEPA review).
- 1294 (4) Proposed activities and operations to be conducted in an existing non-historic structure which  
1295 are within the scope and compatibility of the present functional use of the building, will not  
1296 result in a substantial increase in waste discharged to the environment, will not result in  
1297 substantially different waste discharges from current or previous activities, and emissions will  
1298 remain within established permit limits, if any (REC required).
- 1299 (5) Normal personnel, fiscal, and administrative activities involving military and civilian personnel  
1300 (recruiting, processing, paying, and records keeping).
- 1301 (6) Routinely conducted recreation and welfare activities not involving off-road recreational  
1302 vehicles.
- 1303 (7) Deployment of military units on a temporary duty (TDY) or training basis where existing  
1304 facilities are used for their intended purposes consistent with the scope and size of existing  
1305 mission.
- 1306 (8) Preparation of administrative or personnel-related studies, reports, or investigations.
- 1307 (9) Approval of asbestos or lead-based paint management plans drafted in accordance with  
1308 applicable laws and regulations (REC required).
- 1309 (10) Non-construction activities in support of other agencies/organizations involving community  
1310 participation projects and law enforcement activities.
- 1311 (11) Ceremonies, funerals, and concerts. This includes events such as state funerals, to include  
1312 flyovers.
- 1313 (12) Reductions and realignments of civilian and/or military personnel that: fall below the thresholds  
1314 for reportable actions as prescribed by statute (10 U.S.C. 2687) and do not involve related  
1315 activities such as construction, renovation, or demolition activities that would otherwise require  
1316 an EA or an EIS to implement (REC required). This includes reorganizations and reassignments  
1317 with no changes in force structure, unit redesignations, and routine administrative  
1318 reorganizations and consolidations (REC required).
- 1319 (13) Actions affecting Army property that fall under another federal agency's list of categorical  
1320 exclusions when the other federal agency is the lead agency (decision maker), or joint actions  
1321 on another federal agency's property that fall under that agency's list of categorical exclusions  
1322 (REC required).

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- 1323 (14) Relocation of personnel into existing federally-owned (or state-owned in the case of ARNG) or  
1324 commercially-leased space, which does not involve a substantial change in the supporting  
1325 infrastructure (for example, an increase in vehicular traffic beyond the capacity of the  
1326 supporting road network to accommodate such an increase is an example of substantial change)  
1327 (REC required).
- 1328 (c) Construction and demolition:
- 1329 (1) Construction of an addition to an existing structure or new construction on a previously  
1330 undisturbed site if the area to be disturbed has no more than 5.0 cumulative acres of new surface  
1331 disturbance. This does not include construction of facilities for the transportation, distribution,  
1332 use, storage, treatment, and disposal of solid waste, medical waste, and hazardous waste (REC  
1333 required).
- 1334 (2) Demolition of non-historic buildings, structures, or other improvements and disposal of debris  
1335 there from, or removal of a part thereof for disposal, in accordance with applicable regulations,  
1336 including those regulations applying to removal of asbestos, polychlorinated biphenyls (PCBs),  
1337 lead-based paint, and other special hazard items (REC required).
- 1338 (3) Road or trail construction and repair on existing rights-of-ways or on previously disturbed  
1339 areas.
- 1340 (d) Cultural and natural resource management activities:
- 1341 (1) Land regeneration activities using only native trees and vegetation, including site preparation.  
1342 This does not include forestry operations (REC required).
- 1343 (2) Routine maintenance of streams and ditches or other rainwater conveyance structures (in  
1344 accordance with USACE permit authority under Section 404 of the Clean Water Act and  
1345 applicable state and local permits), and erosion control and storm water control structures (REC  
1346 required).
- 1347 (3) Implementation of hunting and fishing policies or regulations that are consistent with state and  
1348 local regulations.
- 1349 (4) Studies, data collection, monitoring and information gathering that do not involve major surface  
1350 disturbance. Examples include topographic surveys, bird counts, wetland mapping, and other  
1351 resources inventories (REC required).
- 1352 (5) Maintenance of archaeological, historical, and endangered/threatened species avoidance  
1353 markers, fencing, and signs.
- 1354 (e) Procurement and contract activities:
- 1355 (1) Routine procurement of goods and services (complying with applicable procedures for  
1356 sustainable or "green" procurement) to support operations and infrastructure, including routine  
1357 utility services and contracts.
- 1358 (2) Acquisition, installation, and operation of utility and communication systems, mobile antennas,  
1359 data processing cable and similar electronic equipment that use existing right-of-way,  
1360 easement, distribution systems, and/or facilities (REC required).
- 1361 (3) Conversion of commercial activities under the provisions of AR 5-20. This includes only those  
1362 actions that do not change the actions or the missions of the organization or alter the existing  
1363 land-use patterns.
- 1364 (4) Modification, product improvement, or configuration engineering design change to materiel,  
1365 structure, or item that does not change the original impact of the materiel, structure, or item on  
1366 the environment (REC required).

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- 1367 (5) Procurement, testing, use, and/or conversion of a commercially available product (for example,  
1368 forklift, generator, chain saw, etc.) which does not meet the definition of a weapon system  
1369 (Title 10, U.S.C., Section 2403. ``Major weapon systems: Contractor guarantees"), and does not  
1370 result in any unusual disposal requirements.
- 1371 (6) Acquisition or contracting for spares and spare parts, consistent with the approved Technical  
1372 Data Package (TDP).
- 1373 (7) Modification and adaptation of commercially available items and products for military  
1374 application (for example, sportsman's products and wear such as holsters, shotguns, sidearms,  
1375 protective shields, etc.), as long as modifications do not alter the normal impact to the  
1376 environment (REC required).
- 1377 (8) Adaptation of non-lethal munitions and restraints from law enforcement suppliers and industry  
1378 (such as rubber bullets, stun grenades, smoke bombs, etc.) for military police and crowd control  
1379 activities where there is no change from the original product design and there are no unusual  
1380 disposal requirements. The development and use by the military of non-lethal munitions and  
1381 restraints which are similar to those used by local police forces and in which there are no  
1382 unusual disposal requirements (REC required).
- 1383 (f) Real estate activities:
- 1384 (1) Grants or acquisitions of leases, licenses, easements, and permits for use of real property or  
1385 facilities in which there is no significant change in land or facility use. Examples include, but are  
1386 not limited to, Army controlled property and Army leases of civilian property to include leases of  
1387 training, administrative, general use, special purpose, or warehouse space (REC required).
- 1388 (2) Disposal of excess easement areas to the underlying fee owner (REC required).
- 1389 (3) Transfer of real property administrative control within the Army, to another military  
1390 department, or to other federal agency, including the return of public domain lands to the  
1391 Department of Interior, and reporting of property as excess and surplus to the GSA for disposal  
1392 (REC required).
- 1393 (4) Transfer of active installation utilities to a commercial or governmental utility provider, except  
1394 for those systems on property that has been declared excess and proposed for disposal (REC  
1395 required).
- 1396 (5) Acquisition of real property (including facilities) where the land use will not change  
1397 substantially or where the land acquired will not exceed 40 acres and the use will be similar to  
1398 current or ongoing Army activities on adjacent land (REC required).
- 1399 (6) Disposal of real property (including facilities) by the Army where the reasonably foreseeable  
1400 use will not change significantly (REC required).
- 1401 (g) Repair and maintenance activities:
- 1402 (1) Routine repair and maintenance of buildings, airfields, grounds, equipment, and other facilities.  
1403 Examples include, but are not limited to: Removal and disposal of asbestos-containing material  
1404 (for example, roof material and floor tile) or lead-based paint in accordance with applicable  
1405 regulations; removal of dead, diseased, or damaged trees; and repair of roofs, doors, windows,  
1406 or fixtures (REC required for removal and disposal of asbestos-containing material and lead-  
1407 based paint or work on historic structures).
- 1408 (2) Routine repairs and maintenance of roads, trails, and firebreaks. Examples include, but are not  
1409 limited to: grading and clearing the roadside of brush with or without the use of herbicides;  
1410 resurfacing a road to its original conditions; pruning vegetation, removal of dead, diseased, or  
1411 damaged trees and cleaning culverts; and minor soil stabilization activities.

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- 1412 (3) Routine repair and maintenance of equipment and vehicles (for example, autos, tractors, lawn  
1413 equipment, military vehicles, etc.) which is substantially the same as that routinely performed  
1414 by private sector owners and operators of similar equipment and vehicles. This does not include  
1415 depot maintenance of unique military equipment.
- 1416 (h) Hazardous materials/hazardous waste management and operations:
- 1417 (1) Use of gauging devices, analytical instruments, and other devices containing sealed radiological  
1418 sources; use of industrial radiography; use of radioactive material in medical and veterinary  
1419 practices; possession of radioactive material incident to performing services such as  
1420 installation, maintenance, leak tests, and calibration; use of uranium as shielding material in  
1421 containers or devices; and radioactive tracers (REC required).
- 1422 (2) Immediate responses in accordance with emergency response plans (for example, Spill  
1423 Prevention Control and Countermeasure Plan (SPCCP)/Installation Spill Contingency Plan  
1424 (ISCP), and Chemical Accident and Incident Response Plan) for release or discharge of oil or  
1425 hazardous materials/substances; or emergency actions taken by Explosive Ordnance  
1426 Demolition (EOD) detachment or Technical Escort Unit.
- 1427 (3) Sampling, surveying, well drilling and installation, analytical testing, site preparation, and  
1428 intrusive testing to determine if hazardous wastes, contaminants, pollutants, or special hazards  
1429 (for example, asbestos, PCBs, lead-based paint, or unexploded ordnance) are present (REC  
1430 required).
- 1431 (4) Routine management, to include transportation, distribution, use, storage, treatment, and  
1432 disposal of solid waste, medical waste, radiological and special hazards (for example, asbestos,  
1433 PCBs, lead-based paint, or unexploded ordnance), and/or hazardous waste that complies with  
1434 EPA, Army, or other regulatory agency requirements. This CX is not applicable to new  
1435 construction of facilities for such management purposes.
- 1436 (5) Research, testing, and operations conducted at existing enclosed facilities consistent with  
1437 previously established safety levels and in compliance with applicable federal, state, and local  
1438 standards. For facilities without existing NEPA analysis, including contractor-operated  
1439 facilities, if the operation will substantially increase the extent of potential environmental  
1440 impacts or is controversial, an EA (and possibly an EIS) is required.
- 1441 (6) Reutilization, marketing, distribution, donation, and resale of items, equipment, or materiel;  
1442 normal transfer of items to the Defense Logistics Agency. Items, equipment, or materiel that  
1443 have been contaminated with hazardous materials or wastes will be adequately cleaned and will  
1444 conform to the applicable regulatory agency's requirements.
- 1445 (i) Training and testing:
- 1446 (1) Simulated war games (classroom setting) and on-post tactical and logistical exercises involving  
1447 units of battalion size or smaller, and where tracked vehicles will not be used (REC required to  
1448 demonstrate coordination with installation range control and environmental office).
- 1449 (2) Training entirely of an administrative or classroom nature.
- 1450 (3) Intermittent on-post training activities (or off-post training covered by an ARNG land use  
1451 agreement) that involve no live fire or vehicles off established roads or trails. Uses include, but  
1452 are not limited to, land navigation, physical training, Federal Aviation Administration (FAA)  
1453 approved aerial overflights, and small unit level training.
- 1454 (j) Aircraft and airfield activities:
- 1455 (1) Infrequent, temporary (less than 30 days) increases in air operations up to 50 percent of the  
1456 typical installation aircraft operation rate (REC required).

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- 1457 (2) Flying activities in compliance with Federal Aviation Administration Regulations and in  
1458 accordance with normal flight patterns and elevations for that facility, where the flight  
1459 patterns/elevations have been addressed in an installation master plan or other planning  
1460 document that has been subject to NEPA public review.
- 1461 (3) Installation, repair, or upgrade of airfield equipment (for example, runway visual range  
1462 equipment, visual approach slope indicators).
- 1463 (4) Army participation in established air shows sponsored or conducted by non-Army entities on  
1464 other than Army property.

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**Attachment 2. TRADOC Form 161 (Categorical Exclusion)**

<b>CATEGORICAL EXCLUSION (CX)</b> (40CFR1500-1508)		
TO: (Environmental Office)		FROM: (Proponent Action Officer & Phone Number)
<b>I. IDENTIFICATION</b>		
Project Number		Project Title
Brief Description (A copy of DD Form 1391. Military Construction Project Data, or another description prepared to meet another requirement may be attached as appropriate.)		
Applicable Categorical Exclusion(s) (CX)		
Reasons for Categorically Excluding Proposal		
Name and Signature of the Proponent of Action		Phone Number
		Date
<b>II. CONCURRENCE/NONCONCURRENCE</b>		
Concur		Nonconcur
Reasons for Nonconcurrency		
Name and Signature of Environmental Coordinator		Phone Number
		Date

**TRADOC** FORM **161-R** Replaces TRADOC Form 161-R, Jan 77, which is obsolete.  
Apr 80

**Attachment 3. RFMSS Review Process**

RFMSS 2002 Handbook for Range Control Scheduler V1.05

April 05

**3.1 Submitting a Request or Hold**

To submit a request or hold through the RFMSS 2002 system, the above form must be completed. At the top left corner of the form is the Request and Hold radial buttons. The form opens to the default of Request. If the user desires to place a hold on a facility they must click on the HOLD radial. All other entries on this form are identical for both the Request and HOLD functions. Note that all *mandatory* entries on the form are preceded with an asterisk and are colored red. The system will not allow the user to advance to the next window or submit the form until all mandatory fields have been completed.

**3.1.1 Completing the upper portion of the Request form** - The upper portion of the Request Form window contains information that applies to the entire request. RFMSS uniquely identifies a single Request by assigning the Request Control Number Identifier (RCNI) automatically when the OK button is clicked. The assigned RCNI is not modifiable.

- A. **\*Unit** and Priority- A **\*Unit** must be identified on each Request. Click the down arrow at the right of the Unit data field in order to select from a list of unit names. If the user has signed into the system with a Range Scheduler User ID and Password the drop down menu will display all units in the database. If the user has signed into the system with a unit ID and Password the drop down will list only display the unit that signed on and all subordinate units. Subordinate units are established in the Set Up Table. The set up table is accessible from the Main Menu by selecting Administration, Reference Table, and Unit. Should changes to this table be required contact the local FA. The selected unit's Priority automatically displays if assigned in the Set Up Table. Otherwise, a default priority of "0" is entered.
- B. Sponsor - The Sponsor (or parent unit), if established in the Set Up Table, will auto populate. If none has been established in the Set Up Tables then it may be manually entered from the drop down listing.
- C. The **\*Start Date** and **\*End Date** default entries are tomorrow's date when initiating a request using the New Request option on the Schedule menu. If accessed from the Two Week Calendar then the start and end dates will be the date selected in the Two Week Calendar window. Users can change these dates as necessary. When multiple facilities



and/or events are requested using a single Request Form this Start Date will reflect the earliest date of the requests and the End Date will reflect the latest date of the requests thus capturing the entire time frame for all training being scheduled.

- D. If a point of contact is established in the Set Up table, then it will automatically display in the POC data field when a unit is selected. If none has been established then it may be manually entered.
- E. Submitted Date – This will reflect the date the Request or HOLD was submitted into the system.
- F. Days Until Training – This will tell the user the number of days from tomorrows date before the training is to start.
- G. Phone – This is the POC phone and can only be populated via the Set Up Tables. If there is no entry in the Set Up Tables then this will remain blank. It cannot be manually entered.

Note - In the above sample of the Request Form the Text 1, Text 2, and Text 3 data entry areas are blank. The titles Text 1-3 are place holders on the request form. These are *user defined fields* that are set up by the FA and can only be changed by the FA. These allow the local Range management to establish other installation-specific data that the specific range complex desires to utilize. Each installation FA may remove these fields completely or redefine the required data to be input in these fields by the customers. If these fields are not clearly defined contact the Range Control Scheduler or the local FA for explanation of what data should be provided in these fields.

**3.1.2 Completing the middle portion of the Request form** – The middle portion of the request form allows the user to define the facilities, the events, and other specifics about the training to be conducted. Clicking the cursor in the middle portion of the window, or using the Schedule menu at the top of the window, Edit, Add New Facility Event Selection, will open a blank line in the window. A single Request can cover multiple facilities and multiple events, each with different time periods.

- A. **Std Event block** – When the system is set up, Range Management has the option to establish ‘Standard Events’ for each facility. Normally a ‘Standard Event’ is defined as an event, or events, that may be conducted on a given facility without modifications or additional resources being applied to that facility. The “Standard Event” may be further defined as what weapons and ammunitions may be utilized for training on a specific facility. The application will default to standard events thus place a check in the block. The application may be set up by the FA to allow ONLY those select event(s) to be scheduled by the users.

All other training events that have not been established in the set up table by the FA are considered by the application to be non-standard events. Non-Standard events may be blocked in the set up tables by the FA. If this is the case the customers desiring to conduct non-standard training will be forced to contact Range Control and have them input the request. Should a specific facility be desired for a ‘Non-Standard’ event, and the application has been configured to accept non-standard events (by the FA), the user may click on the check mark, removing the check and leaving the block blank, and fill out the request form for submission.

*Note that the Event and Facility fields are linked together through the Set Up Table when the Std. Event block is checked.*

- B. Cont. Time** – This block is used to allow the user to establish with Range Control that they will be training continuously for more than a 24hr period. Note that on the line opened, to the right there is a Start Time and a Stop Time. If a facility has been scheduled for three consecutive days with a start time of 0800hrs and a with a stop time of 1800 hrs, the Range Cadre will assume that the facility will be occupied each day at 0800 and cleared by 1800 hrs at the end of each day. If the Cont. Time block is checked it signifies that the unit will occupy the facility at 0800 the first day and will stay at the facility continuously until 1800 on the last day of training.
- C. Enter the \*Event information** – Clicking on the down arrow on the **Event** field first will display all events that are available to be scheduled on the installation. By selecting a specific event (provided the Std. Event block is checked) only facilities that will accommodate that event will be displayed.
- D. Enter the \*Facility information** - Clicking on the down arrow on the **Facility** field first will display all facilities that are available to be scheduled at the range complex. By selecting a specific facility (provided the Std. Event block is checked) only events that may be scheduled on that facility will be displayed.
- Note that if the Std. Event block is not checked there is no system internal check and balance system to alert Range Cadre should a unit attempt to schedule an event on a facility that is not compatible.*
- E. \*Training Start Date and \*Training End Date** – When the data line is opened the Start Date and End Date will default to the dates set in the upper portion of the request form. If there are multiple entries on the request form, dates may be manually input on these lines. Note that when there are multiple scheduling inputs on the form the upper portion of the form should reflect the first date and last date of all training. Each line will break out the specifics of each date, times, event, and facility as required.
- F. Start and End Time** – Input the start and end times that the facility is being requested. If the facility is to be occupied for more than 24hr, Check the **Cont. Time** block and indicate the start time for the first day of training and the End time for the last day when the unit is scheduled to depart the facility. If a facility has been requested for multiple days and the **Cont. Time** block has not been checked, the start and end times will be the start and end time for EACH DAY. The unit will be expected to occupy and depart the facility EACH DAY.
- G. Max. Altitude** – Maximum altitude is associated with a particular facility and will display whatever altitude is established in the set up table. This is the maximum altitude that is not to be exceeded by any firing on that facility.
- H. Vertical Hazard** – This is the maximum height distance of a possible ricochet from an ammunition or the explosion radius of an ammunition.
- I. No. of Persons** – This block is for the number of Persons projected to be trained.

Should there be a requirement to remove a data line from the request (see below), highlight the data line by clicking on that line. Next place the curser on the Edit located in the top left corner of the screen and click. Then select the Delete Facility/Event Selection and click. The data line highlighted will be removed from the Request Form.



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RFMSS 2002 Handbook for Range Control Scheduler V1.05

April 05

Event	Facility	Training Start Date	Training End Date	Start Time	End Time	Max. Altitude	Vertical Hazard	No. of Person
AIR INSERTION	DZBERO	22/11/03	22/11/03	00:00	23:59	7500	500	

**3.1.3 Completing the tabs portion of the Request form** – There are 8 tabs across the bottom of the Request Form. These tabs are as follows and are individually discussed below:

- Communication
- Vehicle
- \*Weapons/Ammo (Mandatory field)
- Conflict
- Restriction
- SDZ
- Target
- User Fields

NOTE: The Communications tab relates to the entire request as the top 1/3<sup>rd</sup> of the request form.

**3.1.3.1 Communication tab** – There are three radial buttons on the Communication tab which provides means of general communication associated with the request. They are the Memo, Special Instructions, and Unit Activity radials. By clicking on the radial the specific communication can be read.

The **Memo** field is used for general communication about the Request by the customer to communicate information to the Range Control.

The **Special Instruction** field is used by Range Control to communicate to the unit and its chain-of-command.

The **Unit Activity** field is used by the unit to describe any unusual needs associated with the **Request**.

NOTE: All other tabs, excluding the Communications tab, relates to the specific line (event and facility line) highlighted while the tabs are paged through and data input. This allows the user to specify Vehicles, Weapons/Ammo, and Targets to be used for that training event as well as take note of any Conflicts, and/or Restrictions pertaining to that specific facility and/or event.

**3.1.3.2 Vehicle Tab** – Clicking the **Vehicle** tab of the **Request Form** displays a blank tab. An event and facility *must* be selected before choosing a vehicle type. Clicking in the blank field OR clicking on the **Insert** button will display the vehicle data entry line. Clicking on the drop down under the Vehicle Model Name data field will display the vehicles available for training. Anytime this field is clicked upon the entire list in the database will display as available. Clicking on the vehicle of choice will populate the data field and auto populate the Vehicle Description field. (This data will be used for Maneuver Impact Miles (MIMS) calculations and utilization data in the future.) The estimated quantity of each type of vehicle is to be entered. Note that when multiple Events/Facilities are being input on a single request form the vehicle data being input will apply to the highlighted Event/Facility *only* unless the **Apply All** button is clicked. Only vehicles that are going beyond the hardstand parking area and actually into the training areas/ranges are to be considered in the MIMS calculations and therefore entered into the Request Form.

Vehicle Model Name	Vehicle Description	Quantity
1942	B-2 BOMBER	5

Buttons: Apply All, Insert, Delete, Help

Tab Bar: Communication, **Vehicle**, \*Weapon/Ammo, Conflict, Restriction, SDZ, Target, User Fields

NOTE: The **Apply All**, **Insert**, **Delete**, and **Help** buttons will appear on the **Vehicle**, **\*Weapons/Ammo**, and **Target** tabs and function EXACTLY THE SAME for each tab.

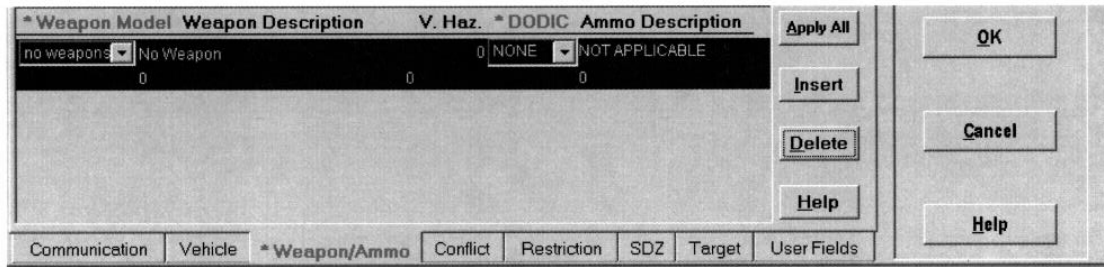
- A. **Apply All button** – When multiple Events/Facilities are being input on a single Request Form and the same Vehicle(s)/Weapons/Ammo/Targets are being used for all scheduled Events/Facilities, highlight an Event/Facility data line, input the vehicle(s), and click the **Apply All** button. This will attach the vehicles highlighted to each Event/Facility on the Request.
- B. **Insert button** – When additional Vehicle(s)/Weapons/Ammo/Targets need to be added to a specific Event/Facility, highlight the specific Event/Facility, click on the **Insert** button, and add the Vehicle(s)/Weapons/Ammo/Targets data as required.
- C. **Delete button** – When Vehicle(s)/Weapons/Ammo/Targets need to be deleted from a specific Event/Facility highlight the specific Event/Facility, highlight the specific Vehicle(s)/Weapons/Ammo/Targets that needs to be deleted, click on the **Delete** button, and the Vehicle(s)/Weapons/Ammo/Targets data will be removed from the display.

**D. Help** – This will display the portion of the Users Guide specifically addressing the Vehicle(s)/Weapons/Ammo/Targets tab.

**3.1.3.3 \*Weapon/Ammo Tab** – The Weapon/Ammo Tab is mandatory and if there is no weapon or ammo to be used the default entry of ‘None’ is acceptable. The Weapon and Ammunition lists are standard listings of the Army inventory. Additions to this list may be made at the local level by the FA if required.

The Weapon Model and DODIC that appear in the drop down list are populated from the Facility-Weapon, Facility-Ammunition and Weapon-Ammunition tables. For each facility-event combination selected in the middle portion of the window, if the STD event check box is selected, then the Weapon Model pull down list is filtered to display only the weapons cross-referenced in the above mentioned tables. If the STD Event check box is selected and there are no weapons or ammo displayed for a facility-event combination then a message “There is no standard ammo/weapon setup for Facility xxxx” will be displayed. If STD EVENT is not selected, then all weapons and ammo in the system will be displayed in the Weapon Model and DODIC pull down list.

Vertical Hazards (**V. Haz.**) associated with a weapon are indicated if they have been entered in the Weapon setup table.



**3.1.3.4 Conflict Tab** - The Conflict tab of the Request Form window identifies the Scheduling, Safety, and Environmental conflicts associated with the request's selected event-facility. If there is a conflict, the label of the radio button is active. Otherwise, the radio button label is grayed out. Click on the desired radio button to view active conflicts.

The **Scheduling** conflict window lists any other requests that are scheduled on the facility for that day. (As displayed below)

The **Safety** conflict window lists all safety conflicts resulting from entries in the Facility-Facility Conflict, Facility-Event Conflict and Facility-Ammunition Event Conflict setup tables.

The **Environmental** conflict window lists all environmental conflicts resulting from entries in the **Facility-Environmental Conflict** setup table.

Unit	Event	Facility	RCNI	Start Date	End Date	Start Time	End Time	Status	Sub Status
1-2FA	AIR MOBILE	DZBOBCAT	101791	16/03/05	16/03/05	00:00	23:59	RES	
2-3AR	CDS	DZBOBCAT	101800	16/03/05	16/03/05	00:00	23:59	PEN-RC	

**3.1.3.5 Restriction Tab** - The **Restriction** tab of the **Request Form** window enables the user to view any **Waivers, Prerequisites, Limitations**, and available **Equipment** associated with the selected event and/or facility. *The restrictions on the facilities can be established for specific time frames or long term in the set up table. Equipment is established in the set up table.*

View any information on each of these restriction types by clicking the applicable radio button: **Waivers, Prerequisites** and **Limitations**. The system will display specific data fields containing information affecting the request. The waivers, prerequisites, and limitations are derived from the **Facility, Restriction** setup table and are based on the facility and event.

A **Limitation** would be any restriction that could keep the facility from being operated at full capacity (i.e. limited hours of operation due to noise abatement).

A **Prerequisite** would be a requirement for the user to take some action prior to facility usage (i.e. attend special briefing or specialized training courses).

A **Waiver** would be the requirement to obtain special permission to conduct specific types of training (i.e. fire fighting training during a dry season).

Facility Description:  Help

Waivers  Prerequisites  Limitations  Equipment

From: 01/09/99 To: 15/11/07  
Facility closed during dry season

Selecting the Equipment radio button displays support facilities/equipment associated with the selected facility. The equipment data originates from the **Facility, Facility-Support Facility** setup table. The facility description field is derived from the **Facility** setup table.

Facility Description: Hand Grenade Familiarization/Qualification		Help
<input type="radio"/> Waivers	<input type="radio"/> Prerequisites	<input checked="" type="radio"/> Equipment
Facility	Support Facility/Equipment Name	Quantity
RNG17	Ammo Breakdown Shed	1
RNG17	Bleachers, enclosed	1
RNG17	Latrine	1
Communication	Vehicle	*Weapon/Ammo
Conflict	<b>Restriction</b>	SDZ
Target	User Fields	

**3.1.3.6 SDZ Tab**– The **Surface Danger Zone (SDZ)** function will be activated in a future release.

**3.1.3.7 Target Tab** - The **Target** tab of the **Request Form** window is a drop down menu that is built in the Set Up Tables. If additional targets are required on the drop down display contact the local FA. The **Target** tab enables the user to specify targeting needs to range control. Users can choose from the drop down list the type of targets needed, specify the quantity, and input any remarks or instructions required on the use of the targets requested. Enter target requirements, if any, for each facility-event on your request form. If more than one event/facility is on the request, highlight the event/facility and then input target data as required. If the target(s) are required for all events/facilities on the request, enter the targets required and click the **Apply All** button. To remove a target requirement from the list highlight the target to be removed and click the **Delete** button.

Target Name	Model	Quantity	Remark
15-meter qualification zero target	250 M		
175-meter feedback target	STANDARI		
25-meter scaled silhouette slow-fire target	175 M		
25-meter scaled silhouette timed-fire target	50 M		
25-meter zeroing target for M16A1 rifle (standard si250 M			

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**Attachment 4. Format for Record of Environmental Consideration  
Modified for Fort Bliss**

**To:** *(Environmental Officer)*

**From:** *(Proponent)*

**Project Title:**

**Brief Description:**

**Anticipated date/or duration of proposed action:** *(month/year)*

**Reason for using record of environmental consideration (choose one):**

a. Adequately covered in an (EA, EIS) entitled *(name)*, *(dated)*. The EA/EIS may be reviewed at *(location)*.

OR,

b. Is categorically excluded under the provisions of CX \_\_\_\_\_, 32 CFR 651, Appendix B, and no extraordinary circumstances exist as defined in paragraph 4-3, because:

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*(Date)* \_\_\_\_\_ *Project Proponent - Commander or Decision Maker*

*(Date)* \_\_\_\_\_ *Director of Environment or Formally Designated Representative*

\*Variation from this format is acceptable provided basic information and approvals are included in any modified document



Attachment 5. Environmental Baseline Survey Format

ENVIRONMENTAL BASELINE SURVEY

Project Location or Address  
FORT BLISS, TEXAS

Date:

1. **PURPOSE:** The purpose of this Environmental Baseline Survey (EBS) is to document the environmental condition of the \_\_\_\_\_ property, Fort Bliss, Texas. This facility is currently used for \_\_\_\_\_.
2. **FINDING:** The subject facility identified below does /does not have a history of contamination by hazardous chemicals, spills of POL, or having been occupied by activities that use or generate hazardous substances.
3. **PROPERTY DESCRIPTION:** This property is located on the main post and therefore has been owned by the government for over a hundred years. It consists of approximately XX square feet of area. It is bounded by XX Road on the east, XX Road on the north, XX Road on the west, and XX Road on the south. Site Map is at Attachment 1. (Describe what is on property at this time There were/were no obvious hazards associated with this property during the on-site inspection of (date).
4. **ENVIRONMENTAL CONDITION OF PROPERTY:** The Environmental Condition of the Property code for this property is Category X. (Example: Category 1- No storage, release, or disposal of hazardous substances has occurred on this property.)
5. **HAZARDOUS WASTE STORAGE AND ACCUMULATION:** There is/is no evidence of hazardous waste or storage at this site.
6. **HAZARDOUS MATERIALS STORAGE AND UTILIZATION:** There is/is no evidence of hazardous materials storage or utilization at this site.
7. **RADIOLOGICAL SUBSTANCE STORAGE:** There is/is no evidence of radiological substances storage at this site.
8. **GROUNDWATER:** There is/is no evidence of groundwater contamination at this site.
9. **AIR EMISSIONS:** (No) air emissions are expected to result from the activities of the (current usage).
10. **RADON TESTING:** Not applicable?
11. **STORAGE TANKS:** There are no storage tanks above or below ground at this site/
12. **HAZARDOUS SUBSTANCE SPILLS:** There is/is no record of or physical evidence of any illegal

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dumping or spills at this site.

13. NATIONAL HISTORIC PRESERVATION ACT: (No) historic or cultural resources have been identified at the site.

14. OTHER AREAS OF CONCERN:

- a. Asbestos Containing Materials: (None).
- b. Polychlorinated Biphenyls (PCBs) and PCB Contaminated Transformers and Shop Equipment: There is/is no evidence of PCB or PCB containing equipment at the site.
- c. Lead based Paint: Lead paint is/is not suspected within the on-site structure. Building XXXXX was constructed in (year) and is a (brick, adobe, stucco, etc) structure. Potential lead-contaminated paint can be found at \_\_\_\_\_.

15. LIMITATIONS: Limitations of the EBS include no sampling or analysis of soils (both surface and subsurface). Other limitations include a lack of historic information on the property, the absence of long-time employees at Fort Bliss familiar with the history of the property, and the absence of neighboring entities that could provide historical information on the property. Since the property has been under long-term ownership of the Army, no EPA databases were consulted for this study.

16. CONCURRENCE: In my capacity as Chief, Multi-media Division of the Directorate of Environment, I have determined that the subject parcel of land identified above has undergone an Environmental Baseline Survey and I agree with the findings of the study subject to the limitations as outlined above.

\_\_\_\_\_  
ELZA CUSHING  
Chief, Multimedia Division  
Directorate of Environment

\_\_\_\_\_  
DATE

Attachments

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**Attachment 6. Site Rehabilitation Prioritization Form A**

<b>SITE REHABILITATION PRIORITIZATION (SiteRep) FORM A</b>			
OBSERVATION GRID (UTM):		MAP DATUM:	
TRAINING AREA:		DATE:	
OBSERVER:		PHONE #:	
CIRCLE APPROPRIATE RESPONSES.			
DO YOU WISH TO KNOW THE FINAL PROJECT ASSESSMENT?		YES	NO
<b>MILITARY LAND TRAINING USE CATEGORY</b>			
LOW WATER CROSSING		ROADS/ROAD SHOULDERS	
RS ADA SITE, BUVOUAC		MANEUVER TRAINING	
SMALL ARMS RANGE		MISSILE/ARTILLERY FIRING POINTS	
OBSERVER/COMMO/RADAR POINTS		IMPACT AREAS	
OTHER:			
<b>ENVIRONMENTAL IMPACTS</b>			
EXTENT OF DAMAGE:			
ESTIMATED (ACRES):			
<b>RISK ASSESSMENT</b>			
THE OBSERVED DEGRADATION WILL IMPACT TRAINING:		YES	NO
VISIBILITY/ACCESSIBILITY OF SITE:		HIGH	MODERATE
			LOW
<b>COMMENTS</b>			
DESCRIPTION OF THE SITE LOCATION:			
DESCRIPTION OF THE DEGRADATION OR PROBLEM:			

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**Attachment 7. Site Rehabilitation Prioritization Form B**

<b>SITE REHABILITATION PRIORITIZATION (SiteRep) FORM B</b>					
Observation Grid (UTM):			Map Datum:		
Training Area:			Date:		
Observer:			Phone #:		
<i>CIRCLE APPROPRIATE RESPONSES.</i>					
<b>MILITARY LAND TRAINING USE CATEGORY</b>					
Low Water Crossing (3)			Roads/Road Shoulders (3)		
Rs Ada Site, Buvouac (2)			Maneuver Training (2)		
Small Arms Range (2)			Missile/Artillery Firing Points (2)		
Observer/Commo/Radar Points (1)			Impact Areas (1)		
Other (1):					
<b>ENVIRONMENTAL IMPACTS</b>					
EXTENT OF DAMAGE		Estimated (Acres):		Or Gps File Name:	
SOIL TYPE			SITE IS LOCATED IN		
Silt (3)		Gravelly Silt (3)		Upland Slopes (2)	
Clay (2)		Gravelly Clay (2)		Basins (1)	
Sand (2)		Gravelly Sand (2)			
Exposed Rock (1)		Other			
SITE DRAINAGE PATTERN			EROSION TYPE		
Primary Drainage (4)			Sheet Erosion (1)		
Secondary Drainage (3)			Rill Erosion (2)		
Culvert/Rd Drainage (2)			Gully Erosion (3)		
Flat Vegetation Area (1)			Other:		
<b>THREATENED ENDANGERED OR SENSITIVE SPECIES CONCERNS</b>					
Yes:				No	Unknown
<b>RISK ASSESSMENT</b>					
The Observed Degradation Will Impact Training			Yes (2)	No (1)	
Visibility/Accessibility Of Site		High (3)	Moderate (2)	LOW (1)	
Potential For Rehabilitation Success		High (3)	Moderate (2)	LOW (1)	
If Site Is A Road	Na (0)	Dirt (3)	GRADED (2)	GRAVEL (1)	PAVED (0)
<b>COVER TYPE</b>					
Plains Mesa Grassland (3)			Desert Grassland (3)		
Woodlands (3)			Montane Shrub (3)		
Barren (3)			Mixed Shrub (2)		
Mobile Dunes (2)			Mesquite Dunes (1)		
<b>REHABILITATION REQUIRED</b>					
Reseed		Culvert	Clean Fill	Dams	
Rock		Concrete	Synthetic Soil Retention	Contour	
Earth Moving		Other:			
Total Score From Values Of Answers Circled:					
Description Of Site Location:					
Description Of The Degradation Or Problem:					

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**APPENDIX B  
PROGRAMMATIC AGREEMENT FOR  
THE MANAGEMENT OF HISTORIC PROPERTIES ON FORT BLISS**

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**PROGRAMMATIC AGREEMENT  
AMONG  
THE FORT BLISS GARRISON COMMAND AND  
THE NEW MEXICO STATE HISTORIC PRESERVATION OFFICER AND  
THE TEXAS STATE HISTORIC PRESERVATION OFFICER AND  
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
FOR THE  
MANAGEMENT OF HISTORIC PROPERTIES ON FORT BLISS,  
FORT BLISS, TEXAS, UNDER SECTIONS 106 AND 110 OF THE  
NATIONAL HISTORIC PRESERVATION ACT OF 1966 (AS AMENDED)**

**WHEREAS**, the Fort Bliss Garrison Command (Fort Bliss), pursuant to the National Historic Preservation Act of 1966 (as amended) (NHPA) and Army Regulation 200-4: Cultural Resources Management has determined that day-to-day military activities on Fort Bliss have the potential to impact historic properties; and

**WHEREAS**, the Army Campaign Plan implements Army Transformation and proposed modifications to land use may impact historic properties; and

**WHEREAS**, military undertakings may affect existing buildings, structures, sites, landscapes, ranges, etc. on lands under Fort Bliss management; and

**WHEREAS**, Fort Bliss in consultation with the New Mexico and Texas State Historic Preservation Officers (SHPO) has selected to develop and implement this Programmatic Agreement (PA) to guide management of historic properties and meet NHPA Section 106 of the NHPA responsibilities on Fort Bliss; and

**WHEREAS**, the Advisory Council on Historic Preservation (ACHP) was notified (April 12, 2006) and responded (April 19, 2006) with intent to participate and was consulted with on the development of this PA; and

**WHEREAS**, the Mescalero Apache and the Ysleta Del Sur Pueblo (Tigua) were invited (April 13, 2006, May 8, 2006 and May 9, 2006) to consult on the development of this PA; and

**WHEREAS**, neither the Mescalero Apache or the Ysleta Del Sur Pueblo expressed an interest in participating in the development of this PA; and

**WHEREAS**, the El Paso Historic Landmark Commission, the El Paso Preservation Alliance, the Preservation Texas, City of Socorro CLG, and the El Paso County Historical Society, Inc. were invited (April 13, 2006) to consult on the development of this PA; and

**WHEREAS**, the City of Socorro (April 27, 2006) and the El Paso County Historical Society, Inc. (May 5, 2006) expressed interest in participating and were consulting in the development of this PA; and



**WHEREAS**, the El Paso Historic Landmark, the El Paso Preservation Alliance and the Preservation Texas did not express an interest in consulting on the development of this PA; and

**NOW, THEREFORE**, Fort Bliss, ACHP, New Mexico SHPO, and Texas SHPO agree that management of historic properties as required by NHPA Section 106 of the NHPA and 36 CFR Part 800 on Fort Bliss shall be implemented in accordance with the following:

### **STIPULATIONS**

Fort Bliss will ensure that the following stipulations are implemented:

#### **I. DETERMINING IF ACTION IS AN UNDERTAKING**

Fort Bliss' Historic Preservation Officer (HPO) will determine whether proposed actions are undertakings as defined by 36 CFR Part 800 in accordance with Standard Operating Procedure #1, Attachment A of this PA. If the HPO determines action is not an undertaking the action will receive no further attention. If it is determined that the action is an undertaking, then the HPO will further evaluate the project under Stipulation II.

#### **II. DETERMINING IF PROPOSED UNDERTAKING IS EXEMPT FROM FURTHER 106 REVIEW**

Fort Bliss' HPO will evaluate proposed undertakings to determine whether they may be undertakings without the potential to affect historic properties (as defined in 36 CFR 800.3(a)) or exempted undertakings following Standard Operating Procedure #2 in Attachment A of this PA or is an activity that will be reviewed by Fort Bliss without SHPO or ACHP review (Attachment C of this PA). If the HPO determines that the undertaking qualifies as an exempted undertaking, no further consideration will be given to the undertaking. A list of undertakings exempt from SHPO review is provided in Attachment C of this PA. If the proposed undertaking does not qualify as an exempted undertaking, the HPO will further evaluate the undertaking under Stipulation III.

#### **III. DEFINING OF AREA OF POTENTIAL EFFECT (APE)**

Fort Bliss' HPO will define the Area of Potential Effect (APE) for each undertaking in accordance with Standard Operating Procedure #3 in Attachment A of this PA. APEs for all undertakings will be documented. Once the APE is defined, the undertaking will be further evaluated under Stipulation IV.

#### **IV. IDENTIFYING AND EVALUATING HISTORIC PLACES**

Fort Bliss' HPO will conduct necessary surveys to inventory APE to identify and evaluate historic properties that may exist in accordance with Standard Operating Procedure #4 in Attachment A of this PA. Findings of eligibilities will be submitted to the appropriate SHPO for a 30-day review. If a finding of eligibility affects Tribal interests, the finding will be submitted to the appropriate Tribal Historic Preservation Officer (THPO) and federally recognized Tribes (Tribes) for a 30-day review. The appropriate SHPO, THPO and Tribes will be provided a copy

of the Record of Historic Properties Consideration (see Attachment B) on determinations of eligibility for concurrence. If eligible historic properties are identified, the HPO will proceed to Stipulation VI.

## **V. SURVEY STRATEGY FOR CHANGING MISSION ON MCGREGOR RANGE AND THE CHANGE IN LAND USE ON TRAINING AREAS**

The objective of this stipulation is to provide an appropriate program by which archeological survey and site evaluation will be conducted to accommodate the change in the military mission on Fort Bliss. Fort Bliss' HPO will implement a survey sampling strategy of 30 percent of all unsurveyed land on McGregor Range, excluding Otero Mesa. Fort Bliss will survey and evaluate historic properties in accordance with Standard Operating Procedure #5 in Attachment A of this PA. Individual project reports will be submitted to the New Mexico SHPO for 30-day review and comment on the HPO's finding of eligibility and will not be submitted as part of the Annual Report.

## **VI. ASSESSING EFFECTS**

The HPO will assess effects that undertakings may have on historic properties under Stipulation VI. Assessment of project effects will fulfill 36 CFR Part 800.5 by following Standard Operating Procedure #6 in Attachment A of this PA. The HPO will document findings of No Historic Properties Affected or No Adverse Effect per Stipulation IX and no further action on that undertaking is required under this PA. If the HPO determines an undertaking will have a finding of an Adverse Effect, further evaluation of the undertaking will occur under Stipulation VII. Further opportunities for review will occur in the Annual Report (see Stipulation XIII and SOP #13 in Attachment A of this PA).

## **VII. RESOLUTION OF ADVERSE EFFECTS**

It is Fort Bliss' policy to avoid adverse effects to historic properties under its management, to the extent possible while meeting mission needs. If adverse effects occur, Fort Bliss will apply best management practices to consider all options to avoid or limit impacts to historic properties. If, after applying best management practices, avoidance is not an option, the HPO will address mitigation of the effect as provided for under Standard Operating Procedure # 7 found in Attachment A of this PA to fulfill 36 CFR Part 800.5. If mitigation is not feasible, the HPO will document this under Stipulation VIII. The SHPO(s) ability to comment on findings of effects is through the NEPA process (see Stipulation IX and SOP #9 in Attachment A of this PA). Further opportunities for review will occur in the Annual Report (see Stipulation XIII and SOP #13 in Attachment A of this PA).

## **VIII. DOCUMENTING ACCEPTABLE LOSS**

Fort Bliss decision-making process is conditioned by fulfillment of 36 CFR Part 800 and other Stipulations of this PA. Unless these have been met, documenting acceptable loss cannot be undertaken. Prior to implementing this Stipulation, the HPO must document why treatment of adverse effects cannot be achieved. Use of this Stipulation by Fort Bliss should be rare, as other mechanisms for compliance with Section 106 under this PA will reduce the need to make acceptable loss determinations. A cost

associated with mitigation is not justification for use of this Stipulation. If the HPO determines that this Stipulation must be used, Standard Operating Procedure #8 in Attachment A of this PA will be followed.

## **IX. REVIEWING AND MONITORING IN ACCORDANCE WITH NEPA**

The New Mexico and Texas SHPOs, federally recognized tribes, and interested members of the public will continue to participate in the process of reviewing and commenting on Fort Bliss undertakings with the potential to affect historic properties in accordance with the NEPA process. Participation shall occur in accordance with NEPA procedures and where no NEPA documentation is prepared, through the availability of the RHPC (Attachment B). The HPO will redact the confidential locational information contained in the RHPC when provided to the public. The HPO will follow Standard Operating Procedure #9 in Attachment A of this PA to insure appropriate stakeholder consultation in the NEPA process.

## **X. ACCIDENTAL DISCOVERY OF HISTORIC PROPERTIES**

The objectives of this Stipulation are to have procedures in place in the event of accidental discovery of archeological materials. This can apply to both previously recorded and new sites and to archeological sites in any part of Fort Bliss. If an archeological site or a property of traditional religious and cultural importance is accidentally discovered, the HPO will insure that Standard Operating Procedure #10 in Attachment A of this PA is followed. Additionally, the stipulations and guidelines outlined in the Fort Bliss NAGPRA policy will be followed.

## **XI. REPORTING DAMAGE TO HISTORIC PROPERTIES: BUILDINGS, SITES, LANDSCAPES, DISTRICTS, OBJECTS, ETC.**

Routine military training activities at Fort Bliss and the operation and maintenance of Fort Bliss facilities pose a risk of unintentional damage to properties that are or may be eligible for inclusion in the National Register of Historic Places. If such damage occurs the HPO will follow Standard Operating Procedure #11 in Attachment A of this PA.

## **XII. PUBLIC INVOLVEMENT IN THE FORT BLISS CULTURAL RESOURCES MANAGEMENT PROGRAM**

Various provisions of federal law, codified regulations and Army regulations require that interested members of the public have access to the decision-making processes and the results of historic preservation and environmental management undertaken at the public expense (see 36 CFR Part 800, AR 200-1, AR 200-2, AR 200-4). The HPO will ensure that Fort Bliss follows Standard Operating Procedure #12 in Attachment A of this PA.

## **XIII. ANNUAL REPORT**

The HPO is required to provide an annual report to interested members of the public, the New Mexico and Texas SHPOs, and the ACHP. In addition to the annual report, Fort Bliss will provide all necessary documents and data for ARMS in New Mexico and TARL in Texas for all archaeological surveys, evaluations and mitigations conducted during the year. If this report is not prepared, Fort Bliss will be required to comply with the provisions of 36 CFR Part 800 of the National Historic Preservation Act

beginning 30 days after report due date unless otherwise arranged with signatories of this PA for each individual undertaking at Fort Bliss that has the potential to affect historic places. The HPO will follow Standard Operating Procedure #13 in Attachment A of this PA to meet this requirement.

#### **XIV. DISPUTE RESOLUTION**

It is Fort Bliss policy to address all disputes in a professional manner and with the objective of reaching mutual agreement on dispute resolutions through meaningful consultation with objecting parties. Consultation needs to begin in the planning and preparation and review of this PA to limit disputes after implementation. If a dispute occurs, the HPO will follow Standard Operating Procedure #14 in Attachment A of this PA to resolve the dispute.

#### **XV. MILITARY ACTIVITIES IN ANTICIPATION OF IMMEDIATE DEPLOYMENT, MOBILIZATION OR ARMED CONFLICT**

Fort Bliss will proceed with undertakings required to support mobilization and training required in anticipation of immediate deployment, mobilization, or armed conflict without prior review of these activities by the SHPOs or the ACHP. The Fort Bliss HPO or other appropriate Fort Bliss cultural resources professional with appropriate security clearance will conduct an internal review following Standard Operating Procedure #15 in Attachment A of this PA.

#### **XVI. TRIBAL INTERESTS**

If at anytime during the life of this PA the Mescalero Apache, the Ysleta Del Sur Pueblo or any other federally recognized Tribe expresses interest in participating in this PA, Ft Bliss will enter into consultation with them to address concerns. This PA may be amended per Stipulation XX to reflect these concerns with the Tribe as a signature. A SOP to address how government-to-government consultation will be conducted may be developed if a Tribe expresses interest in participating in this PA and requests such to be developed.

#### **XVII. ARCHAEOLOGICAL SITE CONFIDENTIALITY**

The confidentiality of the nature and location of archaeological resources is provided for in 32 CFR Part 229.18 and further provided for in 36 CFR Part 800.11 pursuant to Section 304 of the National Historic Preservation Act and Section 9(a) of the Archeological Resources Protection Act (ARPA). Information regarding the nature and location of any archaeological resource may not be made available without the permission of the HPO. The HPO may release information concerning the location of any archaeological site if:

- A. It is determined that such disclosure would further the purposes of research or the “Archaeological and Historic Preservation Act of 1960” (16 U.S.C. § 469-469c) and not create a risk of harm to such resources or to the site at which such resources are located, or
- B. The Governor of New Mexico or Texas has submitted to Fort Bliss HPO a written request for information concerning the archaeological resources within the requesting Governor’s State. The request must include the purpose for which the information is

sought, and provide a written commitment to adequately protect the confidentiality of the information, or

- C. Those in decision making positions on Fort Bliss that may require the information for planning purposes that have a written policy in place to provide confidentiality of the information as provided for in 32 CFR Part 229.18 and approved by the HPO.

## **XVIII. STAFF QUALIFICATIONS**

All survey, evaluation, treatment and excavation work required to meet Stipulations of this PA will be carried out under the supervision of a person who meets the minimum standards as identified in the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44716) as appropriate for the historic properties being addressed. The Fort Bliss HPO is the responsible person on behalf of the Garrison Commander for meeting the stipulations of this PA. Responsibilities may be delegated to appropriately qualified staff to address the cultural resource under consideration. If the HPO does not meet the qualifications as defined by the Secretary of the Interior's Professional Qualifications Standards, then qualified staff members will fulfill the responsibilities.

The HPO will include a list of Fort Bliss professionals who participated in implementation of this PA during the previous and current fiscal years in each PA annual report. The list will include a description of each professional's current responsibilities.

## **XIX. FISCAL REQUIREMENTS AND SOURCES**

The stipulations of this PA are subject to the provisions of the Anti-Deficiency Act (31 USC, Section 1341) and availability of funds. If compliance with the Anti-Deficiency Act alters or impairs the ability of Fort Bliss to implement the stipulations of this PA, Fort Bliss will consult pursuant to sections XX and XXI below. The responsibility of Fort Bliss to carry out all other obligations under this PA that are not the subject of the deficiency will remain unchanged.

## **XX. AMENDMENT**

Any party of this PA may propose to the other parties that it be amended, whereupon all parties will consult to consider such an amendment.

## **XXI. TERMINATION**

Any party to this PA may terminate it by providing thirty (30) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that will avoid termination. In the event of termination, Fort Bliss will consult with the ACHP and the New Mexico and Texas SHPOs to determine how to carry out its responsibilities under NHPA Section 106 in a manner consistent with applicable provisions of 36 CFR Part 800.

**XXII. TERM OF THIS PA**

This PA takes effect upon last signature date and will remain in effect thereafter for five (5) years. Upon consultation with and agreement by other parties of this PA, it may be extended, amended, or terminated at the end of five years.

Execution and implementation of the terms of this PA evidence the fact that Fort Bliss has afforded the ACHP an opportunity to comment on this program, and that Ft Bliss has taken into account the effects of the program on historic properties.

**FORT BLISS, TEXAS**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Robert T. Burns  
Colonel, U.S. Army  
Garrison Commander

**ADVISORY COUNCIL ON HISTORIC PRESERVATION**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
John Fowler  
Executive Director

**NEW MEXICO STATE HISTORIC PRESERVATION OFFICER**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Katherine Slick  
New Mexico State Historic Preservation Officer

**TEXAS STATE HISTORIC PRESERVATION OFFICER**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
F. Lawrence Oaks  
Texas State Historic Preservation Officer

**ATTACHMENT A: STANDARD OPERATING PROCEDURES**

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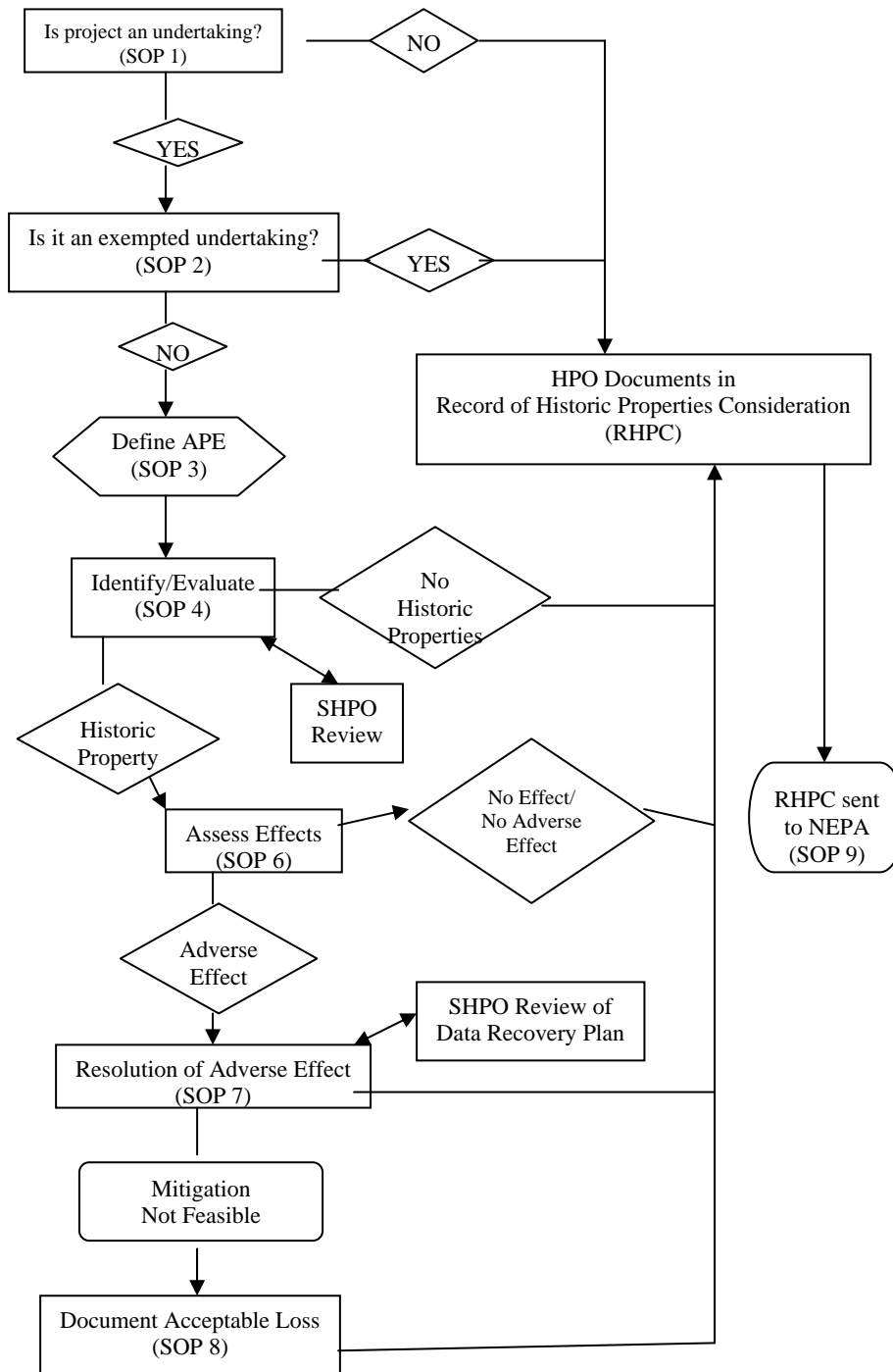


Figure 1: Section 106 Compliance Flowchart

## ***I. CRM Standard Operating Procedure #1***

### ***Identifying Undertakings***

#### **C.1.1 1.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.2 1.2 OBJECTIVE**

The objective of this SOP is to lay out a process to be followed to determine if an action is an undertaking subject to Section 106 review.

#### **C.1.3 1.3 POLICY**

It is Fort Bliss policy to have the Historic Preservation Officer (HPO) to review all undertakings for potential to affect historic properties. To this end, it is the HPO's responsibility to identify which actions are undertakings as defined by 36 CFR Part 800 through following this SOP.

### ***1.4 Implementing Procedures***

An "undertaking" is defined under this PA as "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of Army, including those carried out by or on behalf of Army, those carried out in whole or in part with Army funds, and those requiring Army approval" (36 CFR Part 800.16(y)). The HPO shall evaluate projects to determine if they meet this definition.

Fort Bliss undertakings may take the form of projects, work orders, contractor actions, permits, leases, Army actions, and other activities as defined above. Undertakings may originate with the Directorate of Public Works & Logistics, infrastructure maintenance contractors, military construction (MILCON), project proponents, and other entities. If another Defense Department command or Federal agency is involved with Fort Bliss in an undertaking, Fort Bliss and the other agency may mutually agree that the other agency may be designated as the lead Federal agency. In such cases, undertakings will be reviewed by the lead agency in accordance with 36 CFR Part 800.

Tenant organizations must coordinate with Fort Bliss to obtain up-to-date cultural resource information. Undertakings conducted by or for Army tenants with funding appropriated from the tenant organization are the responsibility of the tenant; likewise, compliance with this PA with these undertakings is the responsibility of the tenant unless Fort Bliss has assumed that responsibility on their behalf.

#### ***1.4.1 Notification of Potential Undertakings***

The HPO shall be notified of potential undertakings early in the planning process, whether or not they appear to impact historic properties. The majority of projects that have the potential to affect historic

properties are generated either through work orders or military construction (MILCON) requests. Work orders tend to cover repair and maintenance needs under \$200,000. MILCON projects tend to be new projects or major repair/maintenance actions over \$200,000. Projects may also be generated by direct congressional appropriations for identified purposes.

Work orders are reviewed by the HPO as they are generated by proponents. Proponents of these shall provide the HPO with a detailed description of the project or activity, site location, and a point of contact. The HPO will prepare a Record of Historic Properties Consideration (RHPC) (see Attachment B) on each work order and it will become part of the NEPA administrative record. Work orders do not become projects until after review and funding has been put towards it. Once a work order becomes an undertaking, it is subject to this PA.

Range Scheduling and Digging Permits also provide notice of potential undertakings. Range scheduling is accomplished through the online Range Facility Management Support System (RFMSS). All training requests are reviewed by the HPO for any potential to affect historic properties. In most cases historic properties are avoided through that HPO review; for more complex training scenarios, or new scenarios, a more extensive review may be required by NEPA. In all cases, either historic properties will be avoided or adverse effects mitigated. Digging permits, issued through the DPW, are also reviewed by the HPO for any potential to affect historic properties. In all cases, either historic properties will be avoided or adverse effects mitigated. All proponents are advised that in the event of any accidental discoveries of cultural materials, SOP #10 will be followed.

Proponents of MILCON projects will coordinate with the HPO to review proposed actions to determine whether they constitute an undertaking. Proponent will provide the HPO with a detailed description of the project or activity, potential site locations, schedule information or suspense dates and a point of contact. The HPO will assist the proponents in meeting requirements of this PA.

#### ***1.4.2 Determining an Undertaking***

The installation's HPO will use the information provided by the proponent to determine whether the project or activity qualifies as an undertaking per 36 CFR Part 800.16(y), and if so, whether it has the potential to affect historic properties.

1. If the project does not qualify as an undertaking, no further action under this PA is required;  
or
2. If the project qualifies as an undertaking, continue to SOP #2.

## ***II. CRM Standard Operating Procedure #2***

### ***Exempted Undertakings***

#### **C.1.4 2.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.5 2.2 OBJECTIVE**

The objective of this SOP is to lay out a process to be followed to determine if an undertaking is exempted from further Section 106 review.

#### **C.1.6 2.3 POLICY**

It is Fort Bliss policy to consider health and safety issues as well as public interest in determining if undertakings that may be exempted from Section 106 review. Army-wide exemptions are established by imminent threat to human health and safety in consultation with ACHP. Fort Bliss exemptions are established through what is in the public's best interest in coordination with the New Mexico and Texas State Historic Preservation Officers, Tribal Historic Preservation Officer (THPO), and Tribes.

#### **C.1.7 2.4 IMPLEMENTING PROCEDURES**

After a project, activity, or program has been determined to be an undertaking, the HPO shall determine if the undertaking is one of the following categorical exclusions and exempted undertakings. However, only the HPO can determine if a proposed undertaking falls into these categories. All proposed undertakings will continue to be coordinated with the HPO, and undertakings determined to fall under exempted undertakings will be accounted for in the annual report.

##### ***C.1.7.12.4.1 Army-Wide Exempted Undertakings***

There are Army-wide exemptions identified in the Army Alternate Procedures (AAP) for undertakings where there is an imminent threat to human health and safety. Parties to this PA recognize these AAP Army Wide Exemptions and apply them to this PA as follows:

- In-place disposal of unexploded ordnance; or
- Disposal of ordnance in existing open burning/open detonation units; or
- Emergency response to releases of hazardous substances, pollutants, and contaminants; or
- Military activities in existing designated surface danger zones (SDZs); SDZs are temporary in nature and only active during training activities. The exemption will apply to designated impact and/or dud areas—areas with unexploded ordnances. SDZs are exempted only when active.

Undertakings addressed through a fully executed nationwide Programmatic Agreement or other Program Alternative executed in accordance with 36 CFR Part 800.14, NHPA Section 106 regulations, a Program

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Comment, or a Memorandum of Agreement will be exempt. Presently there is one Nationwide Programmatic Agreement and one Program Comment in Place.

- Program Comment for Capehart and Wherry Era (1949-1962) Army Family Housing. The Program Comment provides a one-time, Army-wide NHPA compliance action for all Capehart and Wherry Era housing for the following management actions: maintenance and repair; rehabilitation; layaway and mothballing; renovation; demolition; and transfer, sale, or lease from federal ownership.
- Nationwide Programmatic Agreement addressing World War II temporary buildings. Provides for the demolition of World War II temporary buildings without further Section 106 consultation.

***C.1.7.22.4.2 Fort Bliss Exempted Undertakings.***

Some areas of Fort Bliss will be exempted from archeological and properties of traditional religious and cultural importance inventory requirements during the planning period because of low site potential (e.g., located on steep slopes offering no shelter, active arroyos, active flood plains, located in area disturbed to a depth below the cultural layer, etc.) or limited potential for mission impact (i.e. no or minimal ground disturbing activities) (see Attachment C).

Designated impact areas containing unexploded, antipersonnel ordnance are off-limits to historic properties management. No access to these areas is allowed.

Undertakings addressed through a fully executed Fort Bliss Programmatic Agreement or other Fort Bliss Program Alternative executed in accordance with 36 CFR Part 800.14 and that are not subject to the stipulations of this PA are:

- Programmatic Agreement regarding the Fort Bliss Residential Communities Initiative (RCI). This agreement addresses implementation of the Army's privatization of Army Family Housing, for which the future effects on historic properties cannot fully be determined prior to approval of the undertaking
- Programmatic Agreement regarding the Army's Enhanced-Use Leasing Initiative (EUL) to lease underutilized property on Fort Bliss. This agreement addresses the implementation of the William Beaumont General Hospital Historic District EUL, for which the future effects on historic properties cannot fully be determined prior to approval of the undertaking.

The recording and reporting requirements within the above PAs will follow the requirements of SOP 13 of this PA. Fort Bliss may initiate procedures to terminate the above PAs in favor of rolling the RCI and EUL activities under this PA through the amendment process set forth in Section XX of this PA.

Non-ordnance contaminated areas may be identified on Fort Bliss managed lands. Hazmat, restoration, and clean-up project teams will need to coordinate with the HPO to determine the need and efficacy of survey for proposed undertakings in contaminated areas. Some contaminated areas may be off limits to ground-disturbing activities, including archeological surveys. Contaminated areas, however, that do not pose an imminent threat and undertakings in these areas are not exempt from Section 106.

Decisions made through government-to-government consultation with Tribes concerning management options on properties of religious, traditional, and cultural importance are not subject to Section 106

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review by the New Mexico or Texas State Historic Preservation Officer or the Advisory Council on Historic Preservation.

If an undertaking qualifies as an exempted undertaking, the HPO will document this on the Record of Historic Properties Consideration (Attachment B) and the undertaking will receive no further consideration under this PA. If the undertaking does not qualify as an exempted undertaking, the HPO will proceed to SOP #3.

### **III. CRM Standard Operating Procedure #3**

#### **Defining the Area of Potential Effect (APE)**

##### **C.1.8 3.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

##### **C.1.9 3.2 OBJECTIVE**

The objective of this SOP is to lay out a process to be followed to determine the appropriate Area of Potential Effect (APE) of an undertaking.

##### **C.1.103.3 POLICY**

It is Fort Bliss policy to consider the direct and indirect effects an undertaking may have on historic properties; including visual impacts on properties that may be in the view shed of the undertaking. Prior to evaluating specific effects that undertakings may have, Fort Bliss will identify the APE. This will be the area considered for presence of historic properties that may be affected by the undertaking.

##### **C.1.113.4 IMPLEMENTING PROCEDURES**

The APE is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such historic properties exist. The area of potential effect is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking” (36 CFR Part 800.16(d)). An APE may also consist of view sheds associated with historic districts, landscapes, sites, individual historic properties or properties of traditional religious and cultural importance.

The size of the APE is determined on a case-by-case basis by the appropriate cultural resources staff and includes in its calculation the scale and nature of the undertaking. Generally, the size of the APE will be commensurate with the size of the project, encompassing both potential direct and indirect effects. The APE for interior work on buildings that do not have the potential to affect exteriors will be only the interior of that building. Cumulative effects may also influence the final APE. Projects should also consider visual impacts when determining the APE.

To determine a project’s APE:

- Categorize the undertaking (repair and maintenance, ground-disturbing activities, etc.);
- Determine whether the effects typically associated with this category of undertaking are the expected effects for the project;
- Determine where those effects might occur in relation to the project based on anticipated effect(s). The areas where effects might occur constitute the APE;



- May consult with appropriate SHPO, THPO, and Tribe if HPO is unsure of APE boundaries or suspects other information should be considered;
- Examine the APE to determine whether the proposed undertaking is likely to affect historic properties;
- Complete this process for all potential project locations;
- Include all APE definitions on a project map, including areas of direct and indirect effect; and
- Determine whether the scope and/or nature of the undertaking might result in additional or other effects.

Once the APE is defined and documented in the Record of Historic Properties Consideration (Attachment B), the HPO will proceed to SOP #4: Identifying and Evaluating Historic Properties.

## ***IV. CRM Standard Operating Procedure #4***

### ***Identifying and Evaluating Historic Properties***

#### **C.1.124.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.134.2 OBJECTIVE**

The objective of this SOP is to collect information about historic properties within the APE. After the resources in the APE are identified, they are evaluated for eligibility for inclusion in the National Register of Historic Places (NRHP). Not all resources will necessarily qualify for inclusion in the NRHP. NRHP eligibility is a threshold that affects subsequent management actions for the resources. Properties do not have to be formally listed in the NRHP to meet this threshold.

#### **C.1.144.3 POLICY**

It is Fort Bliss policy to identify properties that are eligible for inclusion in the National Register of Historic Places or that are identified as Properties of Traditional Religious and Cultural Importance (TRCI) by THPO or Tribe and manage them to maintain the historic or cultural characteristics that make them eligible for inclusion in the NRHP or important as TRCIs. Only those properties that are eligible for inclusion or that are listed in the NRHP or are identified as TRCIs are subject to this PA.

## ***4.4 Implementing Procedures***

### ***4.4.1 Identification***

Identification studies typically include background research, field investigations, consultation, analysis, and documentation of findings. Prior to a project specific identification study, the HPO will conduct a pre-inventory analysis to determine whether additional investigation is necessary, and, if so, what type of inventory approach is appropriate.

#### ***4.4.1.1 Preliminary Analysis***

The HPO will review the project area to establish whether the APE has been previously inventoried and to determine what types of historic properties are likely to be found in the APE. Background research should be conducted in preparation of survey as appropriate to the project. Potential sources include, but are not limited to, installation files and maps; previous identification surveys; Bureau of Land Management files; New Mexico and Texas SHPO files, previously identified historic contexts for the region; and local histories. Information may also be available from local governments, Native organizations and Tribal governments, universities, and public and private groups and institutions. Resources for this review may also include, but are not limited to:

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- The inventory and maps of Fort Bliss historic properties held on the GIS at Fort Bliss including planning level surveys, building inventories, maps of established historic districts and maps of archeological sites;
- Search of state site database systems, including ARMS and ATLAS.
- Any known properties of traditional religious and cultural importance.

Based on this review, the HPO will assess the project as follows:

- If the area has been investigated previously, assess the quality of any collection data. If the area has not been investigated, or if it has been investigated, but data quality is poor or conducted with old methodologies that are no longer valid with current state standards, further identification efforts will be required.
- Determine the need for additional identification based on Planning Level Survey data, and /or predictive model results, and preliminary tribal consultation on potential properties of traditional religious and cultural significance. The HPO will determine whether the collective data provides a basis for decision-making without additional identification activities:
  - Documentation of a decision not to proceed with further identification activities shall be included in the RHPC and made part of the project file; and
  - The decision shall be documented in the annual report to the consulting parties; documentation shall include the basis for the decision.

If additional identification studies are required, the appropriate tasks may include background research, field investigation, tribal consultation, analysis, and report preparation. The persons conducting identification studies and other historic properties activities shall meet professional qualifications in the appropriate discipline.

#### **4.4.1.2 Survey**

In general, there are two types of surveys: the reconnaissance survey and the intensive survey. The reconnaissance survey is a light inspection aimed at developing a general overview of an area's resources. The primary reason for a reconnaissance survey is to support background research in preparation of an intensive survey. The objective of an intensive survey is to identify completely and precisely all properties in a specified area based on a specific research design. It involves background research and a thorough inspection and documentation of all historic properties in an area. It should provide an inventory and necessary information to evaluate properties of eligibility for inclusion in the NRHP. The requirements and methods for conducting archeological surveys on Fort Bliss are outlined in section 4.4.1.2.2 of this SOP.

As part of the research process, Fort Bliss should periodically contact the NPS or U.S. Army Environmental Center (AEC) to determine whether any nationwide historic contexts have been developed that might apply to historic properties on Fort Bliss. Similarly, the SHPOs may have a statewide context against which the historic relevance of a resource can be weighed. Fort Bliss has been proactive in developing historic contexts for resources on its installation that are specific to the history of the region and to the Army. This effort to address gaps in the literature for current and future reference should

continue. However, Army funding practices does not provide for conducting historic context development beyond the borders of the installation. The HPO will consider other potential funding sources to assist in development of local and state context and will support efforts by others to develop these.

#### **4.4.1.2.1 Requirements for Archeological Survey**

A cultural resources professional with minimum qualifications as defined in 36 CFR Part 61 will supervise all archeological surveys. The installation HPO will provide general survey areas to the field archeologist who will:

- Determine final survey area: Only areas with potential to contain archeological sites in the project's APE will be surveyed. Areas that are already highly disturbed (e.g. improved areas, borrow pits, etc) and areas inaccessible to military training or other Fort Bliss undertakings (i.e. steep slopes) will be excluded. Areas that have been previously surveyed will also be excluded if existing data is determined by the HPO to be sufficient for the proposed project.
- Survey: The archaeologist will be responsible for conducting surveys and site evaluations according to the standards and procedures outlined in section 4.4.1.2.2 that follows.
- Submit report: A report will be submitted to the appropriate SHPO on the survey. For Texas, all of the information required in the CTA guidelines will be included. Survey report will include, but are not limited to:
  - A management summary
  - Project description
  - Project area description
  - Previous work/sites
  - Methods
  - Results
  - Recommendations
  - References.

#### **C.1.15 4.4.1.2.2 ARCHEOLOGICAL SURVEY PROCEDURES**

All cultural resource surveys undertaken on Fort Bliss shall consist of comprehensive, intensive, pedestrian methods designed to identify those Historic Properties that can reasonably be detected from the surface or are exposed in profiles. The purpose of survey is to obtain accurate, descriptive field data, which are systematically collected and sufficiently detailed to assess the research potential of each site; to make evaluations for National Register eligibility; and to allow preparation of accurate data recovery plans and budget estimates. Historic properties shall include both prehistoric and historic (50 years or older) manifestations. Military debris such as bullets, cartridges, and small missile fragments shall not be recorded unless it constitutes a particular historic event or is specified in a delivery order. Historic remains shall also be recorded, including wells, tanks, fences, machinery, and ground modifications from the historic period. Modern bottles, cans, and other trash will not be inventoried, but may be noted.

**4.4.1.2.2.1 Intensity.** The standard distance between surveyors shall be 15 meters. Any deviations from this distance shall be justified, require prior approval by the archeological program managers, and be documented in the technical report. Obstacles that may obscure the discovery of historic properties (e.g., dense vegetation, recent alluvium, sedimentation) shall be noted and the approximate boundaries of the obstacle(s) or condition shall be indicated on the appropriate USGS quadrangle. Linear surveys shall cover a width determined appropriate by the HPO on each side of the linear undertaking being surveyed, not including previously disturbed graded or bulldozed areas.

**4.4.1.2.2.2 Transect Recording Unit Survey.** The preferred survey method to be used on Fort Bliss projects is the transect recording unit (TRU). Other methodologies may be used with approval of the archeological program managers. The TRU method uses a grid system configured to line up with the UTM's (NAD 83) in the area for recording materials found on survey. The survey area is divided into 15- by-15-meter cells. All cultural materials are recorded within each cell and an approved threshold is established to organize positive cells into sites based on the current Fort Bliss site criteria. All TRU survey data are collected digitally and locational data are collected using high-accuracy GPS units. Hand-held computers (i.e., PDAs, Pocket PCs, etc.) are used as field data collection units and the surveyors will develop appropriate field data collection forms and software.

#### ***C.1.15.1 4.4.1.2.3 Recordation***

This section describes the standards and practices for recording archeological sites and isolated occurrences (IOs).

**4.4.1.2.3.1 Site Documentation.** Minimal data to be recorded include the general environmental situation, definition, and location of horizontal site boundaries; description of the location, number, and kinds of features visible from the surface; nature of artifact assemblages; density and frequency of artifacts; site integrity; potential for yielding chronometric samples (radiocarbon, dendrochronological, etc.); and paleoclimatological samples. The entire site boundary is also recorded, even if it exceeds the edge of the survey unit. Historic sites must have all relevant historic records searched as a way of adding documentary knowledge about the site. All archeological sites must have a GPS differentially corrected, highly accurate location taken in the approximate center of the site. All site boundaries must be mapped with GPS or EDM. GPS files should be converted to ArcGIS shape file format for assimilation with the GIS dataset.

**4.4.1.2.3.2 Site Definition Criteria.** No quantified criteria are going to cover all possibilities. Therefore, the following general criteria will be used for defining a site:

- The physical remains of past human activity that are at least 50 years old
- Ten or more artifacts of any class or type within an area 15 meters in diameter, except when all pieces appear to originate from a single source (e.g., one ceramic pot drop, one broken glass bottle, one deteriorated piece of sheet metal, etc.). The

exception is discrete, single knapping episodes, which are treated as sites. Fire-cracked rock and burned caliche are not considered artifact types for purposes of this criterion, but may fall under the category of “undatable feature.”

- One or more datable archeological features with or without associated artifacts.
- Two or more undatable archeological features.
- A single undatable feature with any associated artifacts. Ten pieces of fire-cracked rock and/or burned caliche in 1 square meter is the minimum criteria for fire-cracked rock and/or burned caliche to be assigned feature status without associated feature fill
- In general, 30 meters will be the maximum distance between manifestations, beyond which the materials should be treated as spatially unrelated.

Fort Bliss archeological program managers will allow the field supervisors to assign site status to other situations outside these criteria provided a logical and reasonable argument is made in consultation with the archeology program managers. Thus, a Folsom point, end scraper, and channel flake can still be called a Paleoindian site.

Additionally, any IO must be completely recorded such that the data potential of that manifestation is exhausted. In the case of a single undatable feature, trowel tests must be conducted around the locus to ensure there is no associated stain or additional buried deposits. Additional documentation on the potential for subsurface deposits in that area must accompany any recording of a single undatable feature recorded as an IO.

**4.4.1.2.3.3 Forms.** Data required for the New Mexico or Texas state forms for survey and sites shall be obtained for each project and site. Other additional data forms for in-field analysis may be used at the investigator's discretion, with an archeological program manager's approval, or may be required by Fort Bliss in the future. Data will be compatible with the ARMS or TEXSITE/ATLAS systems. For New Mexico projects, the investigator is responsible for completing an NMCRIS form and obtaining the NMCRIS activity number and LA numbers for New Mexico projects.

**4.4.1.2.3.4 Features.** All features (e.g., rooms, hearths, bins, depressions, middens, terraces, burned rock concentrations, fences, etc.) are recorded noting quantity of materials, size, shape, construction details, probable function, and any relationship to activity areas. Black-and-white and digital color photos are taken of each feature. When specified, profiles and plans views are drawn.

#### **4.4.1.2.3.5 Artifacts**

- Sampling and density for large projects only (40 acres or more with surface collection as part of the project). The investigator shall confer with the archeological program managers to design and implement an approved procedure for (1) estimating the density (or range in density) of surface artifacts and (2)

estimating total frequency of surface artifacts for each artifact group. This should be done on a project-by-project basis and previously approved methods are not automatically acceptable for other projects. Formal sampling procedures may include transects, quadrants, or other techniques, but the procedure shall be appropriate to the overall size and complexity of the site. To preserve the integrity of each site, artifacts shall be disturbed as little as possible during in-field analysis and returned to their pre-analysis locations, unless they are collected.

- Recording artifacts. Artifacts shall be recorded using established Fort Bliss procedures or the specific procedures established in the research design and/or work plan for that project. The archeological program managers must approve any deviations in advance.

**4.4.1.2.3.6 Site Maps.** A sketch map shall be prepared that depicts, minimally, the relationship of the site to nearby physiographic features and identifying landmarks, the location of each visible feature, the shape and location of artifact sampling units, activity loci, the location of the site datum, site and provenience boundaries, location of test units (including probes, auger, and trowel tests) and locations of collected artifacts. All maps must have a scale, north arrow, recorder name, date, legend/key, and source graphics (e.g., quadrangle name, DOQQ name, etc.). If remote sensing techniques are used (e.g., magnetometer, GPR, etc.) these areas must be delineated on the maps as well. The field number may be recorded on the field maps; however, LA or TARL trinomial and Fort Bliss site numbers shall be used on all final and published maps. The entire site boundary shall be recorded, even if it extends outside the survey area.

**4.4.1.2.3.7 Site Depth.** The investigator shall assess the potential of subsurface deposits at each site based on sound geoarcheological and/or geomorphologic argument. If the professional judgment is that a site is a surface manifestation only, a clear statement citing evidence supporting that judgment shall be provided. If the investigator believes a site contains subsurface deposits, a clear statement with supporting evidence shall be provided (e.g., strata visible in arroyo cut, results of auger tests, etc.). Auger tests, probes, trowel tests and other techniques of extremely limited nature that have minimal impact on the integrity of the site may be performed to serve as a basis for making a professional assessment of depth and extent of cultural deposits. These tests are considered a routine element of survey procedures distinct from a formal testing project. The archeological program managers must approve all testing strategies prior to the start of fieldwork.

**4.4.1.2.3.8 Site Integrity.** The investigator shall assess the present condition of each site including (1) identifying the kinds of post-depositional activities that have affected the site, (2) estimating the percentage of total site affected by each kind of disturbance, and (3) indicating those portions of the site that remain intact. Investigators must identify all disturbance sources, manmade and natural. A thorough and accurate description of site integrity must be provided for each individual site investigated.

**4.4.1.2.3.9 Chronometric Potential.** For each prehistoric site, the investigator shall determine the potential for obtaining the following kinds of chronometric samples: (1) radiocarbon samples (how many, standard or AMS, and in what context); (2) dendrochronological samples (how many and from how many different features); (3) type seriation such as diagnostic artifacts (list kind and frequency); and (4) other current techniques as appropriate.

**4.4.1.2.3.10 Site/Project Location Maps.** Each site and project shall be plotted on the appropriate USGS 7.5 minute quadrangle topographic map at a 1:24000 scale. The actual boundary of each site, rather than a central point, shall be depicted, as shall the survey areas, features (hearths, fences, tanks, and other structures), IOs, and modern features (such as roads and power lines) within the project area. The complete site boundary shall be mapped, even if it falls outside the project area boundary. The complete project area must be plotted as well. When appropriate or requested by the archeological program managers, maps with background imagery should be provided. All locational data should be collected with a high-accuracy GPS, EDM, or other approved device. Each site shall be identified in an appropriate GIS system maintained by DOE.

**4.4.1.2.3.11 Site Datum.** A site datum will be placed during site recording unless otherwise indicated by the archeological program managers. In general, a datum should consist of a piece of rebar or other approved stake with an attached aluminum or other approved tag. The tag shall include the name of the contractor and/or investigator, date of placement, Fort Bliss project number, and state and Fort Bliss site numbers. Investigators shall not use in-house or company specific numbers on site tags.

**4.4.1.2.3.12 Isolated Occurrences.** Isolated occurrences (IOs) must be recorded with GPS or EDM and plotted on 1:24000 USGS quads and DOQQs as part of all survey reports. In instances where the distinction between an IO and a site is in question, the investigator shall consult with the cultural resources managers to determine the designation. Only diagnostic or unique artifacts may be collected unless special provisions have been made to accommodate a specific research interest. IOs must have enough attribute data recorded to exhaust the data potential of the material. IOs include artifacts/features from any cultural or temporal period where those manifestations do not qualify as a site under the current criteria.

**4.4.1.2.4 Requirements for Surveys of Historic Buildings and Structures.**

A professional with minimum qualifications as defined in 36 CFR Part 61 for historian, architectural historian, or historic architect will supervise building and structure surveys. Survey requirements will vary depending on the scope and character of the undertaking. In many cases existing inventories will be sufficient to identify historic buildings and structures in the APE. Building and structure surveys may be conducted as needed as part of ongoing planning level survey work as well as to provide information on resources in an APE that are not sufficiently documented.



- Determine appropriate survey requirements: The HPO will determine whether in-house or external survey would be appropriate to the scope and time frame of the undertaking, and whether historic context material will need to be developed concurrently for the evaluation phase. He/she will also consider if the APE has been previously surveyed and if that survey data is adequate for the present undertaking.
- Survey: Surveys should combine site inspections with background research. Background research may include literature reviews, archival research, interviews and consultation as appropriate. Documentary research should be thorough enough to provide for the evaluation of any resources identified. The use of interviews and oral histories is encouraged to provide additional information. Site inspections should include a minimum of a sketch site plan and digital photographs of setting and exterior elevation(s) for each resource identified.
- Documentation: A report documenting the survey will be prepared to include, but not limited to: description and map of survey area(s), documented historical narrative, architectural description using the Historic American Buildings Survey (HABS) level 4 (as defined in the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation: HABS/HAER Standards*, 1990), or equivalent Historic American Engineer Record (HAER) standards as guidance, if recording a structure, photos of all resources identified, and list of sources consulted. It should also include the evaluation of significance as presented below. Maps will be digitized and submitted in a format compatible with ArcGIS. In cases of militarily sensitive properties, photos and maps may be subject to internal review and restrictions.

If no historic resources are identified within the APE of a proposed project, the HPO will document the absence of resources and the means used to determine this absence in the project file and the project can proceed without further consideration of historic resources. This finding will be documented in the Record of Historic Properties Consideration (RHPC) (Attachment B) and made part of the project file.

If historic properties are identified in the APE, the HPO will determine if these are eligible for listing in the NRHP. This finding will be documented in the RHPC and made part of the project file.

#### **4.4.1.2.5. Specific Requirements for Inventories of Properties of Traditional Religious and Cultural Importance**

Fort Bliss will consider Properties of Traditional Religious and Cultural Importance in project planning. In respect of confidentiality issues, Fort Bliss will only collect that information necessary to consider adverse effects in the planning process; this may or may not involve determining a site's eligibility for inclusion in the NRHP. Tribal consultation shall determine the level of identification effort that is merited. It should be noted that Properties of Traditional Religious and Cultural Importance may include natural settings and do not necessarily need to contain culturally modified objects/sites to be considered in the planning process.

**Confidentiality:** Tribes may determine that sharing information about a Property of Traditional Religious and Cultural Importance is inappropriate. In such circumstances, consideration of adverse affects in the planning process is still possible. Tribes may delineate a boundary around a significant site, which will be large enough to avoid inadvertent discovery of the property. When Army undertakings within the boundary are proposed, consultation with appropriate Tribes will be initiated to discover whether the proposed project will affect the Property of Traditional Religious and Cultural Importance. If the project

will adversely affect the site, avoidance through project location modification will be explored. Where adverse affects cannot be avoided, consultation with Tribes shall determine appropriate mitigation measures.

#### **4.4.2 Evaluation**

Evaluation for eligibility is a judgment process based on established criteria and guidance developed by the National Register of Historic Places. The process relies on two key concepts: significance and integrity. Both of these thresholds must be met to establish NRHP eligibility. Understanding the historic context of a property allows reasonable judgments to be made about those thresholds. Because significance and integrity are subjective concepts, the NRHP has developed criteria for evaluation and definitions of integrity that this SOP must follow. These are provided in 36 CFR Part 60.4. While the same NRHP framework is used to evaluate historic resources, archeological resources, and Properties of Traditional Religious and Cultural Importance, evaluations will emphasize the aspects appropriate to the type of resource under consideration. For Prehistoric archeological sites, the thresholds established for eligibility on Fort Bliss are based on the document *Significance Standards for Prehistoric Archeological sites at Fort Bliss: A Design for Further Research and the Management of Cultural Resources* (Abbott et al. 1996). A contract is currently underway to revise and update these standards incorporating what we have learned about the nature and extent of archeology in this region in the last 10 years. This revised Significance Standards will be reviewed and commented on by both SHPOs once completed. Once the SHPOs have concurred, this document will become incorporated into this PA and will be basis of future NRHP eligibility determinations. Until that time, the 1996 standards will be used.

##### **4.4.2.1 Procedures for Evaluation**

The procedures to be followed by the HPO for evaluating a cultural resource of any type are as follows:

###### **4.4.2.1.1. Categorize the Resource**

The HPO shall determine if the cultural resource is an archeological site, Property of Traditional Religious and Cultural Importance, buildings, structure, landscape, object, district, or combination. If the property is a property of Traditional Religious and Cultural Importance, 4.4.2.1.6 should be followed.

###### **4.4.2.1.2. Establish the Historic Context of the Cultural Resource**

- The HPO shall identify the theme(s), geographical limits, and chronological periods that provide a perspective from which to evaluate the cultural resource's significance; and
- The HPO shall determine how the theme(s) within the context may be significant to the history of the local area, the state or the nation. Although it is desirable to understand local and state contexts that may apply to Fort Bliss properties, funding does not always provide for conducting such studies off base. The HPO will consider other potential funding sources to conduct such studies and support local and state efforts to fill this gap. A theme is considered significant if scholarly research indicates that it is important in American or regional history; and
- The HPO shall determine if the cultural resource type is important in illustrating the historic context. Contexts may be represented by a single cultural resource type or by a variety of types; and

- The HPO shall determine how the cultural resource illustrates the historic context through specific historic associations, architectural or engineering values, or information potential; and
- The HPO shall determine whether the cultural resource possesses the physical features necessary to convey the aspects of prehistory or history with which it is associated.
  - (NOTE: The revised *Significance Standards* will provide Historic Contexts for prehistoric archeological properties.)

**4.4.2.1.3. Determine Whether the Cultural Resource is Significant under the NRHP's Criteria**

The HPO shall apply the following NRHP criteria for evaluation of eligibility for inclusion in the NRHP. If the historic property meets one or more of these criteria and retains integrity, the HPO shall proceed to 4.4.2.1.4. If the resource does not meet any of the criteria or does not retain integrity, the HPO shall determine that the resource is not eligible for inclusion in the NRHP; this determination will be stated in the Record of Historic Properties Consideration and made part of the project file. In that case, no further action is required under this PA. Determinations of Eligibilities are subject to appropriate SHPO review.

- (NOTE: The current and revised *Significance Standards* provide guidelines for eligibility of archeological properties.)

**National Register of Historic Places Criteria for Evaluation:**

**“Criteria:** The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

- Criterion A: Event. Under this criterion, an historic property must be associated with one or more events important in the historic context. To establish significance under this criterion:
  - determine the nature and origin of the cultural resource; and
  - identify the significant historic context with which it is associated; and
  - evaluate the historic context(s); and
  - evaluate the resource’s history to determine whether it is associated with the historic context in any important way.

- Criterion B: Person. This criterion applies to historic properties associated with individuals whose activities are demonstrably important within a local, state, or national context. The cultural resource must illustrate the person's achievement. To determine an historic property's significance under this criterion:
  - determine the importance of the individual; and
  - ascertain the length and nature of the person's association with the resource and determine if there are other historic properties associated with the individual that more appropriately represent that person's contributions.
  
- Criterion C: Design/Construction. This criterion applies to historic properties significant for their physical design or construction, including such elements as architecture, landscape architecture, engineering, and artwork. The historic property, to qualify, must:
  - embody distinctive characteristics of a type, period, or method of construction; or
  - represent the work of a master; or
  - possess high artistic value; or
  - represent a significant and distinguishable entity whose components may lack individual distinction.
  
- Criterion D: Information Potential. Historic properties may be eligible for the NRHP if they have yielded, or may be likely to yield, information important to prehistory (pre-contact) or history (post-contact).

***4.4.2.1.4 Determine if the Historic Property represents a Type Usually Excluded from the National Register of Historic Places, and if so, meets any of the Criteria Considerations.***

Some kinds of properties are normally excluded from NRHP eligibility. These include religious- built properties, properties that have been moved, birthplaces and graves, cemeteries, reconstructed properties and properties less than fifty years old. However, exceptions can be made for these kinds of properties if they meet one of the standard criteria in 4.4.2.1.3 above and fall under one of the seven special Criteria Considerations. Before examining the Criteria Considerations, the HPO shall determine if the historic property meets one or more of the four NRHP Criteria for Evaluation and retains integrity, and document the finding in the RHPC.

- If the historic property meets one or more of the four Criteria for Evaluation and has integrity, determine if the historic property is of a type that is usually excluded from the NRHP. If it does not meet one of these types, proceed to 4.4.2.1.5.
- If the historic property is a type cited in the Criteria Considerations, the HPO must determine if the historic property meets the special requirements stipulated for that type in the Criteria Considerations. If so, the HPO shall proceed to 4.4.2.1.5. If the historic property does not meet the requirements, the HPO shall determine that the historic property is not eligible for the NRHP and document that determination in the RHPC. No further action is required under this PA on properties that are not eligible for inclusion in the NRHP.

Criteria Consideration G, properties that have achieved significance within the past fifty years, is the main criteria consideration that applies to historic properties on Fort Bliss. It is recognized that properties dating from the Cold War era (1946-1989) require evaluation under this consideration. The HPO will evaluate properties less than 50 years old from this period for their “exceptional importance” under Criteria A, B, and C to identify those that may be eligible for inclusion in the NRHP. Evaluation of Cold War era properties will be limited to exteriors only. Properties greater than 50 years old in this period will be evaluated for their significance under the three criteria.

#### **4.4.2.1.5 Evaluate the Cultural Resource’s Integrity**

In addition to significance, an historic property must possess integrity to be eligible for the NRHP. Integrity is the ability of the resource to convey its significance; to reveal to the viewer the reason for its inclusion in the NRHP. Integrity is a subjective quality, but must be judged based on how the cultural resource’s physical features relate to its significance. Seven aspects are used to define integrity. Some, if not all, should be present for the resource to retain its historic integrity: location, design, setting, materials, workmanship, feeling, and association. The HPO shall assess integrity as follows:

- The HPO will define the essential physical features that must be present for a cultural resource to represent its significance. Although not all the historic physical features need to be present, those that convey its historic identity are necessary, including those that define why and when the resource was significant. Under Criteria A and B, the resource must retain those features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s). Under Criterion C, the resource must retain most of the physical features that constitute that style or technique. Under Criterion D, integrity depends on the data requirements defined in the research design. The significant data contained in the historic resource must remain sufficiently intact to yield the expected important information under appropriate methodologies; and
- The HPO will determine whether the essential physical features are enough to convey significance; and
- The HPO will determine whether the cultural resource needs to be compared with similar properties (historic and non-historic). A comparison may help determine what physical features are essential to historic properties of that type; and
- The HPO will determine, based on the significance and essential physical features, which aspects of integrity are particularly vital to the cultural resource being evaluated and if they are present. For Criterion A and B, the presence of all seven aspects of integrity are the ideal, however integrity of design and workmanship may not be as important or relevant. Under Criterion C, a cultural resource must have integrity of design, workmanship, and materials. Location and setting are important for those whose design is a reflection of their immediate environment. For Criterion D, settings will be included under Criterion D for evaluating sites.
  - (NOTE: The current and revised *Significance Standards* provide guidelines for assessing archeological site integrity.”)

If the HPO determines that a cultural resource meets one or more of the four Criteria for Evaluation, integrity must be evaluated. If, upon evaluation, the HPO determines that the resource retains integrity, the resource shall be determined eligible for the NRHP and the HPO shall document finding in the RHPC

and provide the appropriate SHPO with a 30 day review period for concurrence with that finding. Once SHPO concurrence is received, the HPO will proceed to SOP #6. If the HPO determines that the resource does not retain integrity, the HPO will determine that the resource is not eligible for inclusion in the NRHP. This determination will be documented in the RHPC and submitted to the appropriate SHPO for concurrence. Upon receipt of the documentation, the SHPO will respond within 30 days. If not comments are received within that time, concurrence with Ft Bliss' finding will be assumed. No further action is required under this PA for properties determined not eligible for inclusion in the NRHP.

#### **4.4.2.1.6 Methods for Evaluation**

In some cases, observations made during survey and recording may not be sufficient to determine the nature and extent of subsurface deposits or assess site integrity. In these cases, a formal testing program may be needed. The following outlines the general standards and procedures for subsurface testing on archeological sites:

**4.4.2.1.6.1 Testing.** Directorate of Environment (DOE) may request formal limited subsurface tests (such as 1- by-1-m test units) or systematic auguring and/or shovel testing to assess subsurface deposits or aid in the design of site specific data recovery plans. Tests should determine the extent and nature of subsurface deposits, including trash middens, artifact scatters, thermal features, or salvage of obviously endangered chronometric samples (e.g., a hearth eroding from the face of an arroyo bank). Information normally gathered in the survey stage, but absent, shall be obtained during testing. Tests should limit adverse effects to potentially eligible properties while maximizing significant data collection. If a site requires extensive tests to define data recovery efforts more accurately, the investigator should include these recommendations in the management section of their report. All units and tests must be screened thru one-quarter-inch mesh or one-eighth-inch mesh as appropriate to the materials being discovered.

**4.4.2.1.6.2 Test Data.** Test units/locations, including auger and trowel tests, shall be plotted on site maps using GPS or EDM. When subsurface tests are performed, all soil horizons and strata shall have written descriptions using standard scientific terms. Color descriptions shall be made in Munsell terminology. All excavated features shall be recorded using basic dimensions, orientation, and depth. Profile drawings and photographs (if possible) shall be made of at least one wall of each test pit and tested feature. Artifact descriptions, photography, and maps shall be as described under survey techniques. Upon completion of any test, units shall be restored as nearly as possible to conditions prior to excavation, except on specific instructions from the archeological program managers.

#### **4.4.2.1.7 Determination of Eligibility for Inclusion in the National Register of Historic Places for Properties of Traditional Religious and Cultural Importance.**

As previously discussed, it may not be necessary or appropriate to specifically identify and evaluate all Properties of Traditional Religious and Cultural Importance for inclusion in the NRHP. However, when this is determined to be an appropriate measure, the following guidelines will be applied. The

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identification, evaluation, and management of Properties of Traditional Religious and Cultural Importance require Tribal consultation and participation.

A Property of Traditional Religious and Cultural Importance is defined in the National Register Bulletin 38 as a site “eligible for inclusion in the NRHP because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identify of the community.” Besides meeting these definitions, Properties of Traditional Religious and Cultural Importance must also meet one or more of the four NRHP Criteria for Eligibility and retain integrity. The statement of significance describing why a site is eligible will be based on traditional knowledge, literature reviews and archival records. Integrity is best determined by the Tribe recognizing the site’s significance.

Properties of Traditional Religious and Cultural Importance need not be eligible for inclusion in the NRHP to be subject to management as if eligible. If such a property is determined eligible for inclusion in the NRHP, the appropriate SHPO will be consulted for concurrence with the finding if the Tribe identifying the property agrees to this consultation. All Properties of Traditional Religious and Cultural Importance will continue to SOP #6 to address potential effects the undertaking may have on that property.

**C.1.16 V. CRM STANDARD OPERATING PROCEDURE #5**

**C.1.17 SURVEY STRATEGY FOR THE CHANGING MISSION ON FORT BLISS AND THE CHANGE IN LAND USE ON TRAINING LANDS**

**C.1.185.1 APPLICABILITY**

This SOP applies to any land controlled by Fort Bliss, or as may be acquired or used by Fort Bliss, that may undergo a change in land use from no off-road maneuver to free off-road maneuver for wheeled and tracked vehicles.

**C.1.195.2 OBJECTIVES**

The objective of this SOP is to provide an appropriate program by which archeological survey and site evaluation will be conducted to accommodate the change in the military mission on Fort Bliss to free off-road maneuver for wheeled and tracked vehicles. On McGregor Range, that survey will be a 30 percent sampling.

**C.1.205.3 POLICY**

***C.1.20.15.3.1 Existing Maneuver Areas in Texas and Dona Ana in New Mexico***

Survey of most of the Texas and Doña Ana training areas has been completed; however, some areas that will undergo a change in land use may require additional survey. Current resources in the Doña Ana and Texas Maneuver areas will be managed through the Fort Bliss site database, GIS system, NEPA and the Form 88 process.

***C.1.20.25.3.2 McGregor Range Maneuver***

Training on McGregor Range will change from no off-road maneuver to free off-road maneuver by wheeled and tracked vehicles. Under the Army Campaign Plan, Army Transformation is implemented, and changes in land use are expected. Of the approximate 700,000 acres, 57% has been surveyed. An additional 300,000 acres remain uninvestigated. DOE proposes to perform a sample survey of approximately 30 percent of the unsurveyed land (98,000 acres). Survey will then continue year by year beyond the 30 percent threshold on uninvestigated lands (based upon the availability of funds). It is anticipated that the 30 percent survey will be completed before the change in land use begins. Otero Mesa is not included in that change in land use at this time. Additional Red Zones will be designated as the data become available and will also be off limits to training.

Sampling will be conducted training area by training area. Fort Bliss will prioritize surveys in these training areas to accommodate the mission needs. Survey began with FY 05 projects, which are specifically geared towards the training areas expected to receive the greatest impacts as well as those areas that are expected to have the highest density of historic properties based on a GIS predictive model.

**C.1.215.4 IMPLEMENTING PROCEDURES**

DOE will conduct surveys across McGregor Range (excluding Otero Mesa) to reach the 30 percent threshold for each training area. Survey parcels will be determined by one of two methods: (1) in areas



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where the highest traffic is anticipated and/or (2) in sample parcels based on a GIS predictive model developed for Fort Bliss considering such factors as soils, vegetation, slope, distance from water source, and other environmental variables. These units will be placed in areas anticipated to contain archeological sites based on the model. As the 30 percent mark is reached, changes in land use will begin. The overall goal will be to designate areas with high densities of historic properties as Red Zones (off-limits areas) to protect representative types of significant archaeological sites from maneuver impact.

Once the 30 percent thresholds have been reached, each year for the life of this PA, Fort Bliss will endeavor to complete an additional 10,000 acres of survey (funds allowing) on McGregor Range. Survey parcels will be determined using the selection criteria discussed in Section 5.1 of this section. These surveys will be programmed into the current Army funding mechanism and justified based on the requirements of this PA. In the event that funds are not approved for these projects, Fort Bliss will consult with the New Mexico SHPO on a mutually acceptable alternative.

Fort Bliss will submit the report generated for each of these survey and evaluation projects to the New Mexico SHPO for review and comment immediately following acceptance of the final report by the HPO. These reports will be submitted individually upon acceptance, not as part of the annual report.

## **VI. CRM STANDARD OPERATING PROCEDURE #6**

### **C.1.22ASSESSING EFFECTS**

#### **C.1.236.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army, by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.246.2 OBJECTIVE**

This SOP provides for the consideration of the effect of a project on historic properties. If the HPO determines that historic properties are present within a project APE, it must be determined if the undertaking will affect those properties. Effect is defined as an alteration to the characteristics of a cultural resource that qualify it for listing in or eligible for listing in the NRHP. Based upon the evaluation of effect, the HPO will determine if there are No Historic Properties Affected or if Historic Properties are Affected.

#### **C.1.256.3 POLICY**

It is Fort Bliss' policy to understand potential effects proposed undertakings may have on historic properties. Fort Bliss will manage its historic properties to minimize effects while meeting its missions.

### **6.4 Implementation**

#### **6.4.1 No Historic Properties Affected**

If the HPO finds that there are no historic properties present or that there are historic properties present but the undertaking will not alter the characteristics of the resource that qualify it for eligibility for the NRHP, then the HPO will determine that there will be no historic properties affected. This determination will be documented in a RHPC and made part of the project file, annual report as well as in the NEPA documentations. No further action is required under this PA.

#### **6.4.2 Historic Properties Affected**

If the HPO finds that there are historic properties that may be affected by the undertaking the CRM shall determine if these effects are adverse.

##### **6.4.2.1. Finding of No Adverse Effect**

This determination is made when there may be an effect, but the effect will not be harmful to those characteristics or historic values that qualify the property for inclusion in the NRHP. This finding will be documented in the RHPC, annual report and made part of the project file as well as in the NEPA documentation. No further action is required under this PA.

#### **6.4.2.2 Finding of Adverse Effect**

This determination is made when there may be an effect, and that effect could diminish the integrity of the characteristics that qualify the property for the NRHP.

36 CFR Part 800.5(a)(1): An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics that qualify a historic property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of an historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register of Historic Places. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

36 CFR Part 800.5(a)(2): Adverse effects on historic properties include, but are not limited to:

- “(i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the *Secretary's Standards for the Treatment of Historic Properties* (36 CFR Part 68) and applicable guidelines;
- (iii) Removal of property from its historic location;
- (iv) Change of the character of the property's use or physical features within the property's setting that contribute to its historic significance;
- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to a Native tribe; and
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions of conditions to ensure long-term preservation of the property's historic significance.”

When the HPO makes a finding of adverse effect, the finding will be documented in the RHPC and the procedures set forth in SOP #7 will be followed.

#### **6.4.2.2.3 Reporting of No Historic Properties Affected and No Adverse Effect**

Undertakings will be reviewed by Fort Bliss Cultural Resources professionals who meet the Secretary of the Interior's Professional Qualifications Standards (48 CFR § 44738-9). When undertakings are determined to have no effect or no adverse effect on historic properties, the appropriate SHPO will be

provided an opportunity to comment either in the NEPA process (SOP #9) or through the Annual Report (SOP #13). If the SHPO does not concur with the HPO's finding, the dispute will be addressed in accordance with SOP #14, Section 14.4.2. Further discussion of undertakings that will be reviewed by Fort Bliss is presented in SOP #7 and identified in Attachment C: Activities Review by Fort Bliss Requiring No SHPO or ACHP Review. At the request of the New Mexico or Texas SHPO and Fort Bliss, the list of undertakings can be modified to include or delete items.

### ***6.5 Emergency Actions***

No requirement of this SOP shall delay immediate actions required in an emergency to protect health and human safety or avoid substantial loss of building fabric. Reasonable and prudent efforts, in coordination with the HPO, shall be made to avoid or reduce adverse effects to historic properties during the implementation of immediate emergency actions, documented in writing after the fact with documentation submitted to signatories within 30 days as notification of actions taken and included in the PA annual report addressed in SOP #13.

## ***VII. CRM Standard Operating Procedure #7***

### ***Resolution of Adverse Effects***

#### **C.1.267.1 APPLICABILITY**

This SOP applies to all organizations, properties, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.277.2 INTRODUCTION**

The Advisory Council on Historic Preservation's implementing regulations provides the definition of adverse effect in 36 CFR Part 800.5 Assessment of Adverse Effects. An adverse effect occurs when an undertaking may alter any characteristic that makes the property eligible for inclusion in the National Register of Historic Places. An adverse effect will result in the diminishment of the property's integrity (i.e., location, design, setting, materials, workmanship, feeling, or association). This SOP defines Fort Bliss policy in regards to adverse effects with the options of (1) how it will strive to avoid adverse effects, and (2) when avoidance is not possible, how it will mitigate such effects.

#### **C.1.287.3 POLICY**

It is Fort Bliss' policy to avoid adverse effects to historic properties under its management to the extent possible while meeting mission needs. If adverse effects may occur, Fort Bliss will apply best management practices to consider all options to avoid or limit impacts to historic properties. If, after applying best management practices, avoidance is not an option, Fort Bliss will address mitigation of the effect as provided for under 36 CFR Part 800.6 (Resolution of Adverse Effects.)

#### **C.1.297.4 IMPLEMENTATION**

##### ***C.1.29.17.4.1 Applying Best Management Practices***

If the HPO, after applying assessment of adverse effects (36 CFR Part 800.5), determines a proposed undertaking will have an adverse effect on a historic property, he or she will consult with the undertaking's implementing organization to consider options for avoiding the effects. This consultation will explore the options available for meeting the mission's needs while maintaining the qualities of the historic property that make it eligible for inclusion in the NRHP. If consultation successfully eliminates the adverse effect, the HPO will document this process in a RHPC, along with the changes made to the undertaking to bring it in compliance with a finding of "no historic properties adversely affected," and submit it to NEPA. The project will be summarized in the PA annual report. At a minimum, the HPO and implementing organization will consider the following options: (1) project cancellation, (2) project relocation to avoid impact to the historic property, (3) minimization of impact, and (4) project redesign to avoid adverse effect to the historic property. When undertaking proposes the demolition of a historic

building, the option of adaptive reuse of that building must also be considered. Other options identified during consultation may be considered.

#### ***C.1.29.27.4.2 Other Options***

If, after considering alternative options, it is determined that the undertaking cannot avoid an adverse effect the HPO will apply mitigation measures identified in this SOP, prepare a RHPC for submittal to NEPA and provide access to the RHPC as outlined below.

#### ***C.1.29.37.4.3 Consultation/Mitigation***

If the HPO determines that mitigation measures identified in this SOP are not adequate for the level of effect on the historic property, a RHPC proposing appropriate mitigation measures will be prepared and submitted to NEPA. If an EA is not prepared, the RHPC will be submitted to the SHPO, ACHP, THPO, Tribes, and interested parties for consultation on mitigation measures. If the project requires an EA, the SHPO, ACHP, and interested parties will have an opportunity to comment in the preparation of the EA. If the project requires an EIS, consultation with the SHPO, ACHP and interested parties will be conducted to identify appropriate mitigation measures and made part of the Record of Decision (ROD). When appropriate and in consultation with the SHPO, off-site mitigation may be considered. If the HPO and SHPO cannot reach agreement on appropriate mitigation measures, SOP #14 will provide guidance on resolution of the disagreement.

**7.4.3.1 Buildings or Structures.** Mitigation of adverse effects caused by proposed demolition of a building or structure will include documentation of the best example of that architectural/building or structure type on Ft Bliss following Historic American Buildings Survey (HABS) or Historic American Engineering Record (HAER), as applicable, Level 2 standards. If HABS/HAER is not interested in receiving the original documentation, photographic documentation will be done digitally in place of large format photography. If no drawings exist for the historic property type to be demolished, new drawings will be prepared following HABS/HAER standards. The HPO will maintain the original documentation with electronic copies provided to the SHPO. Interested parties will be provided copies upon written request. The HPO will relocate the Fort Bliss collection of photographs and architectural and engineering drawings for the building to the permanent publicly accessible Fort Bliss cultural resources archives.

The HPO will identify materials in the building/structure to be reused in the maintenance and repair of other historic buildings/structures on Fort Bliss. Materials identified will be removed, protected, and reused as appropriate.

When the finding of Historic Properties Adversely Affected is limited to a single building that contributes to a historic district but that effect does not threaten the eligibility of that historic district for inclusion in the National Register of Historic Places (a finding of No Historic Properties Affected on the district level), the effected building will be mitigated under standard mitigation measures identified under this section. This mitigation will be referenced in the RHPC and the annual report. When making a finding of effect for a

contributing building in a district, cumulative effects to the district will be considered. If adverse affects to individual contributing elements have cumulated over time to a point where it does threaten the eligibility of the historic district, then mitigation measures will address the historic district.

Other potential mitigation measures may also be considered such as off site mitigation, development of public educational materials, spending of specific project mitigation money on preservation of a like property, etc. Other mitigation measures will be considered in consultation with the appropriate SHPO under the NEPA process as presented in SOP #9.

All actions taken under this SOP will be documented in the annual report and in the NEPA process as discussed in SOP #9.

**7.4.3.2 Historic Landscapes.** Mitigation of proposed demolition of historic landscapes will consist of documentation of the existing landscape following Historic American Landscape Surveys (HALS) Level 2 standards as general guidance, through existing drawings (preparation of measured drawings if there are no existing drawings addressing landscaping), digital photography, and written recordation. The HPO will maintain the original documentation with electronic copies provided to the appropriate SHPO. Interested parties will be provided copies upon written request. The HPO will relocate the Fort Bliss collection of photographs and drawings for the landscape to the permanent Fort Bliss cultural resources archives.

The HPO will identify landscape features that have the potential for reuse or relocation. The identified features will be removed and placed in temporary plantings for future use if their reuse is not immediate.

All proposed actions taken under this SOP will be made part of NEPA for comment or the RHPC will be submitted to appropriate SHPO for review and documented in the annual report.

**7.4.3.3 Archeology.** If an archeological site determined to be eligible for inclusion in the National Register of Historic Places, in consultation with the appropriate SHPO, is to be adversely affected by a specific undertaking or as part of the ongoing land management plan, and avoidance is not possible, Fort Bliss will develop an archaeological data recovery plan to mitigate adverse effects to archaeological sites eligible for the significant information they contain. The plan will be developed in accordance with the ACHP's Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites, effective June 1, 1999 and consultations under this PA (including consultations on the mitigation strategies in the Significance Standards for Prehistoric Archeological Sites at Fort Bliss once completed). The results of all such data recovery projects will be submitted to the SHPOs and the ACHP upon completion.

In the broader management plan, and upon review and completion of the revised *Significance Standards for Prehistoric Archeological Sites at Fort Bliss* and the development of historic contexts, DOE will enter into consultation with the SHPOs to develop sampling strategies for mitigation of different site types. When an agreement is reached on an appropriate strategy, the strategy will become a document incorporated into this PA. The SHPOs will provide a letter of concurrence, and the new standards will be used from that date forth.

If the HPO determines that mitigation is not feasible, the HPO will follow SOP #8: Documenting Acceptable Loss.



## **VIII. CRM Standard Operating Procedure #8**

### **Documenting Acceptable Loss**

#### **C.1.308.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.318.2 POLICY**

The applicability of this SOP to the Fort Bliss decision-making process is conditioned by fulfillment of 36 CFR Part 800 and other SOPs of this PA. Unless these have been met, documenting acceptable loss cannot be undertaken. Prior to implementing this SOP, Fort Bliss must document why treatment of adverse effects cannot be achieved. Use of this SOP by Fort Bliss should be rare, as other mechanisms for compliance with Section 106 under this PA will reduce the need to make acceptable loss determinations. A cost associated with mitigation is not justification for use of this SOP.

#### **C.1.328.3 IMPLEMENTATION**

The Garrison Commander will make acceptable loss determinations, after consulting with the HPO. These determinations will be based on weighing the need to mitigate a historic property that will be adversely affected by an installation undertaking against public interest decisions. The following examples may be applicable under this SOP:

- **Properties of Traditional Religious and Cultural Importance.** Avoidance of impacts altogether and protective measures are among the preferable mitigation measures for properties of traditional religious and cultural importance. Mitigation measures for properties of this type, which are significant to a Native American tribe, must take into consideration the expertise and wishes of the Tribe. There may be cases where a Tribe, understanding the need for a particular installation undertaking and the adverse effects that will result, may decide that mitigation measures should not be undertaken out of respect for their values. In these cases, the Garrison Commander, after consultation with the Tribe and in consideration of Tribe's views, may make a decision to forego undertaking standard mitigation measures for that property.
- **Historic Buildings.** Avoidance of impacts altogether, renovation, reuse, and leasing or transfer are among the preferable mitigation measures for historic buildings. If these measures cannot be done and it becomes necessary to demolish a historic building, mitigation usually involves recordation through some level of HABS/HAER documentation. For Army properties constructed under standardized plans, it may not be in the public interest to further document

an adequately documented property type. In these cases, the Garrison Commander may make a determination that no mitigation measures be undertaken to treat adverse effects to a historic building scheduled to be demolished.

- **Archeological Sites.** Archeological data recovery is time-consuming, and difficult to undertake, and should only be done when there is adequate justification to do so. Justification to conduct archeological data recovery is typically found in a research design or data recovery plan related to a specific archeological site. Data recovery at archeological sites should focus on gaining new information that will be useful to further understanding of past cultures, both for the public as well as archeologists, and to capture the significance of the property. This may include gathering information that can be used to verify or disprove current hypotheses regarding prehistory or history. It is the responsibility of archaeologists to adequately document the need for data recovery based on information collected to make a determination that the site is eligible for inclusion in the National Register of Historic Places. In cases of repetitive site types that offer no new information not available at other sites or already obtained, the Garrison Commander may make a determination that it is not in the public interest to conduct archeological data recovery.

After reviewing all project information and the decisions made in carrying out the SOPs of this PA, the HPO will make a recommendation to the Garrison Commander on the need to proceed with documenting acceptable loss. A package documenting the process that led to selection of acceptable loss will be prepared by the HPO. This documentation is to be submitted to consulting parties and the ACHP. This documentation package will include:

- A letter from the Garrison Commander stating the intent to document acceptable loss,
- A discussion of how Fort Bliss applied the procedures of 36 CFR Part 800 and this PA and the outcome of each of the steps of these procedures, and
- A rationale as to why treatment of adverse effects should not be considered.

The Garrison Commander will allow 30 days for NM and TX SHPOs, Tribes, THPO, and ACHP to submit comments on the documentation. At the close of the review period, the Garrison Commander, in consultation with the HPO, will consider these comments in making a final determination on the project. The Garrison Commander will notify the consulting parties and the ACHP in writing of the outcome of the review and the final decision made prior to implementing the undertaking.

## **IX. CRM Standard Operating Procedure #9**

### **Reviewing and Monitoring Through NEPA<sup>1</sup>**

#### **C.1.339.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.349.2 OBJECTIVES**

The New Mexico and Texas SHPOs, federally recognized tribes, and interested members of the public will continue to participate in the process of reviewing and commenting on Fort Bliss undertakings with the potential to affect historic properties. Participation shall occur through the installation's public participation procedures as provided in 36 CFR Part 800.8: Coordination with the National Environmental Policy Act, and, where no NEPA documentation is prepared, through the RHPC (Attachment B) when addressed findings of eligibility or mitigation of Historic Properties Adversely Affected. Projects that result in findings of No Historic Properties Affected or No Historic Properties Adversely Affected are identified through the biannual report for the first two years of this PA and in the annual report after the initial two year period. The documentation used to reach these later two findings will be available for review upon request.

The National Environmental Policy Act of 1969 (NEPA), as amended, is a federal environmental statute that requires the Army to consider the effects of its proposed action on the quality of the human environment before it makes a decision to go forward with a specific course of action. Historic properties are considered elements of the human environment requiring consideration under NEPA. NEPA also directs the Army, in specified circumstances, to disclose environmental effects to the public, to seek the public's comment, and to consider those comments before proceeding. The Army's NEPA procedures are published in the Code of Federal Regulations at 32 CFR Part 651. Review and monitoring shall proceed as illustrated in Figure 2: NEPA Review Flow Chart.

#### **C.1.359.3 POLICY**

The NEPA process can result in three types of review; Record of Environmental Consideration (REC), Environmental Assessment (EA), and Environmental Impact Statement (EIS). NEPA provides for categorical exclusion (CATEX) for undertakings that do not normally have a significant environmental impact. The Army's NEPA CATEXs are listed in SOP #2, Attachment C, and 32 CFR Part 651, and can only be used if the project can pass the screening criteria set forth in 32 CFR Part 651.29. A Record of Historic Properties Consideration (RHPC) form will be prepared on all undertakings regardless of whether it is covered by a REC, EA, or EIS. If a finding of No Historic Properties Affected or No Historic Properties Adversely Affected for an undertaking and only REC is prepared as the NEPA document, this action will be reported in the Biannual Report for the first two years of the PA with

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<sup>1</sup> NEPA refers to Fort Bliss DOE NEPA procedures or staff.

associated RHPC made available upon request. If an EA is prepared for the proposed undertaking, the RHPC will be made part of that document and released to the stakeholders for a 30 day comment period. If an EIS is prepared for an undertaking, the RHPC will be made part of the document and the stakeholders will be invited to participate in development of the EIS as appropriate. If there is a finding that Historic Properties Adversely Affected and no NEPA documentation is prepared, the RHPC and supporting documentation will be submitted to the stakeholders for a 30 day review. In all cases, comments received within the 30 day review period will be considered in the preparation of the final documentation prior to start of the undertaking.

#### **C.1.369.4 NOTIFICATION OF NEPA REVIEWS**

##### ***C.1.36.19.4.1 Notification for Actions for which an Environmental Assessment or Environmental Impact Statement is Prepared***

Fort Bliss shall maintain a list of parties with a demonstrated interest in management of historic properties on the installation. This list shall include, among others, the New Mexico and Texas SHPOs, federally recognized Tribes, consulting parties and other interested parties.

When Fort Bliss proposes an undertaking with the potential to adversely affect a historic property, the installation, if preparing an EA or EIS, shall use the NEPA process to notify consulting parties and provide an opportunity for their participation in the process. In particular:

- If the installation initiates a public scoping process prior to preparing the EA or EIS, it will specifically notify all consulting parties on the list referenced above and request their participation.
- The EA or draft EIS shall contain information regarding the installation's efforts and methods for identification and evaluation of historic properties, assessment of effects to such properties, and proposed mitigation. The installation shall provide interested parties with electronic access to the EA or draft EIS and request their review and comment. The notification shall direct the recipient to those portions of the document relevant to historic properties.
- The installation shall review and consider all comments submitted from interested parties before finalizing an EA or EIS. For comments received on a draft EIS, the installation will specifically respond to those comments in a final EIS as necessary.

***C.1.36.29.4.2 Notification for Actions for which an Environmental Assessment or Environmental Impact Statement Is Not Prepared.***

The installation will prepare a RHPC for undertakings that have the potential to affect historic properties. If the installation proposes an undertaking that is likely to adversely affect a historic property without preparation of an EA or EIS, and thus no NEPA public participation, the installation shall make the RHPC available to the list of interested stakeholders. The RHPC will demonstrate the installation's compliance with this PA and at a minimum, briefly describe the installation's efforts and methods for identification and evaluation of historic properties, assessment of effects to such properties, and proposed mitigation. If the RHPC includes a determination of eligibility for inclusion in the National Register of Historic Places, the installation will provide the RHPC to the appropriate SHPO for a 30-day period to provide comment regarding concurrence or nonconcurrence. When a finding of eligibility addresses a property of Tribal interest, the RHPC will be provided to the THPO and Tribes for a 30-day review period.

The installation's HPO will maintain all RHPCs prepared under this SOP and list these in its annual report (see SOP #13). Copies will be provided to consulting parties upon request.

**C.1.379.5 ACTIONS NORMALLY REQUIRING AN ENVIRONMENTAL ASSESSMENT**

The following actions normally require preparation of an EA:

- Special field training exercises or test activities on Army land of a nature or magnitude not within the annual installation training cycle.
- Military construction, including contracts for off-post construction.
- An installation pesticide, fungicide, herbicide, insecticide, and rodenticide use program.
- Changes to established installation land use that generates impacts on the environment.
- Proposed changes in doctrine or policy that may have a potential environmental impact.
- Acquisition or alteration of, or space for, a laboratory that will use hazardous chemicals, drugs, or biological or radioactive materials.
- New weapon systems development and acquisition, including the material acquisition, transition, and release process.
- Development of an installation master plan.
- Development of natural resource management plans (land, forest, fish, and wildlife).
- Proposals that may lead to accessing Army real property.
- Field activities on land not controlled by the military. This includes firing of weapons, missiles, or lasers over navigable waters of the United State, or extending 45 meters or more above ground level in the national airspace. It also includes joint air attack training that may require participating aircraft to exceed 250 knots at altitudes below 3,000 feet above ground level.

- Army National Guard /Operations and Maintenance projects that will impact environmental quality.
- Special field training exercises or test activities off Army or DOD property that extend into the national airspace (45 meters above the ground level).
- Changes to established airspace use that generates impacts on the environment or socioeconomic systems or creates a hazard to nonparticipants.

### **C.1.389.6 ACTIONS NORMALLY REQUIRING AN ENVIRONMENTAL IMPACT STATEMENT**

The following actions normally require preparation of an EIS:

- Significant expansion of a military facility or installation.
- Construction of facilities that have a significant effect on wetlands, coastal zones, or other areas of critical environmental concern.
- The disposal of nuclear materials, munitions, explosives, industrial and military chemicals, and other hazardous or toxic substances that have the potential to cause significant environmental impact.
- Land acquisition, leasing, or other actions that may lead to significant changes in land use.
- Realignment or stationing of a brigade or larger.
- Training exercises conducted outside the boundaries of an existing military reservation where significant environmental damage might occur.
- Major changes in the mission or facilities either affecting environmentally sensitive resources or causing significant environmental impact.

### **C.1.399.7 ANNUAL REVIEW AND MONITORING**

In addition to project-based NEPA reviews, Fort Bliss may also hold an annual review and monitoring meeting hosted by the Directorate of Environment as deemed necessary upon request of signatories. The three primary purposes of the annual review and monitoring are (1) to review past undertakings, (2) to discuss upcoming undertakings, and (3) to review the SOPs. Fort Bliss will document the annual review meeting and distribute this documentation to consulting parties after the conclusion of the meeting. No later than sixty (60) days prior to any scheduled annual review meeting, the installation's HPO will provide signatories to this PA with an annual report (see SOP 13). Consulting parties who want to see or visit particular historic properties dealt with under this PA during the review period must contact the HPO no later than twenty-one (21) days in advance of the scheduled meeting. In addition to the annual review, the HPO will provide signatories to this PA with a mid-year update consisting of a log identifying projects reviewed under terms of this PA in the previous six (6) months for the first year of this PA.

### **C.1.409.8 REVIEW PAST UNDERTAKINGS**

The annual report will provide a listing of all undertakings reviewed the previous year under this PA. Stakeholders may select those undertakings of interest to them for further review. The individual stakeholders determine the number of and types of undertakings that they wish to receive additional

information on to understand how review of the undertakings were accomplished under this PA. For undertakings that require a determination of eligibility or that has a finding of Historic Properties Adversely Affected, the documentation will be provided throughout the year and also identified in the Annual Report.

#### **C.1.419.9 REVIEW PROGRAMMED UNDERTAKINGS**

Fort Bliss will identify programmed undertakings that are scheduled, or are likely to be scheduled, for the next fiscal year and that may be anticipated beyond one year. Consulting parties will have an opportunity during the scheduled meeting (or through commenting on the annual report) to express their views over any changes needed in the methods of identification, evaluation, and treatment of historic properties likely to be affected by these undertakings. These programmed undertakings may form the basis for review during the next meeting held with consulting parties.

#### **C.1.429.10 REVIEW SOPS**

Fort Bliss and its consulting parties will review any of the SOPs that may need to have changes made to them in order to accomplish the historic preservation goals set out in Ft Bliss' ICRMP. SOPs that do not consistently achieve the desired goals will be considered for amendment.

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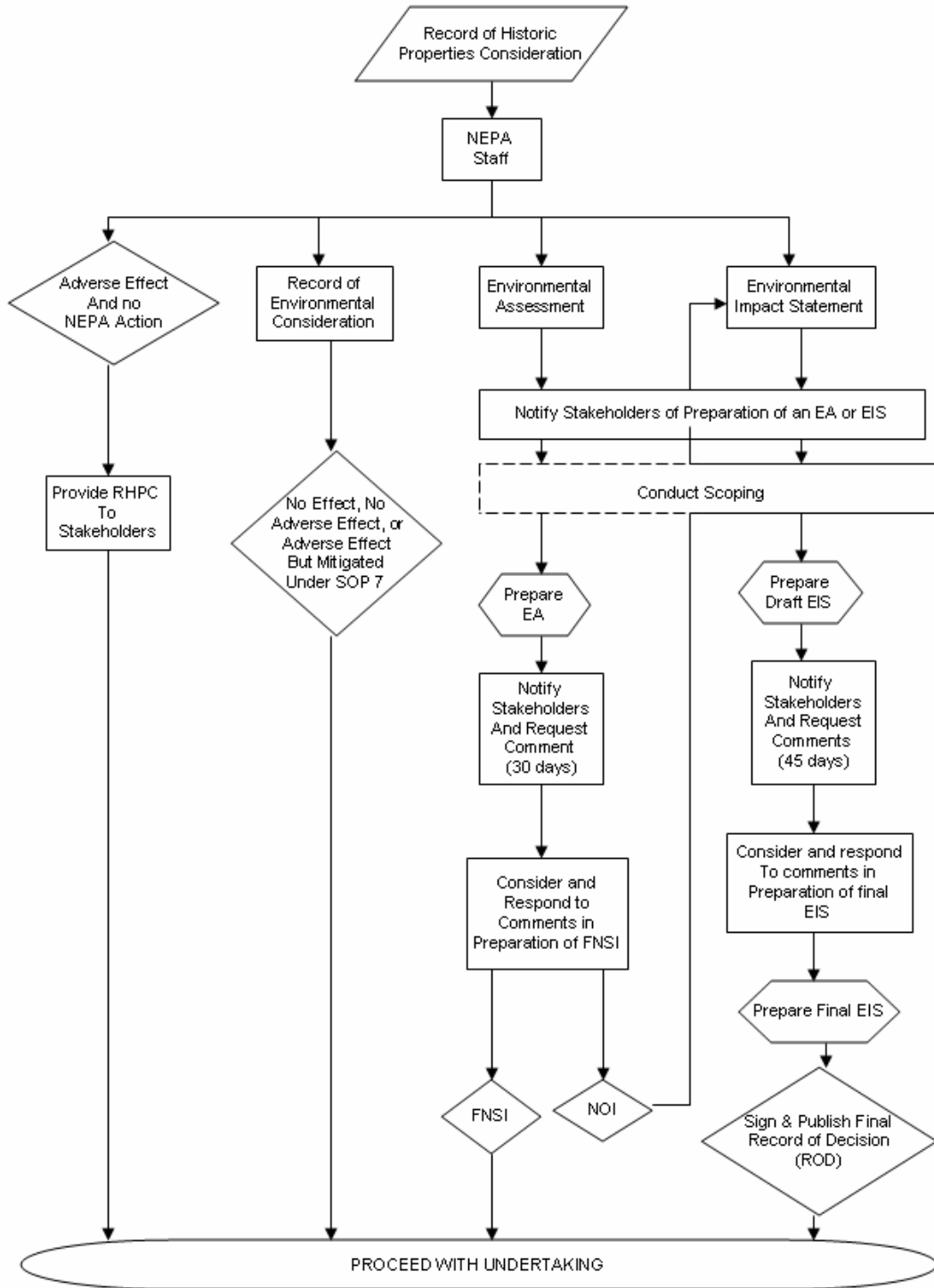


FIGURE 2: NEPA Review Flow Chart



## ***X. CRM Standard Operating Procedure #10***

### ***Accidental Discovery of Historic Properties***

#### **C.1.4310.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.4410.2 OBJECTIVES**

The objectives of this SOP are to have procedures in place in the event of accidental discovery of archeological materials. This can apply to both previously recorded and new sites and to archeological sites in any part of Fort Bliss.

#### **C.1.4510.3 POLICY**

##### ***C.1.45.1 10.3.1 Inadvertent Discovery of Archeological Materials***

Historic and prehistoric archeological sites can be found in most areas at Fort Bliss, including the cantonment, McGregor Range, and the maneuver areas. Historic period sites can be divided into two types, military and nonmilitary, and are usually characterized by one or more of the following artifact types: glass, ceramics, metal, bricks, and wood. Prehistoric period sites usually contain ceramics (usually brownwares, both decorated and undecorated), lithic artifacts (projectile points, scrapers, worked tools, flakes, cores, manos, and metates), bone (both burned and worked implements), and/or thermally-altered rock (including burned caliche). In addition, Native American burials can be encountered anywhere on Fort Bliss. These will be indicated by the presence of large bones and/or small bones, soil stains, and grave goods such as pottery, beads, and exotic items.

- In the event of inadvertent discovery of archeological materials during a construction project or field training exercise in the maneuver areas, all work in the area affecting the materials must cease immediately.
- The conservation division chief and/or Fort Bliss HPO must be notified immediately upon discovery of previously unknown archeological materials. The HPO and/or archeological program managers will inspect the site where archeological materials have been discovered. Documentation of the disturbance will be made, including notes and photographs.
- The HPO will consult with the State Historic Preservation Officer (SHPO) of the appropriate state and appropriate federally recognized Tribe on a course of action if the HPO determines the discovery may constitute an NRHP eligible property. Notification will be done within 48 hours of the discovery by fax and/or telephone. Within three (3) days, the HPO will follow this initial consultation with a letter detailing the disturbance, the location, and any necessary actions.

The HPO will complete the NAGPRA process if Native American burials are encountered. A state site form (LA or TARL) will be prepared for the site(s) discovered.

- The SHPO will have 48 hours to respond.
- In the event that mitigation of the damage to a site is necessary, the archeological program managers will prepare a research design for fieldwork and submit it to the SHPO of the appropriate state (Texas or New Mexico) and appropriate federally recognized Tribes. The SHPO will have 10 days to respond. If there are no objections within the specified time, data recovery will proceed under the attached programmatic agreement.

***C.1.45.2 10.3.2 Willful Destruction of Archeological Materials***

The willful destruction of archeological materials is a violation of the Archeological Resources Protection Act of 1979 (as amended) and may result in a felony prosecution.

***C.1.45.3 10.3.3 Native American Human Remains***

In the event the find is or is suspected to be Native American human remains or funerary objects that are or may have been associated with human remains, the HPO will contact the appropriate Native American groups and comply with the requirements of NAGPRA, as applicable. Fort Bliss will follow the NAGPRA protocol in its Integrated Cultural Resource Management Plan.

## ***XI. CRM Standard Operating Procedure #11***

### ***Reporting Damage to Historic Properties Buildings, Sites, Landscapes, Districts, Objects, etc.***

#### **C.1.4611.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.4711.2 OBJECTIVES**

The objectives of this SOP are (1) to ensure damage is reported so corrective actions may be developed to avoid future unintentional damage, (2) to identify organizations and individuals responsible for intentional damage so appropriate measures can be followed, and (3) to ensure that willful violations of federal law are reported to the range commander, Fort Bliss provost marshal, the staff judge advocate, and the Garrison Commander so appropriate action can be taken.

#### **C.1.4811.3 INTRODUCTION**

Routine military training activities at Fort Bliss and the operation and maintenance of Fort Bliss facilities poses a risk of unintentional damage to properties that are or may be eligible for inclusion in the National Register of Historic Places. Such damage may occur through the failure of the routine administrative controls provided in Fort Bliss' ICRMP or through the failure of trainers or other personnel to confine ground-disturbing activities to the areas that have been cleared to avoid adverse effects.

Willful damage and violation of federal law is also possible. For determining reporting requirements under this SOP, damage is considered willful when the person responsible for, or who approved, the implementation of the action could have reasonably been expected to be aware of the law.

#### **C.1.4911.4 POLICY**

Funds programmed for the implementation of this PA will not be diverted to repair or mitigate damage caused by failure to follow the provisions of the PA.

#### **C.1.5011.5 PROCEDURE**

##### ***C.1.50.1 11.5.1 Archeological Sites***

When a recorded site has been damaged, Fort Bliss HPO or archeological program managers will review the site records, visit the site, and make an initial determination of National Register eligibility of the site, if not already determined, and the damage to the site. An updated state site form will be prepared and forwarded to the appropriate state in consultation with the SHPO.

- Where the damage is slight, not an *in situ* deposit, or not eligible for the National Register for other reasons, the archeological program managers may make a recommendation of No Historic Properties Affected and the HPO will report the incident in the PA annual report.
- Where the damage is severe and the archeological program managers feel there is evidence the site had been found, or may have been found, eligible for the National Register before the damage, the HPO will prepare a RHPC documenting the circumstances of the damage, its extent and effect. This RHPC, with a transmittal letter signed by the Fort Bliss Garrison Commander, will be submitted for notification to the appropriate SHPO within 30 days after the Fort Bliss HPO was made aware of the damage.

***C.1.50.211.5.2 Native American Cultural Properties***

When a property with documented Native American cultural values has been impacted in a manner contradictory to Fort Bliss Policy or its PA, the HPO will review the incident and prepare a report for the Garrison Commander documenting the impact and recommending procedures (or modifications to existing procedures) that avoid future impacts.

- Native Americans with ties to the impacted cultural property will be notified and consulted regarding Fort Bliss's proposed methods to address damage to properties of traditional cultural value to which they have ties. The SHPO of the state where the impact has occurred will be notified through the Annual Report.
- The HPO will include documentation of the incident in the PA annual report, taking care to ensure that information considered confidential by Native Americans is not made available to the public or any agency or organization the Native American individual or group does not specifically indicate should receive information.

***C.1.50.311.5.3 Aboveground Properties (Including, but not Limited to Buildings, Bridges, Landscapes, Structures, Districts, Objects, and Traditional Cultural Properties Not Associated with Native Americans)***

**10.5.3.1.** When an aboveground property that has previously been determined eligible for inclusion in or is listed in the National Register of Historic Places or an unevaluated property that the HPO finds eligible has been impacted, the installation historic architect with the assistance of a historian, architectural historian, ethnographer, folklorist, or landscape architect, as appropriate, will visit the property and make a determination of effect. When the aboveground property affected is 45 or more years old and has not been previously evaluated for eligibility the installation historic architect with the assistance of a historian, architectural historian, ethnographer, folklorist, or landscape architect, as appropriate, will visit the property and make an initial determination of National Register eligibility and effect.

- Where damage is slight or does not affect features that contribute to the historic significance of the property, the installation historic architect will make a determination of No Historic Properties Affected or No Historic Properties

Adversely Affected, prepare a RHPC, and report the incident in the PA annual report.

- Where the damage is adverse, or demolition or partial demolition took place, and the installation historic architect finds that the property has already been found eligible or may have been eligible for the NRHP before the damage, the installation historic architect will prepare a report documenting the circumstances of the damage, its extent, and effect. This report will be submitted with a transmittal letter signed by the Fort Bliss Garrison Commander to the appropriate SHPO, THPO, and Tribes. Potential mitigation measures may be offered for consideration.

**11.5.3.2.** When new construction (or a modification to proposed construction that has not been reviewed in accordance with this PA) is discovered within the historic district or within the view shed, the installation historic architect will visit the site and make an initial evaluation of the impact the construction may have on the district.

- Where construction is determined not to affect the features that contribute to the historic significance of the property, the installation historic architect will make a determination of No Historic Properties Affected and will report the incident in the PA annual report.
- Where construction is determined to have no adverse effect on historic properties, the installation historic architect will prepare a RHPC documenting the project and make available to SHPOs as part of the Annual Report.

## ***XII. CRM Standard Operating Procedure #12***

### ***Public Involvement in the Fort Bliss Cultural Resources Management Program***

#### **C.1.5112.1 APPLICABILITY**

The Fort Bliss HPO is responsible for carrying out the provisions of this SOP in cooperation with the public affairs officer. Other organizations are responsible for providing information regarding undertakings for which they are the proponent, user, or implementing organization.

#### **C.1.5212.2 INTRODUCTION**

Various provisions of federal law, codified regulations and Army regulations require that interested members of the public have access to the decision-making processes and the results of historic preservation and environmental management undertaken at the public expense (36 CFR Part 800, AR 200-1, AR 200-2, AR 200-4).

This SOP outlines the minimum routine measures that Fort Bliss will take to ensure such access within the implementation of the Fort Bliss ICRMP and this PA. Additional effort to determine public concerns may be required if Fort Bliss proposes undertakings that the New Mexico or Texas SHPO or the ACHP feels have the potential to have an adverse effect on Fort Bliss' historic properties. In that case, the public and interested parties will be informed of action at Fort Bliss that may affect historic properties consistent with the requirements of 36 CFR Part 800.8.

When compliance with the NEPA requires either an environmental assessment or environmental impact statement, specific requirements of that law and its implementing regulation regarding public comment must be met concurrently with or in addition to those required by this SOP (AR 200-1, AR 200-2). When Fort Bliss includes wording in its NEPA notifications to the public specifically stating that comment is also being requested to meet the Army's responsibilities under the NHPA, the resulting public participation and comment will fulfill all requirements for public participation under NHPA.

#### **C.1.5312.3 SHPO AND ACHP RIGHTS AND RESPONSIBILITIES**

Nothing in this SOP or the PA changes the right granted under federal law or regulation or separate agreement to the Army, for the appropriate SHPO or the ACHP to issue public notice, solicit public opinion, or hold, facilitate, or participate in public meetings relative to Fort Bliss undertakings.

#### **C.1.5412.4 POLICY**

Fort Bliss will make research reports prepared in conjunction with this plan available to local public libraries (El Paso, Las Cruces, Alamogordo, and Fort Bliss); the University of Texas at El Paso; New Mexico State University; the University of New Mexico; the University of Texas at Austin; Texas A&M University; El Paso, Doña Ana, and Otero county historical and archeological societies; Native American groups with ties to Fort Bliss; and individuals who have expressed an interest and granted permission to have their names and addresses retained on the Fort Bliss Conservation Division mailing list. As part of the consultation process, reports are also provided to the Texas and New Mexico SHPOs.

Reports and other compliance documents that include the exact location(s) of archeological sites or other information that, in the opinion of the HPO, might endanger the resources or are administrative in nature and have neither research value nor public interest will be released consistent with section 304 of the NHPA.

## **C.1.5512.5 IMPLEMENTING PROCEDURES**

### ***C.1.55.1 12.5.1. Mailing Lists***

The HPO will maintain mailing lists of institutions and interested individuals by area of interest and/or research concern, as listed in the policy statement above. The HPO will request assistance from the New Mexico and Texas SHPOs in identifying interested parties.

### ***C.1.55.2 12.5.2. Reports***

The HPO will send reports that have research value or are of public interest, as defined above, routinely to the ACHP, the SHPOs, appropriate state universities, and appropriate county historical and archeological societies. Brochures with notifications of technical reports availability, including a brief abstract of their contents, will be made available to others on the mailing lists according to expressed area of interest. Interested individuals/organizations may contact Fort Bliss and request the reports.

### ***C.1.55.3 12.5.3. Mailing***

The HPO will (at least twice during the implementation of this PA) send a mailing requesting the recipient verify his/her current postal or electronic mail address, reaffirm continuing interest in receiving Fort Bliss reports, and give Fort Bliss permission to have his/her name, postal or electronic mail address, and telephone number maintained in the PA database and provide his/her name, postal or electronic mail address and telephone number to the SHPO and ACHP. Those who do not respond will be deleted from the mailing list.

### ***C.1.55.4 12.5.4. Materials of Interest***

When materials (in the opinion of the HPO) will have a wider range of interest, they may be published in scholarly journals, periodicals, books, or given as papers at learned and historical societies. All materials prepared by the HPO staff will be submitted through channels to the Fort Bliss Public Affairs Officer (PAO) to ensure compliance with Army Regulation 360-5. Release of materials prepared under contract will be approved as specified in the contract. The Fort Bliss HPO will ensure that a process that meets the standards of AR 360-5 is included in the scope of work for contracts approved by Fort Bliss.

### ***C.1.55.5 12.5.5 Cultural Resources Meetings***

The HPO (and/or at his/her discretion other professional members of the cultural resources management staff) will in his/her official capacity attend meetings of local and state organizations concerned with cultural resources management issues at county and state historical and archeological societies. The HPO may speak on the status of Fort Bliss cultural resources management program. Informal presentations, including slide presentations, may be presented without prior approval of the PAO. The HPO will notify the PAO in advance of anticipated informal presentations and coordinate further if the PAO so requests. If a formal paper is given and copies are distributed, the text will be submitted to the PAO prior to the presentation to ensure the requirements of AR 360-5 are met. The HPO will inform the PAO and appropriate members of the command group of any potentially controversial issues raised during formal or informal presentations.

***C.1.55.6 12.5.6 Popular Publications***

The HPO and his or her staff will include the development of popular publications as companions to technical reports when project budgets allow. Fort Bliss will provide Portable Document Files (.pdf) of popular publications to individuals and organizations.

***C.1.55.7 12.5.7 Web Page***

The HPO will explore the potential to develop a web page that can be used to disseminate information to a broader audience on Cultural Resource materials and program.

***C.1.55.8 12.5.8 PA Annual Reports***

Interested parties will be provided copies of the PA annual report. Comments on the report will be requested along with identification of preservation issues of concern to them.



### ***XIII. CRM Standing Operating Procedure #13***

#### ***Annual Report***

##### **C.1.5613.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

##### **C.1.5713.2 INTRODUCTION**

This PA requires that Fort Bliss provide an annual report to interested members of the public, the New Mexico and Texas SHPOs, and the ACHP. If this report is not prepared, Fort Bliss will be required to comply with the provisions of 36 CFR Part 800 of the National Historic Preservation Act for each individual undertaking at Fort Bliss that has the potential to affect historic properties.

Submittal of the annual report to the SHPOs and the ACHP and appropriate consideration of their comments fulfills the compliance requirements with the NHPA, Section 106, for all the undertakings included in the PA.

##### **C.1.5813.3 POLICY**

The following documentation will be provided annually to every interested party on every mailing list maintained in accordance with this SOP and the Fort Bliss Public Affairs Office: (1) an overview describing the implementation of this PA; (2) a list of all projects that proceeded under the procedures in this PA; (3) a revised list of projects proposed for the coming year; and (4) recommendations for amending the PA, if applicable.

In addition to the documents listed above, the following information will be provided to the SHPO, THPO, Tribes and the ACHP: (1) a description of each project undertaken without complete review of the SHPO, THPO, Tribes and the ACHP, as specified in this PA, and (2) a status report on the implementation of PA SOPs, including all reports and documents specified in those SOPs for inclusion in the annual report. For projects in New Mexico, a complete NMCRIS Information Abstract will be provided.

##### **C.1.5913.4 IMPLEMENTATION**

###### ***C.1.59.1 13.4.1. The Fort Bliss HPO will:***

- Retain the original documentation of each project undertaken without formal review of the SHPO for a period of three (3) years. A summary of these will be made part of the annual report. Original documentation will be made available to the SHPO, THPO, Tribes and ACHP, or interested parties upon written request.

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- Prepare the final report and submit it, through command channels, for approval, reproduction, and release on 15 November or mutually agreed-upon date
- Annual Report will include at a minimum a listing of all undertakings reviewed for the previous year. The report will include a list of undertakings that have been consulted on with the appropriate SHPO, project-by-project during the course of the year (such as all determinations of eligibility and resolutions of Adversely effects). It will also include all those undertakings that were reviewed in-house as stipulated in the SOPs and Appendix C as broken down by:

- Determinations of Eligibility

NEPA Number/ RHPC Number	Project title	Project Description	Eligibility Finding	Date to SHPO

- No Historic Properties Affected

NEPA Number/ RHPC Number	Project title	Project Description

- No Historic Properties Adversely Affected

NEPA Number/ RHPC Number	Project title	Project Description

- Historic Properties Adversely Affected

NEPA Number/ RHPC Number	Project title	Project Description	Agreed upon mitigation measures

- Damaged Properties Addressed During the Year

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RHPC number	Property Affected	Project Description	Mitigation Measure Taken

- Provide a mid-term update as required in SOP #9.7.
- May also hold an annual review and monitoring meeting hosted by the Directorate of Environment as deemed necessary as presented in SOP # 9.7 upon request of signatories.
- Consult with any objecting party to answer questions and resolve any disagreement if the objecting party has questions regarding implementation of the PA.
- When resolution regarding the disagreement cannot be met, Fort Bliss (HPO) will request ACHP comment within 30 days of making such a request. If no comment is forthcoming within the allotted time, it will be assumed by all parties that ACHP concurs with Fort Bliss.
- If Fort Bliss is unable to accommodate the comments of the ACHP, Fort Bliss (HPO) will advise IMA and HQDA of the reasons for this action and record the failure to agree in the Environmental Assessment or Environmental Impact Statement that includes the undertaking. If no NEPA compliance documentation is being prepared that includes the undertaking, Fort Bliss will consult with IMA to determine if the requirements of AR 200-1 or AR 200-2 have been met prior to proceeding with the undertaking.

***C.1.59.213.4.2. The SHPO, THPO, Tribes and the ACHP will:***

- Notify Fort Bliss by letter within 60 days of their receipt of the annual report with any comments or any requests for specific RHPCs. If there is no response within this time, it will be assumed that the annual report is acceptable.
- Participate in the consultation with any objecting party to answer questions and resolve any disagreement if the objecting party has questions regarding implementation of the PA.
- When resolution regarding the disagreement cannot be met and it is forwarded to ACHP, ACHP will comment within 15 days of such a request or requests an additional 15 days within the initial 15 days. If no comment is forthcoming within the allotted time, it will be assumed by all parties that ACHP concurs with Fort Bliss.

## ***XIV. CRM Standard Operating Procedure #14***

### ***Dispute Resolution***

#### **C.1.6014.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.6114.2 INTRODUCTION**

Preservation practice can be subjective and open for interpretation. To manage historic properties under its management and to ensure application of sound preservation practices, Fort Bliss will retain a professional cultural resource expertise that meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (*Federal Register* Vol. 48, No. 190, Part IV, 44716-44742). Even so, disputes may arise in application of the criteria for properties' eligibility for inclusion in the National Register of Historic Places, finding of effects, best management practices, etc. This SOP provides Fort Bliss' policy on dispute resolution. It addresses both internal and external disputes.

#### **C.1.6214.3 POLICY**

It is Fort Bliss' policy to address all disputes in a professional manner and with the objective of reaching mutual agreement on dispute resolutions through meaningful consultation with objecting parties. Meaningful consultation needs to begin in the planning and preparation and review of this PA to limit disputes after implementation.

#### **C.1.6314.4 IMPLEMENTATION**

##### ***C.1.63.1 14.4.1 Internal Disputes***

Should an implementing organization object to an action recommended by the HPO under this PA, the two will meet to discuss objections and consider potential ways to resolve the dispute in meeting both mission and legal requirements. If consultation fails to resolve the dispute, both parties will seek the SJA's opinion on applicability with cultural resource laws and regulations or applicability of the PA for the disputed issue. Final dispute resolution, if necessary, will rest with the Fort Bliss Garrison Commander who will consider SJA's legal opinion in making a final decision.

##### ***C.1.63.2 14.4.2 External Disputes***

Should the signatories object to any action carried out or proposed by Fort Bliss with respect to implementation of this PA, the objecting party will send its objection in writing to Fort Bliss' HPO. The HPO will consult with the objecting party to resolve the objection. If the dispute cannot be resolved through this consultation process or if other parties are affected by the dispute, Fort Bliss will consult

with all signatories of this PA. Should another interested party that is not a signatory object to any action, Fort Bliss shall take the objection into account and document its consideration.

**14.4.2.1 Determinations of Eligibility.** If the objection between Fort Bliss and SHPO, THPO, or Tribe concerns determinations of eligibility, and if the two parties cannot reach concurrence after consultation, the HPO will submit the determination of eligibility package originally submitted to the SHPO to the Keeper for final determination. The submittal package to the Keeper will also include all correspondence and consultation between the HPO and SHPO addressing the finding of eligibility. The Keeper will respond to a request for formal determination of eligibility within 45 days of receipt of the request. If there is no response within the allotted time, it will be assumed by all parties that the Keeper concurs with Fort Bliss' determination and the property will be managed accordingly.

**14.4.2.2 Determination of Effects.** If the objection between Fort Bliss and the SHPO, THPO, and/or Tribes concerns determinations of effect as addressed in the Annual Report, and if the parties cannot reach concurrence after consultation, the HPO will submit the determination of effect to the ACHP for final determination. The submittal package to the ACHP will also include all correspondence/consultation between the HPO and SHPO, THPO, and/or Tribes addressing the finding of effect. The ACHP will respond to the request for a formal determination of effect within 15 days of receipt of submittal. The ACHP may request an addition 15 days for response. Non-response by ACHP within 15 days of receipt of the submittal will constitute agreement with Fort Bliss' finding of effect. Participating parties may request amending appropriate SOPs to incorporate any changes required, based on ACHP's comments.

**14.4.2.3 Disputes other than Determinations of Eligibility or Effect.** For disputes centered on other parts of implementing this PA, other than findings of eligibility or effect, and where agreement cannot be reached between Fort Bliss and objecting parties, Fort Bliss will forward all documentation relevant to the dispute along with its proposed resolution to the ACHP. ACHP will exercise one of the following options within 45 days of receipt of all pertinent documentation:

- Advise Fort Bliss that ACHP concurs in the proposed final decision, whereupon Fort Bliss will respond to the objection accordingly; or
- Provide Fort Bliss with recommendations, which Fort Bliss will take into account in reaching a final decision regarding its response to the objection; or
- Notify Secretary of the Army that ACHP will comment pursuant to 36 CFR Part 800(7) (c), and proceed to comment. The resulting comment will be taken into account by Fort Bliss according to 36 CFR Part 800(7)(c)(4) and Section 110(1) of the National Historic Preservation Act.

Should the ACHP not exercise one of the above options within 45 days of receipt of all pertinent documentation, all parties shall assume ACHP's agreement with Fort Bliss's proposed response to the objection.

Fort Bliss will take into account any ACHP recommendation or comment provided by this SOP with reference only to the subject of the objection; the installation's responsibility to implement other actions under this PA that are not the subject of the objection will remain unchanged. Any changes to the PA resulting from ACHP recommendations or comments will be highlighted in the PA annual report, with such changes made part of the PA.

## ***XV. CRM Standard Operating Procedure #15***

### ***Military Activities in Anticipation of Immediate Deployment, Mobilization or Armed Conflict***

#### **C.1.6415.1 APPLICABILITY**

This SOP applies to all organizations, property, and activities under the control of the Department of the Army and located within the boundaries of Fort Bliss or other contiguous land under Fort Bliss control. It also includes activities undertaken on behalf of the Army or with consent of the Army, or as a result of consent of the Army by contract, lease, or interservice support agreement or other instrument to which Fort Bliss, the United States Army, or the Department of Defense is a party, within Fort Bliss or other contiguous land under Fort Bliss control.

#### **C.1.6515.2 OBJECTIVES**

The objectives of this SOP are to ensure the effects of military undertaking (in anticipation of deployment, mobilization, or armed conflict) on historic properties are considered and a reasonable effort is made to ensure that damage to historic properties is avoided.

#### **C.1.6615.3 POLICY**

Fort Bliss will proceed with undertakings required to support mobilization and training required in anticipation of immediate deployment, mobilization, or armed conflict without prior review of these activities by the SHPOs or the ACHP. The Fort Bliss HPO or other appropriate cultural resources professional with appropriate security clearance will conduct an internal review.

#### **C.1.6715.4 IMPLEMENTING PROCEDURES**

##### ***C.1.67.1 15.4.1. Implementing Organization***

The implementing organization will include the HPO in planning activities when an undertaking includes ground-disturbing activities, modifications to or demolition of buildings or grounds more than 45 years old, or the disposal of records connected with historic properties or unevaluated archeological sites or buildings more than 45 years old.

##### ***C.1.67.2 15.4.2. Historic Preservation Officer***

The HPO will ensure the implementing organization is aware of the potential adverse effects of all courses of action on historic properties under consideration and recommend ways to avoid and reduce adverse effects.

##### ***C.1.67.3 15.4.3. Following Recommendations***

The implementing organization will follow the HPO's recommendations when practical.

- If the implementing organization cannot follow the HPO's recommendation, it will provide the HPO with a summary report detailing the decision-making process and why avoiding adverse effects was not practical. The implementing organization will ensure that their next higher command is aware of the decision and include the report, along with recommendations for reducing adverse effects during future undertakings, in the after-action report.
- The HPO will include summary documentation of the undertaking(s) and their effects on historic properties in the annual report, provided no information is classified or would have the potential to affect classified actions. Projects funded will include as part of the deliverables a report describing the project.



## ATTACHMENT B

### RECORD OF HISTORIC PROPERTIES CONSIDERATION

1. CRM Number: \_\_\_\_\_
2. NEPA Number: \_\_\_\_\_
3. Work Order Number: \_\_\_\_\_
4. Archeological Number: \_\_\_\_\_

5. Project Name: \_\_\_\_\_

6. Proponent: \_\_\_\_\_

6A. Proponent's initials: \_\_\_\_\_ 6B. Date: \_\_\_\_\_

7. Project Location: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Project Description: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Project Timeline: \_\_\_\_\_

10. Define Area of Potential Effect: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Does Project Affect a Historic Properties

11a Is/are there property/properties listed in or eligible for listing in the National Register of Historic Places? \_\_\_ Yes \_\_\_ No \_\_\_ Undetermined

11b Identification

Preliminary Analysis-Identify resources referenced to determine if survey is required:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Survey-document level of survey conducted to identify historic properties: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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11c Evaluation

Identify historic context(s) used in evaluation of property(ies): \_\_\_\_\_

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Criteria for Evaluation- address each Criterion as relates to property

Criterion A: \_\_\_\_\_

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Criterion B: \_\_\_\_\_

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Criterion C: \_\_\_\_\_

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Criterion D: \_\_\_\_\_

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Do Criteria Considerations apply to the property?     \_\_\_ Yes     \_\_\_ No

If yes, explain: \_\_\_\_\_

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Does the property have historic integrity?     \_\_\_ Yes     \_\_\_ No

Explain: \_\_\_\_\_

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11d Assessing Effects

\_\_\_ No Historic Properties Affected. Explain: \_\_\_\_\_

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No Historic Properties Adversely Affected. Explain:

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Historic Property Adversely Affected. Explain: \_\_\_\_\_

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If No Historic Properties Affected or No Historic Properties Adversely Affected, do not proceed. Sign form and submit to NEPA staff.

12. Treatment of Adverse Effects

Provide mitigation measures to be met prior to undertaking moving forward: \_\_\_\_\_

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13. Document Decision of Acceptable Loss

Is this undertaking subject to acceptable loss?  Yes  No

If yes, explain how mitigation was not applicable: \_\_\_\_\_

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Attach a copy of the Garrison Commander's letter to the ACHP notifying them of intent to implement SOP #8 along with ACHP's comments on this action.

14. Was form submitted to SHPO prior to Annual Report?  Yes  No

If yes, attached SHPO comments.

How were SHPO concerns addressed: \_\_\_\_\_

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Proponent (only on findings of adverse effects): \_\_\_\_\_

Date: \_\_\_\_\_

Preparer: \_\_\_\_\_ Date: \_\_\_\_\_

HPO (or designee): \_\_\_\_\_ Date: \_\_\_\_\_

Date RHPC sent to NEPA: \_\_\_\_\_

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ATTACHMENTS:

Map showing APE

Other as appropriate (i.e. site reports)

**ATTACHMENT C**

**ACTIVITIES REVIEWED BY FORT BLISS REQUIRING NO SHPO OR ACHP REVIEW**

Fort Bliss Cultural Resources Professionals who meet the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* will review the undertakings listed below without further SHPO review when the undertakings are determined to have no effect or no adverse effect on historic properties eligible for inclusion in the National Register of Historic Places. Projects that fall under Attachment C will be reported in the Annual Report. At the request of the SHPO of Texas or New Mexico and Fort Bliss, THPO, or Tribes, the following list can be modified to include or delete items.

**C.1 Non-Undertaking Activities**

**Site Work**

1. Maintenance work on existing features such as roads, fire lanes, fences, mowed areas, active disposal areas, manmade ditches, and ponds when no new ground disturbance is proposed.
2. Outdoor recreational programs including hunting, fishing, in accordance with Fort Bliss and Army regulations, when there will be no ground-disturbance, including no off-road vehicular travel and when there are no known sites.
3. The following natural resources management activities: tree plantings, planting, maintenance of wildlife food and shrub plots and guzzlers in previously disturbed areas, and improvement of existing dry stream crossing where the depth of the undertaking will not exceed the current disturbance and/or will not impact an intact soil layer with the potential to contain cultural materials.
4. Maintenance, removal, and replacement in kind of existing landscape and plant materials when keeping with the historic character when they are dead, dying, diseased (unsalvageable), and/or pose an imminent hazard to people or structures.

**C.2 ACTIVITIES THAT QUALIFY AS UNDERTAKINGS**

**Work**

1. Replacement of existing landscape and plant materials within the main post or range base camps with native and/or regional landscapes to conserve Fort Bliss natural resources, provided such design meets previously approved landscape design guidelines, is compatible with the building it surrounds, and does not adversely effect an NHRP-listed or eligible landscape (e.g., parade field).
2. Undertakings in previously disturbed areas to the same depth and extent, such as bladed parking lots determined by the HPO to retain no integrity and the HPO has made a finding of no historic properties affected.
3. Any undertaking on the main cantonment, McGregor Base Camp, Doña Ana Range Camp and Biggs Army Airfield in previously surveyed areas where no archeological or historic sites have been identified and with survey methods consistent with current state standards.
4. Paving, repair, and in-kind replacement of streets, driveways, sidewalks, and curbing as they now exist or in existing locations unless historic materials are present.
5. Repair and replacement of existing water, sewer, natural gas, and communications lines in their present configuration and alignments and at the same depth and extent as previous disturbance.

6. Any undertaking in an area surveyed in which no cultural properties are identified and thus the HPO determines that no historic properties will be affected within the APE and with survey methods consistent with current state standards.
7. Installation of traffic signs as required by law when circulation and quantity of traffic adjacent to historic properties or within a historic district will not be affected.
8. Installation of new and replacement of existing building signs in kind, when the design is compatible with the architectural character or period of significance for the building and does not adversely affect the building's historic fabric.
9. Removal of animals, birds, insects, and their associated debris when no damage to historic materials will result.
10. Installation of facilities to provide access to historic properties by disabled persons provided the alterations are architecturally compatible with the facility, are freestanding, and do not damage nor require removal of historic materials.
11. Temporary buildings or structures that will not have a life longer than five years and are required under activities addressed in SOP 15: Military Activities in Anticipation of Immediate Deployment, Mobilization or Armed Conflict.
12. Disturbance in an area less than one square meter, such as placement of fence posts.

### ***Roofs***

1. Repair, replacement in kind, or restoration of existing roofing materials provided the color selection is specifically reviewed by the installation historic architect. Where feasible, roof replacements will be returned to their original roofing materials, details, and configurations.
2. Installation of materials or equipment for the specific purpose of deterring bird habitat on building components provided such materials do not damage or detract from the architectural character of the building.

### ***Exterior Walls***

1. Refinishing of surfaces with chemically compatible materials of historic or existing color provided surface preparation meets the Secretary of the Interior's Standards.
2. Removal of deteriorated or damaged paint or coatings down to the next sound layer by hand scraping or sanding. Abrasive methods, sandblasting, and water blasting are specifically prohibited.
3. Repair of existing materials and partial replacement in kind of stucco, masonry, wood siding, trim, porch decking, porch rails, joists, columns, and stairs (including framing).
4. Repair of existing elements that are not visible or that are not character-defining features of architectural properties. The repairs will be limited to those requiring no structural modifications.

### ***Doors***

1. Repair of existing doors or replacement in kind when each door is separately evaluated and determined to have deteriorated beyond repair.
2. Replacement of doors shall consist of replacing with a door of original design/configuration or a compatible door (where original or historic doors are missing or have been previously replaced with a non-historic door).

3. Installation of hardware to include dead bolts, door latches and locks, window latches, locks, hinges, and door peepholes, provided historic materials are not removed. New hardware shall be of a plain, contemporary design and made of the same material as remaining historic hardware.
4. Repair or replacement in kind of existing door screens.

### ***Windows***

1. Repair of existing window frames and sashes provided no change results to the interior or exterior appearance of the window, and replacement in kind of window sashes that have deteriorated beyond repair, provided each sash is separately evaluated.
2. Adjustment of window counterweights including associated disassembly and reassembly.
3. Reglazing accidentally broken windows with clear glass of the same thickness as the broken glass.
4. Repair or replacement in kind of existing window screens and storm windows.
5. Installation of hardware to include window latches, locks, hinges, provided historic materials are not removed. New hardware shall be of a plain contemporary design and made of the same material finish as remaining historic hardware.

### ***Interiors***

1. Repair of existing historic cabinetwork and cabinet hardware.
2. Replacement of kitchen and bathroom appliances, fixtures, fittings, accessories, and cabinets that are less than 45 years old with compatible items. This includes replacement of non-historic kitchen cabinets with compatible items.
3. Replacement of existing non-historic flooring and carpets, provided that when attachment to historic materials is required it is done in a reversible manner.
4. Repair and replacement in kind of only those portions of historic flooring that are extensively deteriorated.
5. Removal of deteriorated or damaged paint or coatings down to the next sound layer by hand- scraping or sanding. Abrasive methods, sandblasting, and water blasting are specifically prohibited.
6. Installation of fire, smoke, and security detectors, provided all effects to historic materials are reversible.
7. Interior renovation when historic materials or structural configurations are not damaged, to include spaces being renovated that have been significantly impacted within the last 45 years and no longer contribute to the significance of the building, provided the structural loading of the building will not be altered and character-defining features of the property will not be affected.
8. Purchase and installation of interior furniture/furnishings and Information Technology systems and equipment where those items will not alter or detract from those qualities that make the resource eligible for the National Register.
9. Repair of existing elements that are not visible or that are not character-defining features of architectural properties. The repairs will be limited to those requiring no structural modifications.
10. Refinishing in kind, i.e., painting surfaces with the same, or original, materials, and same, or original, color.

### ***Electrical/Plumbing/HVAC***

1. Repair of existing electrical and plumbing fixtures and repair or replacement of existing wiring, lines, and pipes when it can be achieved without damaging other historic features or materials.
2. Repair or replacement of existing heating and cooling systems and duct work when they do not contribute to the historic significance of a building, and provided the new heating and cooling systems do not alter or damage a building's historic features or materials.
3. Repair and replacement of existing electrical, power, lighting and communications lines and poles in their present configuration, same depth and same extent as previous disturbance, and alignments or when they do not contribute to the historic significance of the building.
4. Repair of existing elements that are not visible or that are not character-defining features of architectural properties. The repairs will be limited to those requiring no structural modifications.

### ***Energy Conservation***

1. Energy conservation measures that are not visible or do not alter or detract from those qualities that make the resource eligible for the National Register of Historic Places may include:
2. Modifications to heating, ventilation, and air conditioning control systems;
3. Insulation of roofs, crawl spaces, ceilings, attics, walls, floors, and around pipes and ducts (this exclusion does not include the installation of materials that induce, retain, or introduce moisture into a building);
4. Interior modification when the significance of the NRHP eligible building does not include the interior space based on the determination of eligibility;
5. Caulking and weather stripping, provided the color of the caulking and weather stripping is consistent with the appearance of the building; and
6. Replacement or modification of lighting systems when the modifications do not alter or detract from the significance of the resource.

### ***Maintenance***

1. All maintenance and repair work on elements that are not visible and do not contribute to the historic significance of the property.
2. Maintenance, repair, and rehabilitation of non-historic structures within a listed or eligible historic district or within the view shed of historic properties provided no change in the overall size, massing, appearance or color of materials results.
3. Maintenance to buildings that are less than 50 years old provided they do not qualify under the criteria consideration for properties achieving significance within the past 50 years.



**Mothballing/Layaway**

1. Mothballing of historic properties provided the action is completed in consideration of the procedures established by the NPS in Preservation Brief 31: Mothballing Historic Buildings.

**Deconstruction and Demolition**

1. Demolition of World War II temporary buildings in accordance with the 1986 Army-wide Programmatic Agreement.
2. Demolition and all other undertakings associated with all Capehart-Wherry Era (1949-1962) Army Family Housing, associated structures, and landscape features in accordance with the 2002 Program Comment.
3. Deconstruction, demolition and all other undertakings occurring to buildings, structures, and landscapes that have been previously evaluated for NRHP eligibility and have been determined to be ineligible for inclusion in the NRHP in coordination with the appropriate SHPO, and which will not negatively impact existing historic properties or result in ground disturbance.
4. Deconstruction, demolition, and all other undertakings that may occur to buildings and structures that are covered through other nationwide programmatic compliance actions (Nationwide PAs, Program Comments, Exemptions, or other Program Alternatives).

**New Construction**

1. Construction in areas where the APE of the construction project does not include historic properties and which do not require ground disturbance (such as storage buildings built on existing slabs or other non-ground-disturbing foundations, etc.)

*ATTACHMENT D*

*ACRONYMS/DEFINITIONS*

**D.1 ACRONYMS**

ACHP	Advisory Council on Historic Preservation
AEC	Army Environmental Center
AMS	Accelerated Mass Spectrometry
APE	Area of Potential Effect
AR	Army Regulation
ARMS	Archaeological Records Management System
ARPA	Archaeological Resources Protection Act
CATEX	Categorical Exclusion
DOE	Directorate of Environment
DOE-C	Directorate of Environment-Conservation
DOQQ	Digital Ortho Quarter Quad
DPW	Directorate of Public Works
EA	Environmental Assessment
EDM	Electronic Distance Measurement
EIS	Environmental Impact Statement
EUL	Enhanced-use Leasing Initiative
GPR	Ground Penetrating Radar
GPS	Global Positioning System
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HPO	Historic Preservation Officer
ICRMP	Integrated Cultural Resource Management Plan
IO	Isolated Occurrence
LA	Laboratory of Anthropology
MICON	Military Construction
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
NMCRIS	New Mexico Cultural Resources Information System
NRHP	National Register of Historic Places
PA	Programmatic Agreement
PAO	Public Affairs Officer
RCI	Residential Community Initiative
REC	Record of Environmental Consideration
RFMSS	Range Facility Management Support System
SDZ	Surface Danger Zone
SHPO	State Historic Preservation Officer
SJA	Staff Judge Advocate
SOP	Standard Operating Procedure
TARL	Texas Archaeological Research Laboratory
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Officer

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TRCI	Properties of Traditional Religious and Cultural Importance
TRU	Transect Recording Unit
USGS	U.S. Geological Society
UTM	Universal Transverse Mercator

## **D.2 DEFINITIONS**

**36 CFR Part 800.** The Codified Federal Regulation implementing Section 106 of the NHPA (See Appendix B for a list of CFRs associated with cultural management resources by the Army and other federal agencies.).

**Aboveground properties.** Properties or portions of properties, typically buildings, structures, and landscapes that are not archeology.

**Adverse effect.** Includes but is not limited to the physical destruction, damage, or alteration of part or all of a property's characteristics that contribute to the property's eligibility for inclusion in the National Register of Historic Places. Examples include the introduction of elements that are out of character with the property or affect its setting, neglect resulting in deterioration or destruction of the property, and transfer, lease or sale of the property.

**Advisory Council on Historic Preservation (ACHP).** Established under Title 11 of the National Historic Preservation Act, as amended. The ACHP is to be afforded a reasonable opportunity to comment with regard to proposed federal, federally licensed, federally permitted, or federally assisted undertakings that may affect properties included in or eligible for inclusion in the National Register of Historic Places.

**Archeological program manager.** Senior staff who meet the requirements under the 1983 Secretary of Interior's *Standards and Guidelines for Archeology and Historic Preservation*.

**Area of potential effect (APE).** Geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist there. This area always includes the actual site of the undertaking, and may include other areas where the undertaking will cause changes in land use, traffic patterns, or other aspects that could affect historic properties.

**Artifact.** An object made or modified by human beings.

**Association.** The link of a historic property with a historic event, activity, or person, also, the quality of integrity through which a historic property is associated with a particular past time and place.

**Building.** A resource, such as a house, created principally to shelter any form of human activity.

**Criteria.** The general standard by which the significance of a historic property is judged.

**Design.** A quality of integrity applied to the elements that create the physical form, plan, space, structure, and style of a property.

**Determination of eligibility.** The process of ascertaining a property's eligibility for the National Register of Historic Places (NRHP). A property eligible for the NRHP but not actually listed or formally determined eligible by the Secretary of the Interior is afforded the same protection under Section 106 as a listed property.

**District.** A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

**Effect.** An effect on a historic property may result when an undertaking alters characteristics of the property that may qualify the property for inclusion in the NRHP. For determining effect, alteration to

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features of a property's location, setting, or use may be relevant depending on a property's significant characteristics and should be considered.

**Evaluation.** Process by which the significance and integrity of a historic property are judged for eligibility for the NRHP.

**Feeling.** Quality of integrity through which a historic property evokes the aesthetic or historic sense of past time and place.

**Ground-disturbing activities.** Any action that disturbs soil either temporarily or permanently accomplished by any method including but not limited to hand or machine excavation, grading and removal of vegetation, rocks, or other ground cover.

**Historic American Buildings Survey (HABS).** Program administered by the National Park Service to record in detail historic buildings through architectural rendering, large format photography, and written documentation.

**Historic American Engineering Record (HAER).** Program administered by the National Park Service to record in detail historic structures through engineering drawings, large format photography, and written documentation.

**Historic American Landscape Survey (HALS).** Program administered by the National Park Service to record in detail historic landscapes through rendering, large format photography, and written documentation.

**Historic context.** An organizing structure for interpreting history that groups information about historic properties that share a common theme, common geographical location, and common time period. The development of historic contexts is a foundation for decisions about the planning, identification, evaluation, registration, and treatment of historic properties, based upon comparative significance.

**Historic Preservation Officer (HPO).** The HPO, designated by the Installation Commander, is the expert in cultural resources and the administrator of the Integrated Cultural Resources Management Plan (ICRMP) and this PA. The HPO acts on behalf of the Installation Commander to coordinate compliance with this PA. If the HPO does not meet qualifications as outlined by the *Secretary of the Interior's Professional Qualifications Standards (48 CFR 44738-9)*, appropriate qualified staff will assume duties of this PA.

**Historic property.** Any prehistoric or historic district, site, building, structure, object, or traditional cultural property included in, or eligible for inclusion in the NRHP. The term includes artifacts, records, and remains related to and located in such properties.

**Historic resource.** Historic resource is any real or personal property, record, or life way. These can be historic or prehistoric. Real properties include archeological and architectural places, monuments, planned landscapes, engineering features, or other properties that may meet the criteria for listing in the National Register of Historic Places. Personal properties include artifacts or relics, whereas examples of historic records are any historical, oral historical, ethnographic, architectural, or other document or source reference that provides a record of the past.

**Integrity.** Authenticity of a property's historic identity, evidenced by the survival of physical characteristic(s) that existed during the property's historic or prehistoric period. Integrity consists of seven elements: location, design, setting, materials, workmanship, feeling, and association.

**Interested parties/Stakeholders.** Those individuals and organizations concerned with the effects of a particular undertaking on historic properties. May include, but not limited to SHPO, ACHP, Tribes, Preservation Groups, etc.

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**Keeper:** National Park Service employ responsible for the National Register of Historic Places program. Limited use areas (Green Zones). Maneuver areas where only roll-through is allowed.

**Location.** A quality of integrity retained by a historic property existing in the same place as it did during its period of significance.

**Material.** A quality of integrity applying to the physical elements that were combined or deposited in a particular pattern or configuration to form a historic property.

**Mitigate.** Reduce harm to historic properties.

**National Register of Historic Places (NRHP).** A list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture.

**Object:** A construction primarily artistic in nature or relatively small in scale and simply constructed, such as a statue or milepost.

**Period of significance.** Span of time in which a property attained the significance for which it meets the NRHP.

**Programmatic agreement (PA).** An agreement document that records the terms and conditions agreed upon to resolve potential adverse effects, typically developed for a large or complex project or a class of undertakings that would otherwise require numerous individual requests for ACHP comments under the NHPA, Section 106.

**Proponent.** The organization with technical and administrative control over the execution of a project or training exercise; e.g., the DPW acts as the user's agent for construction activity and is the implementing organization for those projects.

**Red Zones.** Restricted areas on Fort Bliss in which no activity is allowed.

**Section 106 process.** A review process established under NHPA Section 106 of the National Historic Preservation Act and administered by the Advisory Council on Historic Preservation under its regulations. During this process, agencies afford the ACHP an opportunity to comment on any agency activity or undertaking that may affect historic properties, and must take such comments into account.

**Section 110.** The section of the NHPA that defines federal agencies' responsibilities to preserve and use historic buildings and to establish a program to identify, evaluate and nominate historic properties to the NRHP.

**Setting.** A quality of integrity applying to the physical environment of a historic property.

**Site.** Location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.

**State Historic Preservation Officer (SHPO).** A federally funded position created under the NHPA. The SHPO is appointed by the governor and charged with the administration of the NHPA and to ensure that the state's interests are considered.

**Structure.** A functional construction made for purposes other than creating shelter, such as a bridge.

**Traditional cultural property (TCP).** Properties associated with the traditional cultural practices of a living community that (a) are rooted in that community's history or (b) are important in maintaining the continuing cultural identity of the community. TCP is the terminology used by the National Register of Historic Places program. Properties of Traditional Religious and Cultural, which is the legal terminology, is synonymous with TCP.

**Undertaking.** Undertaking means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency including those carried out by or on behalf of a Federal

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agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval.

**View shed.** Areas under the direct or indirect jurisdiction of a federal agency that can be seen from historic properties, typically from the perimeter of a historic district or historic property.

**Workmanship.** A quality of integrity applying to the physical evidence of the crafts of a particular culture during any given period or prehistory.

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**APPENDIX C  
HAZARDOUS AND UNIVERSAL WASTE GENERATED AT FORT BLISS**



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**Table C-1. Summary of Hazardous and Universal Waste Generated 2000-2004**

WASTE DESCRIPTION	TCEQ WASTE CODE	EPA HAZARDOUS WASTE CODE				WASTE GENERATED (lbs)				
						2004	2003	2002	2001	2000
Trichlorotrifluoroethane	0001202H	F001	U121							
Isopropanol (Isopropyl Alcohol)	0002219H	D001						5,052		
Expired Methyl Ethyl Keton	0004203H	D001	D035	F005	U159	35				
Acid (Chromic) Solution	0006104H	D007	D005							
Chromic Acid (1%) and Water	0006105H	D007	U112							
Paint Booth Filters (Hexavalent Chrome)	0007310H	D007						761		
Lacquer	0008209H	D001								
Epoxies	0009210H	D001				152			142	137
Paint (Enamel)	0010209H	D001								
Trichloroethylene	0011202H	F001	U228	F002						
Acetone	0012203H	F003	U002							
Naptha	0014211H	D001							3,154	
Batteries/Chemical Kits with Chromium	0015309H	U061					892	6,203	1,730	51
Methyl Alcohol	0016203H	F003	U154							
Methyl Alcohol	0016801H	D001								13
Spent Toluene	0017203H	D001								
Xylene	0019203H	F003	U239			156	361			
Paint Primer	0020209H	D001	D007							
Trichloroethane	0021202H	F001	U226				3			
Isopropanol (Isopropyl Alcohol)	0022219H	D001								
Adhesives	0024210H	D001				616	1,851			
Sodium Hydroxide	0025110H	D002							6,715	2,470
General Purpose Cleaner, Sealant	0026219H	D001								
Carbon Remover	0027202H	U070							10	
Contaminated Jet Fuel	0030211H	D001								
Paints	0031209H	D001	F003						23,027	22,730
Ignitable Waste	0032219H	D001				13,124	15,681	32,647	51,286	8,090

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WASTE DESCRIPTION	TCEQ WASTE CODE	EPA HAZARDOUS WASTE CODE				WASTE GENERATED (lbs)				
						2004	2003	2002	2001	2000
Corrosive Waste	0033105H	D002				821	693			
Lithium Batteries	0034309H	D003							1,493	2,474
Lab Waste	0035001H	D001	D002	D003	D009		8		41	316
Photographic Fixer	0036219H	D001	D011							
Paint Filters	0037310H	D007								
Contaminated Mogas	0038211H	D001					594			90
Waste Sulfuric Acid	0039103H	D002	D008					1,607	952	3,614
Pesticide Waste	0040219H	D012	D013	D014	D015			9	40	190
Herbicide Waste	0041219H	D016	D017							
Cleaner Lubricant	0042202H	F001								
Polyurethane Coating	0044209H	D001								
Corrosion inhibitor (halogenated solvent)	0045202H	D001	D007							
Paint Sludge (Hydrogen Containing)	0046211H	D001	D007							
Spent Solvents	0047203H	D001	D007	F005						219
Contaminated JP-8	0048211H	D001	D007						3,736	141
Waste Oil	0049206H	D001	D008						676	
Safety-Kleen Solvent	00501203H	D018	D006	D008	D035					
Corrosive Characteristic Waste	0051105H	D002					1,275.8	5,475	12,836	8,545
Benzene	0053203H	U022								
Benzene	0056203H	U019								
Phenol Waste	0057219H	U188	D018			6	10	28		3
Chloroform	0060202H	U044				5	139	71	7	31
Chromium Toxicity Characteristic	0061319H	D007				4,521	1,594	1,243	1,607	8,770
Cresol	0063208H	U052	F004						6	
Reactivity Characteristic Waste	0067309H	D003								
Dichlorodifluoromethane	0068801H	U075				4				
Halogenated Solvents	0069202H	F001	F002				95			
Acetic Acid	0071105H	D001	D002	U112		3				
Dibutyl Phthalate	0079001H	U069							21	

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WASTE DESCRIPTION	TCEQ WASTE CODE	EPA HAZARDOUS WASTE CODE				WASTE GENERATED (lbs)				
						2004	2003	2002	2001	2000
Lead Toxicity Characteristic	0079603H	D008					17		23,255	19,116
Mercury Toxicity	0080309H	D009				8	146		444	1,248
Mercury Waste	0081119H	U151	D009				25	8		
Methyl Alcohol	0082219H	U154				686	358			
Formaldehyde	0086219H	U122					242		55	36
Methylene Chloride	0087202H	U087						138		
Cadmium Toxicity Characteristic	0089309H	D006				262	373		312	629
Spent Solvent (non halogenated)	0090203H	D036	F004							
1,1,1 Trichloroethan	0093202H	U226						27		
Lindane	0094401H	D013	U129			8				
Silver Toxicity Characteristic	0095106H	D011				2,231	55		2	
1,1,1 Tetrachloroethane	0101202H	U208				19				
Trichloroethylene	0102202H	F001	U228					15		
Pol Contaminated Soils	0106489H	D018								
Antifreeze	0107296H	P042								
Spent Fuel Filters	0109489H	D001								
Waste Paint	0110209H	D001								
Waste Batteries (Wet)	0039309H	D002	D008							
Batteries (Lead acid)	0096309H	D002	D008	D009						
Fuel Contaminated w/Oil, Dirt, Water etc.	0113211H	D001								
Paints, Aerosols	0116801H	D001				264	416		54	46
Expired Methyl Ethyl Keton	0018203H	D001	D035	F005			17			
Sodium Azide	0119119H	P105	P030	P098					9	
Oil-Water Separator Sludge	0120603H	D025								
Potassium Cyanide	0122312H	P098						5		
Spent Inorganic Solids	0123319H	D002	D001			357	1,250			
Spent Sodium Hydroxide	0124305H	D002					3			
Corrosivity Characteristic Waste (Caustic)	0125110H	D002				4,381	85			
Expired MRE heaters	0129319H	D003				449	302			

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WASTE DESCRIPTION	TCEQ WASTE CODE	EPA HAZARDOUS WASTE CODE				WASTE GENERATED (lbs)				
						2004	2003	2002	2001	2000
Spent Sodium Cacodylate	0131119H	U136					3			
Expired Dimethyl Sulfate	0135219H	U103				4	4			
Expired Aniline	0138219H	U012					528			
Expired Lead Acetate	0139219H	U144					22			
Expired Organic Acids	0140219H	D002					17			
Expired Barium Containing Waste	0141319H	D005				5				
Expired Solid Paraffin Wax	0144409H	D001				36				
Photographic Waste Containing Silver	0145319H	D011				409				
Inorganic Liquids	0147119H	D006	D007	D008		170				
Recycled Photo-fixer/developer	0095106H	D011								
Recycled photo solutions (Safety kleen)	0629119H	D011					3,058	4,392	9,024	20,883
Safety-Kleen solvent	0501203H	D039	D008	D018	D040				640	
Safety-Kleen solvent	0566203H	D006	D008	D018	D021	432	522.6	616	616	598
Potassium Cyanide	0098312H	P098					5			
Expired Formic Acid	0073104h	D002					67			
Safety-Kleen solvent	0839102H	D039	D006						560	996
<b>TOTAL WASTE GENERATED (lbs)</b>						<b>29,164</b>	<b>30,712</b>	<b>58,297</b>	<b>142,450</b>	<b>101,436</b>

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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WASTE DESCRIPTION	TCEQ WASTE CODE	EPA HAZARDOUS WASTE CODE	WASTE GENERATED (lbs)					
			2004	2003	2002	2001	2000	
<b>UNIVERSAL WASTE</b>								
SPENT LITHIUM BATTERIES	FBUW0000-001		3,209	7,076				
MAGNESIUM BATTERY	FBUW0000-004		707					
LEAD ACID BATTERIES (WET,NON SPILLABLE)	FBUW0000-005		1,447	6,995				
NICAD BATTERIEDS	FBUW0000-006		2,368	1,047				
MERCURY BATTERIES	FBUW0000-007		3,128	1,463				
WASTE PAINT RELATED MATERIALS	FBUW0000-013		60,674	27,376				
USED OR EXPIRED MERCURY THERMOMETERS	FBUW0000-020		160					
<b>TOTAL UNIVERSAL WASTE GENERATED (lbs)</b>			<b>71,693</b>	<b>43,957</b>	<b>27,526</b>			
<b>WASTE RECYCLED (Safety-Kleen and other solvents)</b>			<b>432</b>		<b>5,008</b>	<b>10,840</b>	<b>21,481</b>	
<b>TOTAL WASTE DISPOSAL</b>			<b>28,732</b>	<b>30,712</b>	<b>53,289</b>	<b>131,610</b>	<b>79,955</b>	

\*FBUW0000-001 SPENT LITHIUM BATTERIES INCLUDE THE FOLLOWING INTERNAL TRACKING NUMBERS THAT COORESPOND TO OTHER LITHIUM BATTERY TYPES:  
FBUW0000-003 AND FBUW0000-018.

\*\*FBUW0000-013 WASTE PAINT RELATED MATERIALS INCLUDES THE FOLLOWING INTERNAL TRACKING NUMBERS THAT COORESPOND TO OTHER WASTE PAINT:  
RELATED MATERIALS, FBUW0000-008, FBUW0000-009, FBUW0000016, FBUW0000-022, FBUW0000-011, AND FBUW0000-010.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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**Table C-2. Summary of Toxic Release Inventory 2000-2005**

<i>Chemical Name</i>	<i>CAS Number</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004*</i>	<i>2005</i>
Methyl Ethyl Ketone	78-93-3	21,083	38,673	NR	NR	NR	NR
Toluene	108-88-3	11,247	15,874	NR	NR	NR	NR
Xylene	1330-20-7	NR	13,870	NR	NR	NR	NR
Copper	7440-50-8	NR	82,796	35,095	43,286	279,826	284,209
Lead	7439-92-1	NR	22,725	35,727	12,570	69,212	75,771
Lead Compounds	N420	NR	206	308	308	217	1,275
Diisocyanates	N120	NR	NR	NR	119	NR	NR
Nitroglycerin	NA	NA	NA	NA	NR	NR	24,294

Source: USEPA Toxic Release Inventory Form R Query; Fort Bliss Directorate of Environment  
NR = No Release; NA = not available

**APPENDIX D  
COMMENTS AND RESPONSES**



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## Appendix D

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Las Cruces, New Mexico, November 6, 2006.....	D-7
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## **INTRODUCTION**

This appendix presents all comments received by the Army on the Fort Bliss Mission and Master Plan Draft Supplemental Programmatic Environmental Impact Statement (SEIS) during the public comment period. The Draft SEIS was distributed for public review and comment on October 6, and public comments were accepted through December 12, 2006 for inclusion in the Final SEIS. Three public meetings were held on November 6, 8, and 9, 2006 to accept oral comments.

This appendix contains verbatim transcripts of the three public meetings and copies of all written comments received during the review period for the Draft SEIS. Comments are displayed in the left-hand box and responses, when provided, in the right-hand box of the page. Responses are provided to comments that contained questions or raised issues needing clarification of or expansion on the findings in the Draft SEIS. The responses indicate whether additional information or clarification has been added to other sections of the Final SEIS. Comments that only offered opinions or information are included, but no response is needed or provided. All comments will be considered by the decision-maker.

**Table D-1** lists all commenters who provided either oral (at the public meetings) or written comments during the comment period, alphabetically by last name. It provides the page numbers where their comments and responses to those comments, if applicable, begin.

The Army thanks all commenters for participating in the NEPA process and for providing input.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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**Table D-1. Individuals and Organizations That Submitted Comments on the Draft SEIS**

<i>No.</i>	<i>Name of Commenter</i>	<i>Organization</i>	<i>Date of Comment</i>	<i>Comment Page Number</i>	<i>Response Page Number</i>
1	Addington, Bill	Sierra Club	11/09/2006	D-63	D-65
2	Anaya, Gilbert G.	International Boundary and Water Commission United States and Mexico	11/03/2006	D-72	N/A
3	Chee, Marklyn	The Navajo Nation	12/11/2006	D-73	D-73
4	Childs, Quana	Texas Historical Commission	12/06/06	D-75	N/A
5	Curry, Ron	New Mexico Environment Department	12/4/2006	D-76	D-77
6	Dayoub, Richard	El Paso Chamber of Commerce	11/09/2006	D-57	N/A
7	DeGarmo, Glen		12/11/2006	D-81	D-81
8	Geyer, Bob	Sierra Club	11/9/2006	D-60	D-61
9	Grace, Lance		12/12/2006	D-89	D-89
10	Hutchison, Bill	El Paso Water Utilities	11/09/2006	D-46	N/A
11	Jones, Bob	Otero County Grazing Board	11/08/2006	D-30	D-30
12	Kirkpatrick, Lisa	State of New Mexico Department of Game and Fish	12/12/2006	D-90	N/A
13	Lee, Bebo		11/08/2006	D-33	D-33
14	McMurray, Heather		12/12/2006	D-68	D-69
15	Moore, Doug	Otero County	11/8/2006	D-28	D-29
16		New Mexico State Historic Preservation Officer	No date	D-93	N/A
17	Oaks, F. Lawrence	Texas Historical Commission	11/13/2006	D-95	D-95
18	Roberson, Edwin L.	Bureau of Land Management, Las Cruces District Office	12/12/2006	D-96	D-96
19	Rosmarino, Nicole	Forest Guardians	12/12/2006	D-98	D-99
20	Roxlau, Katherine		12/13/2006	D-126	D-126
21	Smith, Rhonda	United States Environmental Protection Agency	12/01/2006	D-127	N/A
22	Toahty, Ruth	Comanche Tribe	12/11/2006	D-128	D-128
23	von Finger, Kevin <sup>1</sup>		12/12/2006	D-48	D-50
24	Wicker, Julie C.	Texas Parks & Wildlife	12/14/2006	D-129	D-130

1. Comments read into record by Bill Addington

N/A = not applicable

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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PUBLIC MEETING  
FOR COMMENTS ON SEIS  
HELD ON  
NOVEMBER 6, 2006  
AT  
MESILLA PARK RECREATION CENTER AUDITORIUM  
304 WEST BELL AVENUE  
LAS CRUCES, NEW MEXICO

*COPY*  
**ORIGINAL**

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MS. HILLER: So good evening, and welcome to this public meeting to accept your comments on the Fort Bliss Mission and Master Plan Draft Supplemental Programmatic Environmental Impact Statement, or SEIS, which was distributed for public review on October the 6th, 2006.

My name's Deborah Hiller, and I'll be your moderator for this evening. And with me, I've got Ginger Zachary, court reporter, who will be taking a verbatim transcript of these proceedings. Also with me is Dr. Rafael Corral.

Mr. Corral, would you stand up in the back? He's with the Fort Bliss Directorate of Environment. He will be our interpreter this evening if anyone wishes to make comments in Spanish. Is there anyone present who would like to make comments in Spanish?

Dr. Corral, if you would -- want to offer that up? Okay. I don't think -- I don't think so.

So I'd like to start the proceedings by introducing Colonel Robert Burns, Fort Bliss Garrison Commander, who will say a few words.

Colonel Burns?

MR. KNOPP: Just turn the mike off.

COLONEL BURNS: Turn it off?

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**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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1 MR. KNOPP: Off.

2 COLONEL BURNS: I think it is off.

3 Okay. Thanks for coming. Okay. This is a  
4 real important time for Fort Bliss. For the last few  
5 years, we've had a very active mobilization mission  
6 that's prepared the soldiers for deployment, sent them  
7 to support our campaigns in Southwest Asia, and brought  
8 them back home. The SEIS is an important part of our  
9 partnership with this community, because it will help us  
10 both plan for the major changes that are occurring at  
11 Fort Bliss and the region.

12 The land use changes proposed in the draft  
13 SEIS are critical to our ability to give these young men  
14 and women the best possible training, so they are better  
15 prepared for the rigors of combat. We accomplish that  
16 by providing high-quality, realistic training, and to do  
17 that, we have to increase our off-road maneuver training  
18 capability. It's really a transformation of our  
19 training capabilities.

20 In addition, we are proposing to develop  
21 facilities in the main cantonment area of Fort Bliss to  
22 support our mission and also provide a suitable quality  
23 of life for our soldiers while they're here. So this  
24 SEIS is part of Fort Bliss's active program to sustain  
25 our lands in an environmental, responsible way, and your

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1 valuable input will help us do that job better.

2 So I look forward to hearing your comments,  
3 and thank you for taking the time to participate in this  
4 process.

5 MS. HILLER: Thank you, Colonel Burns.

6 So this is our agenda for the evening. And  
7 we'll first have a short briefing to provide you an  
8 overview of what's proposed, the alternatives being  
9 considered, and the draft SEIS process.

10 We'll then take a quick 15-minute break,  
11 during which time y'all can examine the displays in the  
12 back or ask -- if you haven't already done so, ask any  
13 questions you might have. We'll have Army  
14 representatives and subject matter -- subject  
15 matter experts who are available to you as you  
16 ask those questions.

17 We'll then reconvene for the main purpose  
18 of this meeting, and that is to accept your comments on  
19 the draft SEIS.

20 So I'd now like to introduce Colonel White,  
21 the deputy garrison commander, to start the briefing.

22 COLONEL WHITE: Good evening. We've  
23 invited you here tonight to give us your input on the  
24 findings in the Fort Bliss Mission and Master Plan Draft  
25 EIS -- correction -- SEIS. The draft SEIS

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**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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1 supplements the Fort Bliss Master -- Mission and Master  
2 Plan Programmatic Environmental Impact Statement, or the  
3 PEIS, published in December of 2000.

4           We are preparing the SEIS because changes  
5 in the Fort Bliss mission require us to modify how we  
6 manage our lands and resources. Not everything needs  
7 changing, and the PEIS still remains relevant and in  
8 effect for a lot of our activities. Thus, the SEIS  
9 incorporates appropriate parts of the PEIS and focuses  
10 on the proposed land use modifications.

11           These modifications are necessitated by a  
12 number of recent events that affect the mission of Fort  
13 Bliss and the composition of the units assigned here.  
14 They include the overall transformation of the Army,  
15 which was addressed in an Armywide Programmatic EIS  
16 published in 2002; the Army campaign plan developed and  
17 implemented Army transformation; the integrated global  
18 presence and basing strategy that is bringing units in  
19 Europe and other overseas locations back to the United  
20 States; and the base realignment and closure process  
21 known as BRAC.

22           An important component of the Army  
23 transformation and the Army campaign plan is to move to  
24 what is called a modular force. Simply put, this  
25 approach changes the way the Army is organized into more

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1 self-sufficient units that incorporates elements that  
2 fight together, as well as supporting elements like  
3 supply and engineering, as integral parts of the unit.

4           The primary building block of the new  
5 organization is called the brigade combat team, or the  
6 BCT. The BRAC commission identified both incoming and  
7 outgoing units, as shown on this chart. Fort Bliss will  
8 receive a total of four brigade combat teams over the  
9 next five years, as well as an armored division  
10 headquarters.

11           Other incoming units include an artilleries  
12 brigade, a combat aviation brigade, a sustainment  
13 brigade, and other supporting organizations. The BRAC  
14 decisions became law in December of 2005, resulting in  
15 substantial personnel and other changes at Fort Bliss  
16 that we must respond to and prepare for.

17           At the same time, the Air Defense  
18 Artillery, or ADA, School and three ADA brigades have  
19 been identified to move out of Fort Bliss, although the  
20 BRAC commission acknowledged that the brigade -- ADA  
21 brigades would need to be returned to Fort Bliss for  
22 missile firings.

23           As you may know, the first heavy BCT, the  
24 the 4th BCT of the 1st Cavalry Division, has already  
25 come to Fort Bliss, has undergone training, and was

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1 deployed to Iraq a little over a week ago.

2           As the previous slide indicated, the  
3 brigade combat teams at Fort Bliss is -- that we are  
4 receiving at Fort Bliss are called heavy BCTs. Heavy  
5 BCTs are armored units that fight with tanks, Bradley  
6 fighting vehicles, and artillery, as shown on this  
7 slide.

8           A heavy BCT has several battalions with  
9 specific combat roles and pieces of equipment. Each BCT  
10 has about 3,800 soldiers and includes approximately 360  
11 track vehicles and 900 wheeled vehicles, as well as  
12 generators and other pieces of equipment. With four  
13 heavy BCTs, Fort Bliss is expecting a net increase of  
14 about 1400 track vehicles and 7- to 800 wheeled  
15 vehicles.

16           This chart shows the expected personnel  
17 changes that will occur over the next five years. In  
18 sum, we are expecting a net increase of approximately  
19 20,000 military personnel, many with dependents, and  
20 about 3800 civilians.

21           The incoming units will have a different  
22 mission from the ADA units currently at Fort Bliss, so  
23 their training requirements will be different. They  
24 will need to become proficient in using their weapons,  
25 which requires live fire through qualification ranges.

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8

1           The combat aviation brigade and its  
2 helicopters will need training on onground  
3 targets -- air ground targets. Excuse me. The heavy  
4 equipment battalions need off-road vehicle maneuver  
5 training. Based on their training requirements, Fort  
6 Bliss needs a minimum of approximately 539,000 acres of  
7 off-road vehicle maneuver area.

8           Currently, only 335,000 acres are approved  
9 for off-road vehicle maneuver. The land use changes and  
10 the construction considered in the draft SEIS are  
11 proposed to meet these training needs.

12           I'll now turn the podium over to Colonel  
13 Kirby to describe the alternatives, analyze the draft  
14 supplemental EIS.

15           COLONEL KIRBY: Thank you, and good  
16 evening. My name is John Kirby, and I am the Fort Bliss  
17 Range Commander. My job is to manage the Fort Bliss  
18 training complex in a manner that provides the best  
19 possible preparation of our soldiers being sent into  
20 combat, ensure the long-term sustainability of the land.

21           As Colonel White indicated, the draft SEIS  
22 provides information about the environmental  
23 consequences associated with bringing in 20,000 new  
24 troops and constructing new facilities to support them.  
25 The primary decisions being considered in the SEIS,

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1 however, are proposed land use changes to accommodate  
2 the incoming units and provide the training they need.

3           One proposal is to expand the main  
4 cantonment area and change its land use designation to  
5 mixed use. This is needed to accommodate new complexes  
6 for the heavy BCTs and the combat aviation brigade.  
7 These complexes are self-contained inquiries (phonetic)  
8 that include a mix of facility types, including  
9 barracks, administrative facilities, and maintenance and  
10 supply facilities, as well as various community services  
11 and amenities.

12           This mixed-use approach allows soldiers to  
13 live near their place of work, enhances efficiency, and  
14 reduces resources needed to transport people and  
15 equipment.

16           In order to accommodate these mixed-use  
17 complexes, we are proposing to designate the entire main  
18 cantonment area for mixed land use, where the location  
19 of individual facilities would conform to Army  
20 regulations and guidelines for land use compatibility  
21 and environmental management.

22           In the Fort Bliss training complex, we will  
23 be developing a number of new live fire and  
24 qualification ranges, most of which will be located on  
25 or adjacent to existing ranges on Dona Ana Range and in

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1 the south part of McGregor Range, near the existing  
2 Meyer complex, forward area weapon sites, and McGregor  
3 Range Camp.

4           We are proposing to develop a new range  
5 complex on McGregor Range in the area of the existing  
6 Oro Grande Range and short-range air defense system  
7 site. This complex would house a number of new  
8 facilities and include a digital air ground integration  
9 range primarily for helicopter training by the combat  
10 aviation brigade.

11           The main land use change we are proposing  
12 is opening up training areas in the Tularosa basin  
13 portion of McGregor Range for off-road vehicle maneuver.  
14 The alternatives considered in the draft SEIS provide  
15 for different combinations of training area use for that  
16 purpose.

17           I want to make it clear at the onset that  
18 we are not considering off-road vehicle maneuvers or any  
19 land use changes on Otero Mesa or the Sacramento  
20 Mountains foothills that lie within the Fort Bliss  
21 training complex, nor do we have any plans for future  
22 use of Castner Range. Furthermore, all the changes  
23 under consideration involve land that is currently  
24 within the Fort Bliss boundaries. We are not  
25 considering expanding the installation.

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1           Finally, this SEIS is not being prepared to  
2 support the BRAC decisions. Those decisions became law  
3 last December. This SEIS identifies the environmental  
4 impacts from the BRAC actions, but only the decisions  
26 5 that will be made pursuant to the SEIS are the land use  
6 decisions I described.

7           As required by the National Environmental  
8 Policy Act regulations, the draft SEIS includes a  
9 no-action alternative. Under this alternative, none of  
44 10 the proposed land use changes would be made, and land  
11 use at Fort Bliss would remain as designated in the  
12 mission and master plan PEIS published in December 2000,  
13 with some minor modifications.

14           Construction of facilities and ranges would  
00 15 occur, but only in keeping with the land uses currently  
16 authorized. Off-road vehicle maneuvers would be limited  
17 to the south training areas, north training areas, and  
18 one training area, training area eight on McGregor  
19 Range, that is already approved for that use.

18 20           This alternative includes development of  
21 one BCT complex for the 4th BCT of the 1st Cav, which  
22 was assessed in accordance with the proposed --  
23 correction -- with the procedures and criteria described  
24 in the 2000 PEIS.

44 25           Although we are required to include it, the

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1 no-action alternative is not a reasonable option,  
2 because it will not provide adequate training capability  
3 for the units that are coming to Fort Bliss as a -- as a  
4 result of the BRAC decision.

5           Alternative one in the draft SEIS  
6 implements the land use changes I mentioned for the main  
7 cantonment area and includes construction of the new  
8 facility needed to support all the incoming units  
9 identified in the BRAC decision. It also includes new  
10 live fire and qualification ranges at Dona Ana and  
11 McGregor Ranges, including the Oro Grande Range complex  
12 and the helicopter range I mentioned.

13           This alternative proposes to open training  
14 areas in the south Tularosa Basin portion of McGregor  
15 Range south of New Mexico Highway 506, the area shown in  
16 brown, to off-road vehicle maneuver. This would add  
17 216,000 acres of off-road vehicle maneuver capability to  
18 the 335,000 acres currently available for that use.

19           Together, these areas would provide the  
20 minimum amount of off-road vehicle maneuver capability  
21 needed, but it would severely curtail our ability to  
22 continue supporting the training needs of other users,  
23 including the air defense artillery missile firings and  
24 the mobilization mission.

25           Alternative two considered in the draft

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1 SEIS includes the land use changes and construction of  
2 alternative one and further extends the area in the  
3 Tularosa Basin portion of McGregor Range that would be  
4 available for off-road vehicle maneuver into training  
5 areas north of Highway 506. In addition, this  
6 alternative examines the environmental effects of  
7 bringing a second combat aviation brigade to Fort Bliss.

8 We are considering that possibility in  
9 order to understand the implications of providing the  
10 additional infrastructure and training capability at the  
11 installation, but I want to clarify that there is  
12 currently no plan to station a second combat aviation  
13 brigade at Fort Bliss and no decision will be made about  
14 that possibility at this time.

15 This alternative would authorize off-road  
16 vehicle maneuver training in a total of 615,000 acres of  
17 the Fort Bliss training complex, allowing us to continue  
18 providing limited support to mobilization training and  
19 missile firings, as well as training the incoming units.

20 Alternative three is similar to alternative  
21 two. It includes the same changes and improvements in  
22 the main cantonment area and the firing ranges, but  
23 instead of extending off-road vehicle maneuver north of  
24 Highway 506, it would extend it to the ridges and  
25 valleys of the southeast training areas below Otero

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14

1 Mesa.

2 This area offers important capabilities not  
3 available in other training areas, because it provides  
4 different terrain from the flat and sandy, copious dunes  
5 of the north and south training areas and southwest  
6 training areas of McGregor Range. Providing variety in  
7 the training environment is important for preparing our  
8 units to operate in different areas of the world.

9 In addition to authorizing off-road vehicle  
10 maneuver in the areas shown in brown, this alternative  
11 also expands the training uses allowed in those areas to  
12 include mission facilities, weapons firing, and surface  
13 danger zone. Many of the training areas already permit  
14 some or all of those uses, but this alternative would  
15 make the land use designations uniform across all areas  
16 used for off-road vehicle maneuver.

17 This alternative would result in  
18 approximately 622,000 acres being available for off-road  
19 vehicle maneuver, which is similar to the capability  
20 provided by alternative two, just in a different part of  
21 the installation.

22 Finally, alternative four in the draft SEIS  
23 includes all of the changes and developments of  
24 alternatives one, two, and three. It proposes to extend  
25 off-road vehicle maneuver capability to all of the

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1 Tularosa Basin portion of McGregor Range, including the  
2 training areas north of Highway 506 and in the southeast  
3 area of the range.

4           It would also provide for a uniform land  
5 use designation across those training areas, allowing  
6 for mission facilities, weapons firing, and surface  
7 danger zones, in addition to off-road vehicle maneuver.  
8 This would make a total of 687,000 acres available for  
9 off-road vehicle maneuvers.

10           Alternative four is the Army's proposed  
11 action and preferred alternative because it offers the  
12 most capability, variety, and flexibility to respond to  
13 current and future training needs. In evaluating this  
14 alternative, the draft SEIS considers the effects of  
15 bringing two additional heavy BCTs to Fort Bliss, as  
16 well as a second combat aviation brigade.

17           There are currently no plans to bring any  
18 additional units in, other than those identified through  
19 Army transformation and BRAC. The impacts associated  
20 with the additional units have been included in the  
21 analysis to help us understand the potential  
22 implications of further expanding the Fort Bliss  
23 mission. Like the combat aviation brigade, no decision  
24 concerning the additional BCTs will be made at this  
25 time.

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1           That concludes my portion of the briefing.  
2 Now I would like to turn the briefing over to Walter  
3 Christianson to describe the SEIS process.

4           MR. CHRISTIANSON: Hello. I'm Walter  
5 Christianson from the Fort Bliss Directorate of  
6 Environment. I'll give a very brief overview of the  
7 draft SEIS process and findings of the documents.  
8 However, because of time limits, I will not be able to  
9 describe the contents of the draft SEIS thoroughly or in  
10 any real detail, so I encourage everyone to read the  
11 document for yourselves in order to really understand  
12 what it says. If you do not have a copy, we have some  
13 available tonight, and it's also available at local  
14 libraries and online at the Fort Bliss web site.

15           The draft SEIS was completed in accordance  
16 with the National Environmental Policy Act, or NEBA, and  
17 both the president's council on environmental quality  
18 and the Army's implementing regulations. It addresses  
19 the environmental and socioeconomic impacts of -- from  
20 the five alternatives described by Colonel Kirby in 14  
21 resource areas.

22           It is called a draft because it reflects  
23 the Army's assessment of expected impacts, but we want  
24 your input before we finalize our analysis and provide  
25 our conclusions to the decision maker for consideration.

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1 The decision maker will see all the comments we receive  
2 during this review period, including any comments made  
3 tonight, and those comments will be published in the  
4 final SEIS, along with appropriate responses. Tonight  
5 is an important step in this process.

6 The SEIS process began with publication of  
7 a notice of intent, which was published in the Federal  
8 Register on November 15 of last year. This initiated a  
9 scoping period, during which we solicited input on the  
10 topics to be addressed in the SEIS. As part of scoping,  
11 we held public meetings last December.

12 The draft SEIS was distributed for public  
13 review and comment on October 6th of this year. NEBA  
14 regulations require a minimum of 45 days for public  
15 review and comment. However, we provided for an  
16 extended comment period, which ends December 12, 2006.  
17 Anyone wishing to make comments on the contents of the  
18 draft SEIS needs to submit those comments by December 12  
19 in order for them to be included in the final SEIS. All  
20 comments made tonight will be included.

21 Our current schedule is to complete and  
22 distribute the final SEIS next spring. After the notice  
23 of availability, a final SEIS is published in the  
24 Federal Register. A record of decision will be issued  
25 no sooner than 30 days later. The record of decision

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1 will specify which alternative the Army has selected and  
2 list any mitigation measures that will be adopted to  
3 reduce environmental impacts. Both the final SEIS,  
4 notice of availability, and the record of decision will  
5 be publicly announced and posted on the Fort Bliss web  
6 site.

7 These next few slides summarize the main  
8 findings of the draft SEIS. I realize this is a lot to  
9 absorb, especially during a briefing, but there are fact  
10 sheets at the display tables with this information,  
11 which you're welcome to take with you. Again, the best  
12 way to get a thorough understanding of the SEIS findings  
13 is to read the document itself.

14 Many of the expected effects are related to  
15 the influx of new military and civilian personnel at  
16 Fort Bliss. With their dependents, these personnel will  
17 increase the regional population by over 60,000 people.  
18 The additional income and expenditures generated are  
19 projected to attract almost 60,000 additional people to  
20 the region, for a total population impact of about  
21 120,000 people.

22 The proposed land use changes in the Fort  
23 Bliss training complex, specifically, the increase in  
24 off-road vehicle maneuver, will result in some changes  
25 in the local visitation and ecology. The soils in the

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1 area are susceptible to wind erosion, so the maneuvers  
2 can be expected to generate -- generate more dust.  
3 However, our modeling indicates the levels of  
4 particulate matter will not exceed air quality standards  
02 5 outside the installation.

6           There will be more training at the large  
7 caliber range -- weapons ranges on Dona Ana and McGregor  
8 Ranges, so noise levels will increase, especially in  
9 communities adjacent to those areas. Safety and  
12 10 hazardous materials and waste issues are not expected to  
11 increase significantly because of management processes  
12 already in place.

13           Finally, increased population means more  
14 housing and community services will be needed.

80 15           MS. HILLER: So we'll now take a 15-minute  
16 break. And for those of you who haven't, please feel  
17 free to go look at the displays. The discussions in the  
18 back of the room, please be aware that those won't be  
19 recorded. However, Ginger Zachary will be available  
4 20 during the break for people who prefer to make their  
21 comments in private.

22           Also, while the Army representatives here  
23 can answer questions you might have to the best of their  
24 ability, they may not have all the answers readily at  
8 25 hand and may need to get back to you or to defer the

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1 response to the final SEIS, where the information will  
2 be available to everyone.

3           Again, Dr. Corral and Sylvia Wagner from  
4 the Fort Bliss Directorate of Environment are available  
22 5 if anyone would like assistance in Spanish.

6           After the break, we'll reconvene and take  
7 public comments, which will be recorded by Ginger  
8 Zachary for the record. I currently have no persons  
9 signed up to speak at this time. If you'd like to make  
38 10 a comment and did not check the box when you signed in,  
11 you can receive your card at the registration desk,  
12 which is in the back, and they'll add your name -- your  
13 name to the list of potential speakers for the evening.

14           So there are rest rooms to the back of the  
52 15 room, and if we don't have any speakers, then  
16 we'll -- the meeting will be adjourned. So right now,  
17 we'll just adjourn to a 15-minute break.

18           (Break taken from 7:01 p.m. to 7:15 p.m.)

19           MS. HILLER: So we've now come to the main  
34 20 purpose of this meeting, and that is to obtain your  
21 comments on the draft SEIS. So at this point, are there  
22 any members of the audience who would wish to speak?

23           (No response.)

24           MS. HILLER: Okay. I'd like you -- I'd  
48 25 like to remind you-all that we do have Ginger Zachary

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1 available if you have any private comments.

2           And I want to thank you. Thank you for  
3 participating in this public meeting on the Fort Bliss  
4 Mission and Master Plan Draft Supplemental Programmatic  
04 5 Environmental Impact Statement.

6           If you decide not to present any comments  
7 to Ginger Zachary, there are other options for making  
8 comments. One of those is to fill out a written comment  
9 form. We have plenty of these available here at the  
16 10 meeting tonight. They are over on the far wall at the  
11 comment table.

12           You can either fill this out and turn it in  
13 to us tonight, or you can take it with you and then  
14 submit it. You're also welcome to submit comments in  
30 15 any format that you wish: by e-mail -- there's a sheet  
16 over there -- it's just like this slide up here -- that  
17 informs the various methods for submitting comments.  
18 And, again, that can be in your own letter or in an  
19 e-mail.

16 20           The important part is that we receive those  
21 comments by December 12th. That is the close of the  
22 comment period, and that is the date by when we need  
23 comments to consider them for the SEIS.

24           So this concludes the meeting. I want to  
32 25 thank you-all for being here and please drive home

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22

1 safely. Thank you.

2           (Hearing concluded at 7:17 p.m.)  
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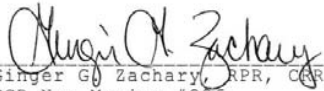
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REPORTER'S CERTIFICATION

State of Texas        )  
                              )  
County of El Paso    )

I, Ginger G. Zachary, Registered  
Professional Reporter, Certified Realtime Reporter, and  
Certified Shorthand Reporter in and for the New Mexico,  
do hereby certify that this transcript is a true record  
of the Public Meeting for Comments of SEIS, and that  
said transcription is done to the best of my ability.

Given under my hand and seal of office on  
this 16th day of November, 2006.



-----  
Ginger G. Zachary, RPR, CCR  
CCR New Mexico #286  
Expiration Date: 12/31/07  
300 E. Main, Suite 1024  
El Paso, Texas 79901  
(915) 533-1199

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**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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In Re: Fort Bliss Mission and Master Plan Draft Supplemental  
Environmental Impact Statement Public Meeting.

TRANSCRIPT OF PROCEEDINGS

On the 8th day of November, 2006, at 6:30 p.m., a public  
scoping meeting was held at City Hall, 1376 E. Ninth Street,  
Alamogordo, New Mexico.

At which time, the following proceedings were had:

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PRESENTATIONS

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1 MS. HILLER: Good evening to all of you. And I want  
2 to welcome you tonight to this public meeting to accept your  
3 comments on the Fort Bliss Mission and Master Plan Draft  
4 Supplemental Programmatic Environmental Impact Statement, that's a  
5 mouthful. We call it an SEIS. And this SEIS was put out for public  
6 comment on October 6th of 2006 and that's what we're here for  
7 tonight.

8 My name is Deborah Hiller and I'll be your moderator  
9 this evening. With me, we have Jan Wimberly, who will be the court  
10 reporter, and she'll be taking a verbatim transcript of this  
11 evening's proceedings. We also have with us Dr. Raphael Corral,  
12 right here in the middle, who will be our interpreter for the  
13 evening for any folks who would like assistance in Spanish. And Dr.  
14 Corral, would you like to see if anyone would like an interpreter  
15 for the evening?

16 DR. CORRAL: I guess not but I'll be ready anyway.  
17 Thanks.

18 MS. HILLER: Thank you. So before we begin, if you  
19 have a cell phone, please turn it off at this time. And I'd like to  
20 start the proceedings by introducing Colonel Robert Burns, who is  
21 the Fort Bliss Garrison Commander, and he's going to just say a few  
22 words. Colonel Burns.

23 COL BURNS: After I turn off my cell phone, I don't  
24 want to be the first violator. Good evening, everybody. Thanks for  
25 coming, especially to those of you that I recognize as coming again

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1 that were here the first time that we were here. This is a real  
2 important time for Fort Bliss. And for the last few years, you may  
3 know that we've had a very active mobilization mission that's  
4 prepared thousands of soldiers for deployment to support combat  
5 operations in Iraq and Afghanistan. We've also redeployed thousands  
6 of them. This SEIS is a real important part of our partnership with  
7 the communities because it helps us both plans for the major changes  
8 that are going to occur at Fort Bliss and will be occurring in the  
9 region in general.

10 Land use changes proposed in the Draft SEIS are  
11 critical in our ability to give our young men and women the most  
12 realistic training so they're prepared for the rigors of combat. We  
13 accomplish that by providing high quality, realistic training, and  
14 we need to do that in a manner that replicates what they're going to  
15 encounter in theater and how they're gonna fight. To do that, we  
16 have to increase our off-road maneuver training to support  
17 components organic to the First Armored Division and its comment and  
18 the organic brigade combat means associated to it.

19 In addition, we're proposing to develop facilities in  
20 the Main Cantonment Area of Fort Bliss to support our mission there  
21 and to provide a suitable quality of life for our soldiers while  
22 they're here. So this is a significant transformation of Fort Bliss  
23 and our training areas.

24 This SEIS is part of Fort Bliss's active program to  
25 sustain our lands in an environmental responsible way, and your

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1 valuable input helps us do that job better so we're very anxious to  
2 get your comments. So I'll look forward to hearing from you and  
3 thank you for taking time to participate tonight, thanks.

4 MS. HILLER: Thank you, Col Burns. So I want to let  
5 you all know a little bit about how this evening is going to go.  
6 This is our agenda for the evening: First we'll have a short  
7 briefing to provide you all an overview of what's being proposed,  
8 the alternatives being considered, and the Draft SEIS process.

9 We'll then -- after the briefing, we'll take a short  
10 15 minute break and that'll provide you an opportunity to go into  
11 the forum and review the displays, if you haven't already had an  
12 opportunity to do so. And if you have questions, we'll have Army  
13 representatives out there, as well as subject matter experts. This  
14 really is your opportunity, that if you have any questions to have  
15 those answered because we do have those individuals here to assist  
16 you, the subject matter experts and the Army representatives.

17 We'll then reconvene here for the main purpose of the  
18 meeting, and that is to accept your comments on the draft SEIS. So  
19 I'd now like to introduce Col White, the Deputy Garrison Commander  
20 at Fort Bliss, to start the briefing.

21 COL WHITE: Good evening. We've invited you here  
22 tonight to give us your input on the findings of the Fort Bliss  
23 Mission and Master Plan Draft SEIS. The Draft SEIS supplements the  
24 Fort Bliss Mission and Master Plan Programmatic Environment Impact  
25 Statement, or the PEIS, published in December of 2000. We are

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1 preparing the SEIS because changes in the Fort Bliss mission require  
2 us to modify how we manage our lands and resources. Not everything  
3 needs to be changed, and the PEIS still remains relative and in  
4 effect for a lot of our activities. Thus, the SEIS incorporates  
5 appropriate parts of the PEIS and focuses on the proposed land used  
6 modification.

7 These modifications are necessitated by a number of  
8 recent events that affect the mission of Fort Bliss and the  
9 composition of the units assigned there. They include the overall  
10 transformation of the Army, which was addressed in the Army-wide  
11 Programmatic EIS published in 2002, the Army Campaign Plan developed  
12 to implement Army Transformation, the Integrated Global Presence and  
13 Basing Strategy, which is bringing units in from Europe and other  
14 overseas locations back to the United States, and the Base  
15 Realignment and Closure process known as BRAC.

16 An important component of the Army Transformation and  
17 the Army Campaign Plan is a move to what is called the "modular  
18 force." Simply put, this approach changes the way the Army is  
19 organized into more self-sufficient units that incorporate elements  
20 that fight together, as well as supporting elements like supply and  
21 engineering, as integral parts of the unit. The primary building  
22 block of the new organization is the Brigade Combat Team or the BCT.

23 The BRAC Commission identified both incoming and  
24 outgoing units, as shown on this chart. Fort Bliss will receive a  
25 total of four BCTs over the next five years, as well as an Armor

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1 Division headquarters. Other incoming units include the Artillery  
2 Brigade, a Combat Aviation Brigade, a Sustainment Brigade, and other  
3 supporting organizations. The BRAC decision became law in December  
4 2005, resulting in substantial personnel and other changes at Fort  
5 Bliss that we must respond to and prepare for.

6 At the same time, the Air Defense Artillery, or ADA,  
7 school and three ADA brigades have been identified to move out of  
8 Fort Bliss, although the BRAC Commission acknowledged that the ADA  
9 brigades would need to be returned to Fort Bliss for missile  
10 firings.

11 As you may know, the first heavy BCT, the 4th Brigade  
12 Combat Team of the 1st Cavalry Division has already come to Fort  
13 Bliss, undergone some training, and was deployed to Iraq a little  
14 more than a week ago.

15 As the previous slide indicated, the BCTs at Fort  
16 Bliss -- that we are receiving at Fort Bliss are called the Heavy  
17 Brigade Combat Teams. Heavy BCTs are armored units that fight with  
18 tanks, Bradley fighting vehicles, and artillery, as shown on this  
19 slide. The heavy BCT has several battalions with specific combat  
20 roles and pieces of equipment. Each BCT is about 3800 soldiers and  
21 includes approximately 360 tracked vehicles and 900 wheeled  
22 vehicles, as well as generators and other pieces of equipment. With  
23 four heavy BCTs, Fort Bliss is expecting a net increase of about  
24 1400 tracked vehicles and 7800 wheeled vehicles.

25 This chart shows the expected personnel changes that

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1 will occur over the next five years. In sum, we're expecting a net  
2 increase of approximately 20,000 military personnel, with many  
3 dependents, and about 3800 civilians.

4 The incoming units will have a different mission from  
5 the ADA units currently at Fort Bliss, so their training  
6 requirements are gonna be different. They'll be required to become  
7 more proficient in using their weapons, which requires live-fire and  
8 qualification ranges. The Combat Aviation Brigade and its  
9 helicopters will need training on air-ground targets. The heavy  
10 equipment battalions need off-road maneuver training areas. Based  
11 on the training requirements, Fort Bliss needs a minimum of  
12 approximately 539,000 acres of off-road vehicle maneuver space.  
13 Currently only about 335,000 acres are approved for off-road vehicle  
14 maneuver. The land use changes and construction considered in the  
15 Draft EIS are proposed to meet these training needs.

16 I'll now turn the podium over to Colonel Kirby to  
17 describe the alternatives analyzed in the draft SEIS.

18 COL KIRBY: I'd like to break from the script just  
19 for a minute to congratulate Mr. Moore on his reelection.  
20 Congratulations, we look forward to continuing to work with you over  
21 the next four years.

22 MR. MOORE: Thank you.

23 COL KIRBY: So thank you and good evening. My name  
24 is John Kirby, and I am the Fort Bliss Range Commander. My job is  
25 to manage the Fort Bliss Training Complex in a manner that provides

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1 the best possible preparation of our soldiers being sent into combat  
2 and ensures the long-term sustainability of the land.

3           As Col White indicated, the Draft SEIS provides  
4 information about the environmental consequences associated with  
5 bringing in 20,000 new troops and constructing new facilities to  
6 support them. The primary decisions being considered in the SEIS,  
7 however, are proposed land use changes to accommodate the incoming  
8 units and provide the training they need.

9           One proposal is to expand the Main Cantonment Area  
10 and changed its land use designation to mixed use. This is needed  
11 to accommodate new complexes for the heavy BCTs and the Combat  
12 Aviation Brigade. These complexes are self-contained enclaves that  
13 include a mix of facility types, including barracks, administrative  
14 facilities, and maintenance and supply facilities, as well as  
15 various community services and amenities. This mixed-use approach  
16 allows soldiers to live near their place of work, enhances  
17 efficiency, and reduces resources needed to transport people and  
18 equipment.

19           In order to accommodate these mixed-use complexes, we  
20 are proposing to designate the entire Main Cantonment Area for mixed  
21 land use, where the location of individual facilities would conform  
22 to Army regulations and guidelines for land use compatibility and  
23 environmental management.

24           In the Fort Bliss training complex, we will be  
25 developing a number of new live-fire and qualification ranges, most

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1 of which will be located on or adjacent to existing ranges on Dona  
2 Ana Range and in the south part of McGregor Range near the existing  
3 Meyer Complex, Forward Area Weapon Sites and McGregor Range Camp.

4           We are proposing to develop a new range complex on  
5 McGregor Range in the area of the existing Orogrande Range and the  
6 Short Range Air Defense System Site. This complex would house a  
7 number of new facilities and include a Digital Air-Ground Integrated  
8 Range primarily for helicopter training by the Combat Aviation  
9 Brigade.

10           The main land use change we are proposing is opening  
11 up training areas in the Tularosa Basin portion of McGregor Range  
12 for off-road vehicle maneuver. The alternatives considered in the  
13 Draft SEIS provide for different combinations of training area use  
14 for that purpose.

15           I want to make it clear at the onset that we are not  
16 considering off-road vehicle maneuvers, or any land use changes on  
17 Otero Mesa or the Sacramento Mountain foothills that lie within the  
18 Fort Bliss Training Complex. Nor do we have any plans for future  
19 use of Castner Range. Furthermore, all the changes under  
20 consideration involve land that is currently within the Fort Bliss  
21 boundaries. We are not considering expanding the installation.

22           Finally, this SEIS is not being prepared to support  
23 the BRAC decisions. Those decisions became law last December. This  
24 SEIS identifies the environmental impacts from the BRAC actions, but  
25 the only decisions that will be made pursuant to the SEIS are the

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1 land use decisions I've described.

2           As required by the National Environmental Policy Act  
3 regulations, the Draft SEIS includes a No Action Alternative. Under  
4 this alternative, none of the proposed land use changes would be  
5 made, and the land use of Fort Bliss would remain as designated in  
6 the Mission and Master Plan PEIS published in December 2000, with  
7 some minor modifications.

8           Construction of facilities in ranges would occur, but  
9 only in keeping with the land uses currently authorized. Off-road  
10 vehicle maneuvers would be limited to the south training areas,  
11 north training areas, and one training area, Training Area 8 on  
12 McGregor Range that is already approved for that use. This  
13 alternative includes development of one BCT complex for the 4th  
14 Brigade Combat Team of the 1st Cavalry division, which was assessed  
15 in accordance with the procedures and criteria described in the 2000  
16 PEIS.

17           Although we are required to include it, the No Action  
18 Alternative is not a reasonable option because it will not provide  
19 adequate training capability for the units that are coming to Fort  
20 Bliss as a result of the BRAC decision.

21           Alternative 1 in the Draft SEIS implements the land  
22 use changes I mentioned for the Main Cantonment Area and includes  
23 construction of the new facilities needed to support all the  
24 incoming units identified in the BRAC decision. It also includes  
25 now live-fire and qualification ranges at Dona Ana and McGregor

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1 Ranges, including the Orogrande Range Complex and the helicopter  
2 range I mentioned.

3           This alternative proposes to open training areas in  
4 the south Tularosa Basin portion of McGregor Range south of New  
5 Mexico Highway 506, the area shown in brown, to off-road vehicle  
6 maneuver. This would add 216,000 acres of off-road vehicle maneuver  
7 capability to the 335,000 acres currently available for that use.  
8 Together, these areas would provide the minimum amount of off-road  
9 vehicle maneuver capability needed, but it would severely curtail  
10 our ability to continue supporting the training needs of other  
11 users, including the Air Defense Artillery missile firings and the  
12 mobilization mission.

13           Alternative 2 considered in the Draft SEIS includes  
14 the land use changes and construction of Alternative 1 and further  
15 extends the area in the Tularosa Basin portion of McGregor Range  
16 that would be available for off-road vehicle maneuver into training  
17 areas north of Highway 506. In addition, this alternative examines  
18 the environmental effects of bringing a second Combat Aviation  
19 Brigade to Fort Bliss. We are considering that possibility in order  
20 to understand the implications of providing the additional  
21 infrastructure and training capability at the installation, but I  
22 want to clarify that there is currently no plan to station a second  
23 Combat Aviation Brigade at Fort Bliss, and no decision will be made  
24 about that possibility at this time.

25           This alternative would authorize off-road vehicle

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1 maneuver training in a total of 615,000 acres of the Fort Bliss  
2 Training Complex, allowing us to continue providing limited support  
3 to mobilization training and missile firings, as well as train  
4 incoming units.

5           Alternative 3 is similar to Alternative 2. It  
6 includes the same changes and improvements in the Main Cantonment  
7 Area and the firing ranges. But instead of extending off-road  
8 vehicle maneuver north of Highway 506, it would extend it to the  
9 ridges and valleys of the southeast training areas below Otero Mesa.  
10 This area offers important capabilities not available in other  
11 training areas because it provides different terrain from the flat  
12 and sandy coppice dunes of the north and south training areas and  
13 southwest training areas of McGregor Range. Providing variety in  
14 the training environment is important for preparing our units to  
15 operate in different areas of the world.

16           In addition to authorizing off-road vehicle maneuver  
17 in the area shown in brown, this alternative also expands the  
18 training uses allowed in those areas to include mission facilities,  
19 weapons firing, and surface danger zone. Many of the training areas  
20 already permit some or all of those uses, but this alternative would  
21 make the land use designations uniform across all areas used for  
22 off-road vehicle maneuver.

23           This alternative would result in approximately  
24 622,000 acres being available for off-road vehicle maneuver, which  
25 is similar to the capability provided by Alternative 2, just in a

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1 different part of the training complex.

2           Finally, Alternative 4 in the Draft SEIS includes all  
3 the changes and developments of Alternatives 1, 2 and 3. It  
4 proposes to extend off-road vehicle maneuver capability to all of  
5 the Tularosa Basin portion of McGregor Range, including the training  
6 areas north of Highway 506 and in the southeast area of the range.  
7 It would also provide for a uniform land use designation across  
8 those training areas, allowing for mission facilities, weapons  
9 firing, and surface danger zones, in addition to off-road vehicle  
10 maneuver. This would make a total of 687,000 acres available for  
11 off-road vehicle maneuvers.

12           Alternative 4 is the Army's proposed action and  
13 preferred alternative because it offers the most capability,  
14 variety, and flexibility to respond to current and future training  
15 needs. In evaluating this alternative, the Draft SEIS considers the  
16 effects of bringing two additional heavy BCTs to Fort Bliss, as well  
17 as a second Combat Aviation Brigade. There are currently no plans  
18 to bring any additional units in, other than those identified  
19 through Army transformation and BRAC.

20           The impacts associated with the additional units have  
21 been included in the analysis to help us understand the potential  
22 implications of further expanding the Fort Bliss mission. Like the  
23 Combat Aviation Brigade, no decision concerning the additional BCTs  
24 will be made at this time. That concludes my portion of the  
25 briefing, now I'd like to turn the briefing over to Walter

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1 Christensen to describe the SEIS process.

2 MR. CHRISTENSEN: Hello. I'm Walter Christensen from  
3 the Fort Bliss Directorate of Environment. I will give a very brief  
4 overview of the SEIS process and the findings of the draft document.  
5 However, because of our limited time tonight, I will not be able to  
6 describe the contents of the Draft SEIS thoroughly or in any detail.  
7 I encourage everyone to read the document for yourselves in order to  
8 really understand what it says. If you don't have a copy, we have  
9 some available tonight, and it's also available at the local  
10 libraries and on the Fort Bliss website.

11 The Draft SEIS was completed in accordance with the  
12 National Environmental Policy Act, or NEPA, as well as both the  
13 Council on Environmental Quality and the Army's implementing  
14 regulations. The document addresses the environmental and  
15 socioeconomic impacts from the five alternatives described by Col  
16 Kirby in 14 different resource areas. This document is considered  
17 draft because it reflects the Army's assessment of expected impacts,  
18 but we want your input before we finalize our analysis and provide  
19 conclusions to the decision maker for consideration.

20 All comments received during the public comment  
21 period, including any comments made tonight, will be addressed in  
22 the Final SEIS and provided to the decision maker. Tonight is an  
23 important step in this process.

24 The SEIS process began with publication of a Notice  
25 of Intent in the Federal Register on November 15 of this last year.

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1 This initiated a scoping period during which we asked for public  
2 input on the topics to be addressed in the SEIS. We held public  
3 meetings last December as part of the scoping process. The Draft  
4 SEIS was distributed for review and public comment on October 6th of  
5 this year.

6 NEPA regulations require a minimum of 45 days for  
7 public review and comment, but we provided for an extended comment  
8 period which ends on December 12, 2006. Anyone wishing to make  
9 comments on the contents of the Draft SEIS needs to submit those  
10 comments by the December 12th deadline in order for them to be  
11 included in the Final SEIS. All comments made tonight will be  
12 included.

13 Under our current schedule, we aim to complete and  
14 distribute the final SEIS next spring. After the Notice of  
15 Availability is published in the Federal Register, we will wait at  
16 least 30 days before issuing a Record of Decision. The Record of  
17 Decision will specify which alternative the Army has selected and  
18 list any mitigation measures that will be adopted to reduce  
19 environmental impacts. Both the Final SEIS Notice of Availability  
20 and the Record of Decision will be publicly announced and posted on  
21 the Fort Bliss website.

22 These next few slides summarize the main findings of  
23 the Draft SEIS. I realize this is a lot to absorb, especially  
24 during a briefing, but there are fact sheets at the display tables  
25 outside with this information and you're welcome to take those fact

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1 sheets home with you. Again, the best way to get a thorough  
2 understanding of the SEIS is to read the document itself.

3           Many of the expected effects are related to the  
4 influx of new military and civilian personnel at Fort Bliss. With  
5 their dependents, these personnel will increase the regional  
6 population by over 60,000 people. The additional income and  
7 expenditures generated by this population increase are projected to  
8 attract almost 60,000 additional people to the region, for a total  
9 population of about 120,000 people.

10           The proposed land use changes in the Fort Bliss  
11 Training Complex, specifically the increase in off-road vehicle  
12 maneuver, will result in some changes in the local vegetation and  
13 ecology. The soils in the area are susceptible to wind erosion, so  
14 the maneuvers can be expected to generate more dust. However,  
15 expert modeling indicates that the levels of particulate matter will  
16 not exceed air quality standards outside the installation.

17           There will be more training at the large caliber  
18 weapons ranges on Dona Ana and McGregor Ranges, so noise levels will  
19 increase, especially in communities adjacent to those areas. Safety  
20 and hazardous materials and waste issues are not expected to  
21 increase significantly because of the management processes already  
22 in place.

23           Finally, increased population means more housing and  
24 community services will be needed. I'd now like to turn the podium  
25 over to Ms. Hiller for the next phase of this meeting. Thank you.

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1           MS. HILLER: So we're now going to take the 15 minute  
2 break. And again, I'd like you all to feel free to look at the  
3 displays and ask questions of the Army representatives during this  
4 break. Please be aware that those informal discussions will not be  
5 on the record. However, Jan Wimberly will be available during the  
6 break for those of you who'd like to make comments in private.

7           Also, while the Army representatives are here to try  
8 to answer questions you might have to the best of their ability,  
9 they may not have all the answers readily available to them, and may  
10 need to either get back to you in order to respond, or defer the  
11 responses to the Final SEIS where they'll be available to everyone.  
12 So again, Dr. Corral will be available for anyone who would like  
13 assistance in Spanish.

14           After the 15 minute break, we'll reconvene here and  
15 we'll take public comments, which will be recorded by Jan Wimberly  
16 for the record. How many people do we currently have signed up to  
17 speak? We have one person currently signed up to speak. If you  
18 would like to make a comment but did not indicate so at the sign-in  
19 table, you can go back to the sign-in table and get your sign-in  
20 card and sign up during the break and we'll add you to the list. I  
21 think the restrooms are just down the hall here if you need those  
22 facilities and we'll see you in 15 minutes.

23           (Recess was taken from 7:08 until 7:25 p.m.)

24           MS. HILLER: Okay, we'll go ahead and just get  
25 started. We have now come to the main purpose of this evening's

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1 meeting, and that is to obtain your comments on the SEIS. So we've  
2 got two individuals who would like to speak. And because we only  
3 have two, I'm not going to limit time tonight. But if I need to, I  
4 will, so we'll see how that goes. As a courtesy to government  
5 officials, I'm going to call on Mr. Doug Moore first. Thank you for  
6 being here. And you can speak from wherever you feel most  
7 comfortable.

8           MR. MOORE: Can you hear me back here? Well, you  
9 know, I appreciate you guys coming and providing this information to  
10 us. When we had the scoping meeting late last year and looked at  
11 all the alternatives, I think the County voiced our opinion,  
12 representing in the residents in that area, that we prefer  
13 Alternative 3. Is that decision made? No? When we talk about a  
14 decision maker, who will take all these public comments, who will  
15 that be? We talk about, you know in some of these comments you  
16 made, who will be the decision maker on which alternative and to  
17 what degree it is implemented?

18           MS. HAMILTON: It'll be the Commander of the  
19 Installation Management Command.

20           MR. MOORE: And that is?

21           COL BURNS: That is General Wilson, but I believe  
22 he's delegated it to his deputy, which is General McDonald.

23           MR. MOORE: And of course, we in the community want  
24 to have our troops as well trained as possible. My son's in the  
25 Army, he's been deployed a couple of times. And so our concern, of

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1 course, is if we go north of 506, the enhanced closure of that road.  
2 And there's also some concern about fire. If we're going to go live  
3 fire, how are the fire issues addressed, are they in the  
4 environmental impact on the responses to grass fire?

15.1

5 MS. HILLER: We haven't really set this meeting up  
6 for a question and answer, so do you have several questions?

7 MR. MOORE: Well, that's, you know, I'm just trying  
8 to get a feel for the dynamics. I know a lot of the folks in the  
9 room have some of the same questions that I have. So I guess the  
10 comment, if we need to rephrase, since I'm a politician I can do  
11 that, you know the concern is if in fact we go with Alternative 4,  
12 there's going to be a component on 506 and I know I've talked with  
13 Col Kirby and a bunch of the staff about how that would take place.  
14 And I know you guys have laid out that any decision for crossing  
15 there, you know you'd get our input, you'd get input from the local  
16 folks on what would be the best place to locate it to minimize the  
17 closure of 506. But that continues to be a concern, not only the  
18 crossing of 506, but if you go live fire on that side and we do get  
19 a brush fire, in a wind it could very well sweep up on the Mesa and  
20 take that whole country, burn all the way to the Guadalupes. So I  
21 mean that is just another component of why we prefer 3, Alternative  
22 3 to Alternative 4.

15.1

23 MS. HILLER: Great, thank you. Okay, I'd now like to  
24 call upon Bob or Bobby Jones. And wherever you would feel most  
25 comfortable speaking, I can have a seat.

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**15.1.** Additional information and analysis has been added to Sections 4.11 and 5.11 of the Final SEIS to more completely address the risk of wildfires. No live fire is planned in training areas north of Highway 506.

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1 MR. JONES: Where do we come to, there?

2 MS. HILLER: Either place is fine. Just the court  
3 reporter is transcribing so as long as you're loud and speak slowly,  
4 it works.

5 MR. JONES: Well, I'd like to reiterate what our  
6 commissioner said, one of the major concerns we have, because --  
7 especially with the kind of year we had this year, is there's grass  
8 belly deep, you know, in places where we've never had, it's just  
9 solid all over that country and it's a real concern to us. And  
10 there needs to be somewhere where -- you were talking about, in the  
11 alternative where they're going up on some of the terrain up on the  
12 edge of the Mesa where the canyons are, so you'd operate in  
13 different types of terrain than you can get down in the sands. But  
14 it looks to me that one thing that might be done there is to go up  
15 there and build a lot bigger fire guard than what you've got,  
16 instead of having one you go around every once in a while, just put  
17 something in there that would keep that fire from jumping across.  
18 Because we've all, that live out there, we've all had occasion to  
19 fight those fires. And it hasn't been anything to encourage us very  
20 much because about two-thirds of the time, you know we got the fire  
21 out before anybody ever showed up. But sometimes we didn't and  
22 there was some, I think Bebo might address that, there was some  
23 methods that were used out there that didn't work and they weren't  
24 proper to do.

25 And the other thing I had to follow-up on what Doug said

11.1

**11.1.** Additional information and analysis has been added to Sections 4.11 and 5.11 of the Final SEIS to more completely address the risk of wildfires. The highest risk is from live-fire weapons, which will be limited to designated firing ranges in the Doña Ana, south McGregor, and Orogrande Range Complexes in the basin. No live fire would occur in the training areas outside designated areas. Personnel would be present in any areas where live fire or off-road vehicle maneuvers occur, ensuring immediate detection and response to any ignitions. Therefore, the risk of wildfire is not anticipated to increase significantly. Fort Bliss is working with the Bureau of Land Management in a joint program to reduce fire hazard at the community of Timberon.

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1 about 506, we worry just because that's our -- this is our county  
2 government here and we carry all our business over here, our  
3 banking, our groceries, everything that we do in that country comes  
4 in on that road. And Bobby had a suggestion and I'd like to maybe  
5 put it further and I know you're spending a lot of money on a lot of  
6 building out there and I think the gentleman told us while ago, I  
7 can't even remember how much money you said but it was a lot that  
8 would be spent out there. Would it be at all possible to put an  
9 overpass over that road so you could take your equipment across and  
10 not cut everybody off at the pass when they come through there.  
11 Because we've had to deal with it on the firings and we've had some  
12 problems there because we were all on the e-mail recipient, you  
13 know, and when that road was to be closed, we knew it.

11.2

14 But when they changed it around and put it all over here  
15 in the county and everything, well a lot of times we haven't -- Doug  
16 said that's not going to happen again, but we haven't been informed.  
17 And sending those e-mails out, they had all of our addresses, you  
18 know our e-mail addresses, it's not a problem, we'd like for you to  
19 return to that when that road is going to be closed. At the same  
20 time, I am concerned about, and what's what I was asking you, how  
21 many, how long it would take and you said, I think the gentleman's a  
22 colonel over here, said probably not more than an hour at the worst  
23 where they had a brigade if something was wrong with the brigade.

11.3

11.4

24 But at the same time with the amount of money that's going  
25 to be spent on so many things, it looks to me like you could put an

**11.2.** As described in Section 5.3.4 of the SEIS, military vehicle convoys crossing NM Highway 506 would cross in "march units." These march units would be company size and typically take 15 minutes or less to cross. Any unit proposing to cross Highway 506 would be required to coordinate its schedule with the Combined Arm Battalion (Range Control) and provide traffic control at the crossing. Civilian traffic traveling on the highway would be allowed to pass between march units, so delays would be short. Therefore, an overpass is not needed to ensure reasonable access.

**11.3.** Fort Bliss will notify the Otero County Administrator, BLM, and send emails to two additional addressees chosen by Otero County of any scheduled road closures.

**11.4.** Crossing will be limited to company-size elements, will include traffic control, and will typically take less than 15 minutes.

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1 overpass over that, if it does go there. We'd like to keep it all  
2 south of 506, we've always thought that, because it's -- for a lot  
3 of reasons, and I won't go into it, but if we can't win that  
4 argument and everything, you might consider that other one. It'd  
5 cost some money to do it, but it would be minor up beside the other  
6 expenses you're gonna have, then we would never have -- well, you  
7 could make it even better than it is now for that part of it.

8 I had a question, and I thought I don't think this is the  
9 place for 'em, but the comments, when you go north up there and it  
10 shows it goes all the way to the extent of McGregor to the north  
11 coming this way, there are some BLM units that are in part of that  
12 country and I just assumed, maybe Ed might tell me, but that those  
13 would be -- they'd do away with those and they wouldn't be let out  
14 for lease anymore. They've been pretty valuable to a lot of people,  
15 especially during the drought that we've had and all the problems  
16 because it's quite an issue in this country what to do with that.  
17 So that was mine, that's what I had.

18 506 is a real critical aspect to it, but the one that's  
19 really staring us in the eye right now is fire. Because when this  
20 country all dries up, and it's on its way now and everything, it  
21 wouldn't, if you got a little bit of a west wind or a lot of west  
22 wind, it doesn't make any difference, if we get a fire you're not  
23 gonna be able to stop it, like Doug says, till it gets to the  
24 Warloopie Mountains, or the Guadalupe, we call it, that's old  
25 country word, Warloopies, it's going to go down there. I talked to

11.5

11.6

**11.5.** It remains to be determined whether training areas that are used for off-road vehicle maneuvers will continue to be leased by BLM for grazing. Several factors need to be considered before that determination can be made. The Army will work with BLM and any affected leaseholders to evaluate the feasibility of continued grazing in Units 1, 2, and 3, should Alternative 2 or 4 be selected.

**11.6.** Additional information and analysis has been added to Sections 4.11 and 5.11 of the Final SEIS to more completely address the risk of wildfires.

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1 a gentleman that's got a place down there, he was looking for fires  
2 this evening. He was up there because of the -- you know, the roads  
3 were closed and there was fire yesterday. It was Enos Lewis and  
4 Enos was, he said he couldn't get over here cuz he was down there  
5 fire guarding. It's kind of like he said, anywhere they start up  
6 there, they're gonna end up at his house.

7                   So we are concerned, really concerned about that.  
8 And I think there's probably some efforts and some things that y'all  
9 can do to minimize that and it really needs to be done. Cuz it's  
10 been very drastic in the past and it could be an awful lot worse.  
11 Thank you.

12                   MS. HILLER: Thank you. Is there anyone else who  
13 would like to speak at this time? Yes, sir. Can you state your  
14 name, for the record?

15                   MR. LEE: Yes, ma'am. My name's Bebo Lee. I'm a  
16 neighbor of Mr. Jones's on Otero Mesa. Thank you for this  
17 opportunity to speak. To start with, I am -- would rather see  
18 Alternative 3 as a preference. As Mr. Jones was talking and stating  
19 on the fire, that is the large concern. I haven't met, and I'm not  
20 sure who took his place, George Bankston, when he was down there, he  
21 did supply us on the McGregor side of it during the fires, when they  
22 got to having a lot of fires in the, mainly in the '80s there was a  
23 lot up there, they were using their own equipment to come up there  
24 and help fight the fires when they were down there on McGregor  
25 Range. Like I said, I haven't met with the new man who's taking his

13.1

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**13.1.** Additional information and analysis has been added to Sections 4.11 and 5.11 of the Final SEIS to more completely address the risk of wildfires. Fort Bliss and the Las Cruces District Office of BLM have signed a mutual aid agreement (dated September 29, 2006) to provide firefighting equipment and personnel (when available) as requested by one or the other agency to respond to fires along or within the boundary of McGregor Range.



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1 place, I'm not even sure who that is, to work out any kind of thing  
2 with them on the ability to be able to fight those fires. Usually  
3 up on top of Otero Mesa, anything up there BLM's usually out there  
4 with the Forest Service, which I know you all, generally I don't  
5 believe is out there fighting those, we do have some concerns with  
6 the way they fight them with doing the back burning that they do in  
7 the forest service. Which we don't think, out on a grass fire is a  
8 very good method of fighting fires, burns up a lot more country than  
9 what needs to be burnt up.

10           And also, as Mr. Jones was talking about 506, my  
11 uncle, when he was in the state legislature, when they first put in  
12 McGregor Range, got that road made a state road just for that  
13 concern of worrying about getting our closest -- it's not  
14 necessarily our closest but easiest access to get to our county seat  
15 in Otero County, which is Alamogordo. And so that would be a  
16 concern, I would like to see something put in there about that it  
17 would never be permanently closed. I think closing, the way it is  
18 now I understand sometimes we, it's an inconvenience but it's  
19 usually nothing that inconvenient and it's closed for what, three  
20 days, a week maybe, sometimes maybe four during from September to  
21 December, which isn't too bad with the notices coming out. But I  
22 would like to see something in there that would guarantee that it  
23 would not be closed if Alternative 4 is the one accepted. Thank  
24 you.

13.2

25           MS. HILLER: Thank you. Anyone else at this time

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**13.2.** There are no plans to permanently close NM Highway 506, and nothing in the Proposed Action and other alternatives considered in this SEIS would require it to be permanently closed.



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PUBLIC MEETING  
FOR COMMENTS ON SEIS  
HELD ON  
NOVEMBER 9, 2006  
AT  
CHAPIN HIGH SCHOOL  
7000 DYER STREET  
EL PASO, TEXAS

*copy*  
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MS. HILLER: So good evening, and welcome to this public meeting to accept your comments on the Fort Bliss Mission and Master Plan Draft Supplemental Programmatic Environmental Impact Statement, or what we call an SEIS, which went out for public comment on October 6th of this year.

My name is Deborah Hiller, and I'll be your moderator this evening. With me is Ginger Zachary, who is the court reporter, who will be reporting a verbatim -- she'll be taking a verbatim transcript of this evening's proceedings.

Also with me is Dr. Rafael Corral.

Do you mind standing up?

For those of you who wish to make comments in Spanish, he will be our interpreter this evening.

Dr. Corral, would you ask if anyone in the room would like to have interpretation services?

(Dr. Corral complies.)

MS. HILLER: Okay. Great. Thank you.

Before we get into the presentation, if anyone has a cell phone, please turn them off. Okay. And I'd like to start the proceedings by introducing Colonel Robert Burns, the Fort Bliss Garrison Commander, who will say a few words.

Colonel Burns?

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1 COLONEL BURNS: Thank you. I'd like to  
2 thank everybody for coming this evening. This is a very  
3 important time for Fort Bliss. For the last few years,  
4 most of you in El Paso know that we've had a very active  
5 mobilization mission. This prepared thousands of  
6 soldiers for deployment to support combat operations in  
7 both Iraq and Afghanistan, and then we've also  
8 redeployed them back home.

9 This SEIS is an important part of our  
10 partnership with this community, because it helps us  
11 both plan for major future changes that are occurring at  
12 Fort Bliss, as well as the region.

13 The land use changes proposed in the draft  
14 SEIS are critical to our ability to give our young men  
15 and women the most realistic training, so they're  
16 prepared for the rigors of combat. We accomplish that  
17 by providing high-quality, realistic training, and we  
18 need to do that in a manner that replicates what they'll  
19 encounter in the theater and how they'll fight.

20 To do that, we have to increase our  
21 on -- excuse me -- our off-road maneuver area to support  
22 combat capabilities. That will be organic to the 1st  
23 Armored Division and its organic brigade -- brigade  
24 combat teams.

25 In addition, we're proposing to develop

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1 facilities in the main cantonment area of Fort Bliss to  
2 support our mission there and provide a suitable quality  
3 of life for our soldiers while they're here.

4 So this SEIS is a part of Fort Bliss's  
5 active program to sustain our lands in an environmental,  
6 responsible way, and your valuable input will help us do  
7 that job better. So I look forward to hearing your  
8 comments, and thank you for taking the time to  
9 participate in this process.

10 MS. HILLER: Thank you, Colonel Burns.

11 So I want to let you-all know a little bit  
12 about how this evening will go. This is our agenda up  
13 here. We'll first have a short briefing, about a half  
14 hour-long, to provide you an overview of what's being  
15 proposed, the alternatives being considered, and the  
16 draft SEIS process.

17 We'll then have a 15-minute break, during  
18 which time you can examine displays, if you haven't  
19 already done so. Those are the displays that are here  
20 on the side of the room. We'll have Army  
21 representatives here available to you as subject matter  
22 experts, if you have any questions. And we'll then,  
23 after that break, reconvene for the main purpose of this  
24 meeting, which is to accept your comments on the draft  
25 SEIS.

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1           So I would now like to introduce Colonel  
2 White, the deputy garrison commander, to start the  
3 briefing.

4           COLONEL WHITE: Good evening. We've  
5 invited you here tonight to give -- to give us your  
6 input on the findings of the Fort Bliss Mission and  
7 Master Plan Draft SEIS. The draft SEIS supplements the  
8 Fort Bliss Mission and Master Plan Programatic  
9 Environmental Impact Statement, or the PEIS, published  
10 in December of 2000.

11           We are preparing the SEIS because changes  
12 in the Fort Bliss mission require us to modify how we  
13 manage our lands and resources. Not everything needs  
14 changing, and the PEIS still remains relevant and in  
15 effect for a lot of our activities.

16           Thus, the SEIS incorporates appropriate  
17 parts of the PEIS and focuses on the proposed land use  
18 modifications. These modifications are necessitated by  
19 a number of recent events that affect the mission of  
20 Fort Bliss and the composition of units assigned here.

21           They include the overall transformation of  
22 the Army, which was addressed in the Armywide  
23 Programatic EIS published in 2002; the Army campaign  
24 plan developed to implement the Army transformation; the  
25 integrated global presence and basing strategy that is

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1 bringing units in Europe and other overseas locations  
2 back to the United States; and the base realignment and  
3 closure process, known as BRAC.

4           An important component of Army  
5 transformation and the Army campaign plan is a move to  
6 what is called the modular force. Simply put, this  
7 approach changes the way the Army is organized into more  
8 self-sufficient units and incorporates elements that  
9 fight together, as well as supporting elements, like  
10 supply and engineering, as integral parts of the unit.  
11 The primary building block of the new organization is  
12 called the brigade combat team, or BCT.

13           The BRAC commission identified both  
14 incoming and outgoing units, as shown on this chart.  
15 Fort Bliss will receive a total of four BCTs over the  
16 next five years, as well as an armored division  
17 headquarters. Other incoming units including an  
18 artillery brigade, a combat aviation brigade, a  
19 sustainment brigade, and other supporting organizations.

20           The BRAC decisions became law in December  
21 2005, resulting in substantial personnel and other  
22 changes at Fort Bliss that will -- that we must respond  
23 to and prepare for. At the same time, the artil- -- Air  
24 Defense Artillery, or ADA, School, and three ADA  
25 brigades have been identified to move out of Fort Bliss,

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1 although the BRAC commission acknowledged that the ADA  
2 brigades would need to return to Fort Bliss for missile  
3 firings.

4 As you may know, the first heavy BCT, the  
5 4th Brigade Combat Team of the 1st Cavalry Division, has  
6 already come to Fort Bliss, undergone training, and was  
7 deployed to Iraq a little over a week ago.

8 As the previous slide indicated, the BCTs  
9 Fort Bliss is receiving is called heavy BCTs. Heavy  
10 BCTs are armored units that fight tanks, Bradley  
11 fighting vehicles, and artillery, as shown on this  
12 slide.

13 The heavy BCT has several battalions with  
14 specific combat roles and pieces of equipment. Each BCT  
15 has about 3800 soldiers and includes approximately 360  
16 track vehicles and 900 wheeled vehicles, as well as  
17 generators and other pieces of equipment. With four  
18 heavy BCTs, Fort Bliss is expecting a net increase of  
19 about 1400 track vehicles and 7- to 800 wheeled  
20 vehicles.

21 This chart shows an expected personnel  
22 change that will occur over the next five years. In  
23 sum, we are expecting a net increase of approximately  
24 20,000 military personnel with many dependents and about  
25 3800 civilians.

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1 The incoming units will have a different  
2 mission from the ADA units currently at Fort Bliss, so  
3 their training requirements will be different. They  
4 will need to become proficient in using their weapons,  
5 which requires live fire and qualification ranges.

6 The combat aviation brigade and its  
7 helicopters will need training on air ground targetry.  
8 The heavy equipment battalions need off-road vehicle  
9 maneuver training. Based on the training requirements,  
10 Fort Bliss needs a minimum of approximately 539,000  
11 acres of off-road vehicle maneuver area.

12 Currently, only about 335,000 acres are  
13 approved for off-road vehicle maneuver. The land use  
14 changes and construction considered in the draft SEIS  
15 are proposed to meet these training needs.

16 I'll now turn the podium over to Colonel  
17 Kirby, who will describe to you the alternatives  
18 analyzed in the draft SEIS.

19 COLONEL KIRBY: Thank you, and good  
20 evening. My name is John Kirby, and I am the Fort Bliss  
21 Range Commander. My job is to manage the Fort Bliss  
22 training complex in a manner that provides the best  
23 possible preparation of our soldiers being sent into  
24 combat and assures the long-term sustainability of the  
25 land.

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1           As Colonel White indicated, the draft SEIS  
2 provides information about the environmental  
3 consequences associated with bringing in 20,000 new  
4 troops and constructing new facilities to support them.  
5 The primary decisions being considered in the SEIS,  
6 however, are proposed land use changes to accommodate  
7 the incoming units and provide the training they need.

8           One proposal is to expand the main  
9 cantonment area and change its land use designation to  
10 mixed use. This is needed to accommodate new complexes  
11 for the heavy BCTs and the combat aviation brigade.  
12 These complexes are self-contained inclobs -- incligs  
13 (phonetic) that include a mix of facility types,  
14 including barracks, administrative facilities, and  
15 maintenance and supply facilities, as well as various  
16 community services and amenities.

17           This mixed-use approach allows soldiers to  
18 live near their place of work, enhances efficiency, and  
19 reduces resources needed to transport people and  
20 equipment.

21           In order to accommodate these mixed-use  
22 complexes, we are proposing to designate the entire main  
23 cantonment area for mixed-land use, where the location  
24 of individual facilities would conform to Army  
25 regulations and guidelines for land use compatibility

1 and environmental management.

2           In the Fort Bliss training complex, we will  
3 be developing a number of new live fire and  
4 qualification ranges, most of which will be located on  
5 or adjacent to existing ranges on Dona Ana Range and in  
6 the south part of McGregor Range, near the existing  
7 Meyer complex, forward area weapon sites, and McGregor  
8 Range Camp.

9           We are proposing to develop a new range  
10 complex on McGregor Range in the area of the existing  
11 Oro Grande Range and short-range air defense system  
12 site. This complex would house a number of new  
13 facilities and include a digital air ground integration  
14 range primarily for helicopter training by the combat  
15 aviation brigade.

16           The main land use change we are proposing  
17 is opening up training areas in the Tularosa Basin  
18 portion of McGregor Range for off-road vehicle maneuver.  
19 The alternatives considered in this draft SEIS provide  
20 for different combinations of training area use for that  
21 purpose.

22           I want to make it clear at the onset that  
23 we are not considering off-road vehicle maneuvers or any  
24 land use changes on Otero Mesa or the Sacramento  
25 Mountains foothills that lie within the Fort Bliss

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1 training complex, nor do we have any plans for future  
2 use of Castner Range. Furthermore, all the changes  
3 under consideration involve land that is currently  
4 within the Fort Bliss boundaries. We are not  
5 considering expanding the installation.

6 Finally, this SEIS is not prepared to  
7 support the BRAC decisions. Those decisions became law  
8 last December. This SEIS identifies the environmental  
9 impacts from the BRAC actions, but the only decisions  
10 that will be made pursuant to the SEIS are the land use  
11 decisions I've described.

12 As required by the National Environmental  
13 Policy Act regulations, the draft SEIS includes a  
14 no-action alternative. Under this alternative, none of  
15 the proposed land use changes would be made, and the  
16 land use at Fort Bliss would remain as designated in the  
17 Mission and Master Plan PEIS published in December 2000,  
18 with some minor modifications.

19 Construction of facilities and ranges would  
20 occur, but only in keeping with the land uses currently  
21 authorized. Off-road vehicle maneuvers would be limited  
22 to the south training areas, north training areas, and  
23 one training area, training area eight on McGregor  
24 Range, that is already approved for that use.

25 This alternative includes development of

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1 one BCT complex for the 4th Brigade Combat Team of the  
2 1st Cavalry Division, which was assessed in accordance  
3 with procedures and criteria described in the 2000 PEIS.

4 Although we are required to include it, the  
5 no-action alternative is not a reasonable option,  
6 because it will not provide adequate training capability  
7 for the units that are coming to Fort Bliss as a result  
8 of the BRAC decision.

9 Alternative one in the draft SEIS  
10 implements the land use changes I mentioned for the main  
11 cantonment area and includes construction of the new  
12 facilities needed to support all the incoming units  
13 identified in the BRAC decision. It also includes new  
14 live fire and qualification ranges at Dona Ana and  
15 McGregor Ranges, including the Oro Grande Range complex  
16 and the helicopter range I mentioned.

17 This alternative proposes to open training  
18 areas in the south Tularosa Basin portion of McGregor  
19 Range south of New Mexico Highway 506, the area shown in  
20 brown, to off-road vehicle maneuver. This would add  
21 216,000 acres of off-road vehicle maneuver capability to  
22 the 335,000 acres currently available for that use.

23 Together, these areas would provide the  
24 minimum amount of off-road vehicle maneuver capability  
25 needed, but it would severely curtail our ability to

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1 continue supporting the training needs of other users,  
2 including the air defense artillery missile firings and  
3 the mobilization mission.

4           Alternative two considered in the draft  
46 5 SEIS includes the land use changes and construction of  
6 alternative one and further extends the area in the  
7 Tularosa Basin portion of McGregor Range that would be  
8 available for off-road vehicle maneuver into training  
9 areas north of Highway 506. In addition, this  
04 10 alternative examines the environmental effects of  
11 bringing a second combat aviation brigade to Fort Bliss.

12           We are considering that possibility in  
13 order to understand the implications of providing the  
14 additional infrastructure and training capability at the  
20 15 installation, but I want to clarify that there is  
16 currently no plan to station a second combat aviation  
17 brigade at Fort Bliss and no decision will be made about  
18 that possibility at this time.

19           This alternative would authorize off-road  
36 20 vehicle maneuver training in a total of 615,000 acres of  
21 the Fort Bliss training complex, allowing us to continue  
22 providing limited support to mobilization training and  
23 missile firings, as well as training incoming units.

24           Alternative three is similar to alternative  
34 25 two. It includes the same changes and improvements in

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1 the main cantonment area and the firing ranges, but  
2 instead of extending off-road vehicle maneuver north of  
3 Highway 506, it would extend it into the ridges and  
4 valleys of the southeast training areas below Otero  
4:12 5 Mesa.

6           This area offers important capabilities not  
7 available in other training areas, because it provides  
8 different terrain from the flat and sandy, copious dunes  
9 of the north and south training areas and southwest  
:24 10 training areas of McGregor Range. Providing variety in  
11 the training environment is important for preparing our  
12 units to operate in different areas of the world.

13           In addition to authorizing off-road vehicle  
14 maneuver in the areas shown in brown, this alternative  
:40 15 also expands the training uses allowed in those areas to  
16 include mission facilities, weapons firing, and surface  
17 danger zones. Many of the training areas already permit  
18 some or all of those uses, but this alternative would  
19 make the land use designations uniform across all areas  
:58 20 used for off-road vehicle maneuver.

21           This alternative would result in  
22 approximately 622,000 acres being available for off-road  
23 vehicle maneuver, which is similar to the capability  
24 provided in alternative two, just in different parts of  
:14 25 the installation.

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1           Finally, alternative four in the draft SEIS  
2 includes all of the changes and developments of  
3 alternatives one, two, and three. It proposes to extend  
4 off-road vehicle maneuver capability to all of the  
50 5 Tularosa Basin portion of McGregor Range, including the  
6 training areas north of Highway 506 and in the southeast  
7 area of the range.

8           It would also provide for a uniform land  
9 use designation across those training areas, allowing  
6 10 for mission facilities, weapons firing, and surface  
11 danger zones, in addition to off-road vehicle maneuver.  
12 This would make a total of 687,000 acres available for  
13 off-road vehicle maneuvers.

14           Alternative four is the Army's proposed  
54 15 action and preferred alternative, because it offers the  
16 most capability, variety, and flexibility to respond to  
17 current and future training needs. In evaluating this  
18 alternative, the draft SEIS considers the effects of  
19 bringing two additional heavy brigade combat teams to  
64 20 Fort Bliss, as well as a second combat aviation brigade.

21           There are currently no plans to bring any  
22 additional units in, other than those identified through  
23 Army transformation and BRAC. The impact associated  
24 with additional units have been -- have been included in  
0 25 the analysis to help us understand the potential

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1 implications of further expanding the Fort Bliss  
2 mission. Like the combat aviation brigade, no decision  
3 concerning the additional BCTs will be made at this  
4 time.

54 5           That concludes my portion of the briefing.  
6 Now I would like to turn the briefing over to Walter  
7 Christianson to describe the SEIS process.

8           MR. CHRISTIANSON: Good evening. I'm  
9 Walter Christianson from the Fort Bliss Directorate of  
16 10 Environment. I'll give a very brief overview of the  
11 SEIS process and the findings of the draft document.  
12 However, because of our limited time tonight, I will not  
13 be able to describe the contents of the draft SEIS  
14 thoroughly or in any detail. I encourage everyone to  
50 15 read the document for yourselves in order to really  
16 understand what it means. If you do not have a copy, we  
17 have some available tonight and is also available at  
18 local libraries and on the Fort Bliss web site.

19           The draft SEIS was completed in accordance  
62 20 with the National Environmental Policy Act, or NEBA, as  
21 well as both the council on environmental quality and  
22 the Army's implementing regulations. The document  
23 addresses the environmental and socioeconomic impacts  
24 from the five alternatives described by Colonel Kirby in  
58 25 14 different resource areas.

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1 This document is considered a draft because  
2 it reflects the Army's assessment of expected impacts,  
3 but we want your input before we finalize our analysis  
4 and provide conclusions to the decision maker -- to the  
5 decision maker for consideration. All comments received  
6 during the public comment period, including any comments  
7 made tonight, will be addressed in the final SEIS and  
8 provided to the decision maker. Tonight is an important  
9 step in this process.

10 The SEIS process began with the publication  
11 of a notice of intent in the Federal Register on  
12 November 15 of last year. This initiated a scoping  
13 period, during which we asked for public input on topics  
14 to be addressed in the SEIS. We held public meetings  
15 last December as part of the scoping process.

16 The draft SEIS was distributed for public  
17 review and comment on October 6 of this year. NEBA  
18 regulations require a minimum of 45 days of public  
19 review and comment, but we provided for an extended  
20 comment period, which ends December 12, 2006. Anyone  
21 wishing to make comments on the draft SEIS needs to  
22 submit those comments by the deadline of December 12 in  
23 order for them to be included in the final SEIS. The  
24 comments you offer tonight will be included and  
25 addressed in the final document.

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1 Under our current schedule, we aim to  
2 complete and distribute the final SEIS next spring.  
3 After the notice of availability is published in the  
4 Federal Register, we will wait at least 30 days before  
5 issuing a record of decision. The record of decision  
6 will specify which alternative the Army has selected and  
7 list any mitigation measures that will be adopted to  
8 reduce environmental impacts. Both the final SEIS,  
9 notice of availability, and the record of decision will  
10 be publicly announced and posted at the Fort Bliss web  
11 site.

12 These next few slides summarize the main  
13 findings of the draft SEIS. I realize this is a lot to  
14 absorb, especially during a briefing, but there are fact  
15 sheets at the display tables with this information, and  
16 you're welcome to take home the fact sheets. Again, to  
17 get a thorough understanding of this document is to read  
18 it.

19 Many of the expected effects are related to  
20 the influx of new military and civilian personnel at  
21 Fort Bliss. With their dependents, these personnel  
22 would increase the regional population by over 60,000  
23 people. The additional income and expenditures  
24 generated by this population increase are projected to  
25 attract almost 60,000 additional people to the region,

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1 for a total population impact of about 120,000 people.

2           The proposed land use changes in the Fort  
3 Bliss training complex, specifically, the increase in  
4 off-road vehicle maneuver, will result in some changes  
5 in the local vegetation and ecology. The soils in the  
6 area are susceptible to wind erosion, so the maneuvers  
7 can be expected to generate more dust. However, expert  
8 modeling indicates the levels of particulate matter will  
9 not exceed air quality standards outside the  
10 installation.

11           There will be more training at the large  
12 caliber weapons ranges in Dona Ana and McGregor ranges,  
13 so noise levels will increase, especially in communities  
14 adjacent to those areas. Safety and hazardous materials  
15 and waste issues are not expected to increase  
16 significantly because of management processes already in  
17 place.

18           Finally, increased population means more  
19 houses and community services will be needed.

20           I would now like to turn the podium over to  
21 Ms. Hiller for the next phase of the meeting. Thank  
22 you.

23           MS. HILLER: Thank you, Mr. Christianson.

24           So we're now going to take a 15-minute  
25 break. During this time, please -- please feel free to

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1 look over the displays and ask questions of Army  
2 representatives. This is your opportunity, during the  
3 break, to ask questions. The next phase of the hearing,  
4 when we reconvene, will be for receiving your comments.  
5 It won't be a question and answer period.

6           So while we've got the displays over here  
7 and the subject matter experts, that's where I encourage  
8 you-all to take advantage of the opportunity and ask  
9 those questions. Now, when you ask your questions, the  
10 Army representatives will try to answer those to the  
11 best of their ability. However, they may not have the  
12 answers readily available, and they may need to get back  
13 to you or defer their answers to the SEIS, where the  
14 answers will be available to everyone.

15           So, again, Dr. Corral is here available.  
16 He's from the Fort Bliss Directorate of Environment, and  
17 he's available if anyone would like assistance in  
18 Spanish.

19           After the 15-minute break, we'll reconvene,  
20 take public comments, which will be recorded by Ginger  
21 Zachary. And I think we just have a few people speaking  
22 tonight. If you didn't sign up to speak, but would like  
23 to speak, please go back up to the sign-in table and  
24 retrieve your sign-in card and check the little box on  
25 there that indicates that you wish to speak.

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1           So we do have rest rooms right here in this  
2 facility. They are back here. They lock if you shut  
3 the door, which is fine if you're in the rest room, but  
4 if you leave the rest room, we just ask that you leave  
5 the door open. Or there are rest rooms across the  
6 breezeway to your left.

7           So we'll adjourn for now and reconvene in  
8 15 minutes. Thank you.

9           (Break taken, 7:02 p.m. to 7:03 p.m.)

10          MS. HILLER: One other thing I would like  
11 to mention, that is, if any of you would like to make  
12 verbal comments in private, one on one, Ginger Zachary  
13 is available right now during this break where she will  
14 transcribe your comments, if you just want to make them  
15 in private. Thank you.

16          (Break taken, 7:03 p.m. to 7:19 p.m.)

17          MS. HILLER: Okay. We're going to get  
18 started, if you-all would take a seat. Thank you.

19          We've now come to the main purpose of this  
20 meeting, and that is, to accept your comments on the  
21 draft SEIS. So we have four people that have signed up  
22 to speak, and in order to give everyone a chance to have  
23 input, we are asking that you limit your comments to  
24 five to seven minutes. I do have Beth Ferrell Hale  
25 sitting here, who will just kind of give a little wave

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1 if we're getting close to the seven-minute mark.

2           And as a courtesy to the government  
3 officials, I'm going to call on them first. We have  
4 one. And then on everyone else in the order that you  
5 signed in. When I call your name, please step up to the  
6 microphone, speak clearly, so that the court reporter  
7 can hear you. If she has trouble hearing or  
8 understanding you, I will interrupt and ask you to speak  
9 up.

10          We're committed that we have an accurate  
11 record of your comments. And please be aware that your  
12 comments will be on the record and printed verbatim in  
13 the final SEIS, so don't include any personal  
14 information you don't want to have published in the  
15 document.

16          So are there any questions about the public  
17 comment process? When you come up, you can step up to  
18 the microphone, or if you have a voice that projects,  
19 just please come on up so that everyone can hear you.

20          So we'll go ahead and get started with the  
21 first speaker, and that is Bill Hutchison with the  
22 El Paso Water Utilities.

23          MR. HUTCHISON: Oh, that microphone?

24          My name is Bill Hutchison. I'm the water  
25 resources manager for El Paso Water Utilities.

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1 Obviously, there's been some -- there's  
2 plenty of information in the EIS regarding water supply  
3 and the impacts of this possible decision on water  
4 supply, and I'd like to highlight a few things from our  
5 perspective.

6 In 1997, the State adopted a regional  
7 planning process for water, and there have been now two  
8 regional plans developed. The most recent one was  
9 adopted by the State earlier this year. We're in what's  
10 known as region E, the far west Texas region. And that  
11 plan covered -- has -- has extensive information on the  
12 water supply for El Paso County.

13 Based on that plan, the current supply  
14 is -- in the current infrastructure is adequate to meet  
15 all demands until the year 2020. At that point, the  
16 plan calls for an increase in surface water -- surface  
17 water development. In other words, a surface water  
18 treatment plant would be built sometime before 2020; and  
19 by 2030, there would be the need for importation of  
20 groundwater from other parts of West Texas. This plan  
21 takes us through the year 2060.

22 The current capacity of our system, surface  
23 water and groundwater, we can deliver 305,000,000  
24 gallons a day. That works out -- based on the  
25 availability of surface water and the reasonable

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1 operation of the wells, we can supply something on the  
2 order of 230,000 acre-feet a year. A peak demand last  
3 year was 162,000,000 gallons a day. So, basically, we  
4 have almost twice the capacity for what our peak demand  
5 is currently.

6 In terms of the recent past, ten years ago,  
7 when there were about 662,000 people in our service  
8 area, our demand was about 130,000 acre-feet. Last  
9 year, our demand was 113,000 acre-feet. It's gone down,  
10 even though about 80,000 additional people are in the  
11 service area.

12 Our per capita demand has gone down  
13 dramatically since the 1970s. This is largely due to a  
14 number of conservation measures that have been  
15 implemented. Our most recent per capita demand last  
16 year was about 137 gallons per person per day. This  
17 regional plan that was adopted assumed per capita demand  
18 would be 140 and would stay at 140 until the year 2060.

19 It's obviously built in some conservatism  
20 to the plan, because the natural tendency -- or the  
21 tendency that we've seen over the last several years,  
22 the last couple of decades, is that the per capita  
23 demand has gone down.

24 The PSB will be developing a new goal for  
25 per capita demand. Currently, it's 140. That was the

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1 goal set for 2010. We've already exceeded that. And so  
2 over the next couple of years, in anticipation of the  
3 next regional update, our board will be looking at the  
4 data and -- and adopting a new goal that will obviously  
5 be lower than the 140.

6           The rapid population increase that's  
7 expected as a result of Fort Bliss will result in a lot  
8 of new houses. That's the main water user in this area  
9 is from -- from houses, from residential areas.

10           New houses use less water than older  
11 houses. The indoor fixtures are better. The  
12 xeriscaping is now required, and most of the new houses  
13 are being put in with refrigerated air and not  
14 evaporative coolers. So there's plenty of opportunity  
15 for this per capita demand trend to continue, if not  
16 accelerate.

17           So in summary, our supplies are adequate  
18 through 2020. Our demands have been steadily  
19 declining -- or have been steady or declining over the  
20 last ten years, despite a population increase that's  
21 already been observed.

22           A plan is in place to meet demands through  
23 2060. The plan will be updated and revised around 2010,  
24 because these plans are updated every five years, and  
25 that will provide an opportunity to update and revise

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1 these per capita estimates and goals and revisit the  
2 timing of additional resource addition in 2020 and the  
3 importation schedule in 2030.

4           Now, the lead time to expand existing  
5 facilities, like a surface water plant, is about three  
6 years. The lead time for importation, to implement an  
7 importation project, is somewhere around seven years.  
8 So, in other words, there's adequate time to respond to  
9 any unexpected changes.

10           Our expectation is, is that the demand will  
11 continue to stay level or decrease a little bit,  
12 possibly start increasing as more troops start coming in  
13 and more residents start coming in, but we're  
14 in -- we're in -- we're in very good shape waterwise.

15           Thank you.

16           MS. HILLER: Thank you.

17           And I have Bill Addington with the El Paso  
18 Regional Sierra Club Group.

19           MR. ADDINGTON: Thank you, ma'am.

20           I was asked to read a statement by Kevin  
21 Von Finger, who used to work for the department of the  
22 environment here at Fort Bliss. He wasn't able to  
23 attend today. He's working at Keystone Heritage Park.  
24 I'll go ahead and read that, and then if there's time,  
25 hopefully, I'll be able to read my short, short

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1 comments.

2 (Reading) The EIS relates some  
3 staggering -- this is Kevin's. The SEIS relates some  
4 staggering statistics that should be of concern to all  
5 El Pasoans. Speaking just about the proposed effects on  
6 people, there will be some winners and some losers.

7 The winners, especially the developers and  
8 retail folks, will make money off the construction  
9 activities and increase sales in economic multiplier  
10 effects. Their quality of life will increase, since  
11 they can afford to purchase it. That is no doubt why  
12 the El Paso Chamber of Commerce sent out an e-mail to  
13 members yesterday to attend this meeting in support of  
14 Fort Bliss. Some jobs will, of course, be created by  
15 this action. This is good.

16 The losers will be the majority of we, the  
17 public, especially those on fixed incomes, the elderly  
18 and the retirees. Our quality of life will decrease.  
19 In fact, the SEIS notes that the quality of life will be  
20 affected, and there will -- there probably will be  
21 cost-of-living increases.

22 Here's a list of the quality-of-life and  
23 pocketbook issues that will affect most of us in a  
24 direct result of this action: We will see an increase  
25 in population the city -- the size of the city of

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1 Las Cruces.

2           The proposed action demand for water will  
3 cause the El Paso Water Utility's resources to be  
4 exceeded by three percent. That's after the desal plant  
5 is in operation. So the buffer that the desal plant was  
6 to operate -- was to provide us will be erased in a  
7 single act. This demand is above what should -- would  
8 happen due to normal regional growth.

9           Yet the El Paso Times headline on May 22nd,  
10 2005, read, "Bliss says new personnel won't strain water  
11 supply." And in the same article, Mr. Archuleta, PSB  
12 general manager, says, "Water is a nonissue as far as  
13 Fort Bliss expanding."

14           Mr. Archuleta wrote an editorial in August  
15 of 2005 entitled, "Desal Plant Ensures El Paso's Water  
16 Needs." In another El Paso Times editorial, the Times  
17 writes about the desal plant, "There will now be no  
18 shortage of drinking water in our lifetimes and beyond."

19           The SEIS must reconcile these discrepancies  
20 regarding water use impacts or perhaps our public  
21 servants need to do the explaining of why the apparent  
22 contradictions.

23           My April 2005 water bill admonished me to  
24 reuse the water I wash vegetables in. Yet, rather than  
25 conserving water, in 2003, Fort Bliss declined to

23.1

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**23.1.** The SEIS provides a quantitative analysis of expected impacts from the Proposed Action and other alternatives on water resources, considering all existing and planned sources of water. It is not the Army's responsibility to reconcile differing opinions.

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1 participate in the purple pipe reclaimed water project  
2 to water their golf courses and continued to use fresh  
3 water from the aquifer.

4           Why is this -- is not the use of purple  
5 pipe reclaimed water a mitigation measure? Not to  
6 worry. The PSB plans to import water within 20 years of  
7 the action. Per the PSB, your rates will rise up to  
8 five percent per year for the next 20 years.  
9 Personally, I expect much higher rates, since nothing  
10 comes in -- out at budget.

11           Water importation will cost the PSB another  
12 estimated, if not more, 600,000,000 in capital costs.  
13 The PSB is currently over 400,000,000 in debt. That's a  
14 billion dollars the PSB -- that's us -- will be in debt.  
15 It will cost rate payers another hundred -- 1200 to  
16 \$1400 per acre-foot to get imported water here in  
17 today's dollars, again, if all goes according to budget.  
18 Who pays? We do.

19           Again, I would like to interrupt myself,  
20 because I'd like to make a statement. If I'm going over  
21 time, please stop me, because I'd like to make my  
22 statement, and I'll yield the time to someone else here  
23 to finish Kevin's statement.

24           MS. HILLER: Okay. And, also, if we have  
25 time at the end of the evening, when everyone has

23.2

23.3

**23.2.** Fort Bliss is investigating cooperative plans with EPWU for the provision of reclaimed wastewater for use on the installation.

**23.3.** EPWU expects its current debt load of \$400 million to be fully retired by 2026, and much of it before that. As currently planned, EPWU would not be expending any significant funds related to construction of importation facilities until the mid-2020s. The expected importation capital cost of \$600 million would be funded by 20-25 percent in cash and the remainder from bonds and grants. The cash funding would come from funds set aside for the next 25 years as part or the 2004 rate increase.

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1 spoken --

2 MR. ADDINGTON: Yes, ma'am.

3 MS. HILLER: -- you're welcome to come back

4 up --

5 MR. ADDINGTON: Okay.

6 MS. HILLER: -- too, so...

7 MR. ADDINGTON: Okay. Because I'd like to

8 give my comments, and I'm doing this as a favor.

9 Continuing on with Kevin's statement:

10 (Reading) Recently, the Rio Grande has met about half of

11 our water demand, yet the State of New Mexico notes that

12 global warming will significantly affect the state's

13 water supply.

14 No mention is -- of this is made in the

15 SEIS. At a time when city government and the public is

16 seeking to preserve open space -- arroyos, the

17 Rio Grande, parks, and farms in the valleys -- the SEIS

18 notes that open space would be converted to urban use

19 and rural -- the upper and lower valleys -- communities

20 will become more developed and urban.

21 The SEIS says the action will increase

22 housing demand, which will cause an increase in housing

23 process, which will increase our appraised property

24 values, so up goes our property taxes. The SEIS must

25 attempt to estimate the increase the public will see in

23.4

23.5

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**23.4.** The report, *The Impact of Climate Change on New Mexico's Water Supply and Ability to Manage Water Resources*, published by the New Mexico Office of the State Engineer/Interstate Stream Commission in July 2006, recognized that "significant uncertainties remain concerning many aspects and predicted aspects of current climate change." It also acknowledged effects of shorter term weather and climate variability. Significant impacts of climate change are predicted "by the end of the century," which is beyond the analytical horizon of this SEIS. More imminent variations are more likely to affect water resources in the near term. Those variations, specifically the drought cycles, have been taken into consideration in water planning in the region of influence.

Additional information about this report has been added to Section 5.15 of the Final SEIS.

**23.5.** More information on revenues and costs for public services has been added to Section 5.13 of the Final SEIS. This does not account for increased earnings, however. It is not possible to determine whether property taxes will increase relative to earnings.

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1 our taxes.

2                   The SEIS notes that medical service impacts  
3 will be especially significant, since there are already  
4 shortfalls in medical services. The SEIS must be more  
50 5 specific in its analysis. Low-income folks especially  
6 will be hit.

23.6

7                   Traffic will become a nightmare, but will  
8 be fixed with toll roads. We pay again.

9                   Roll all those negative impacts together  
10 and ask, "How the heck are we going to [sic] able to  
11 recruit any high-tech firms to El Paso?" By the way,  
12 why is there no mitigation section in this document?  
13 Why is there no attempt at reducing impacts of this  
14 action?

23.7

15                   I asked Congressman Reyes, commit to the  
16 following: Obtain federal funding for a doubling of our  
17 desalination capacity; obtain federal funding to fully  
18 expand any and all infrastructure needs that result from  
19 this action's population increase, including the I-10  
20 southern bypass and the northeast parkway; obtain  
21 federal funding to require open space and fund  
22 conservation easements for open space and farmland  
23 preservation; make the implementation of this action  
24 contingent on funding being provided.

25                   The people of El Paso should not have to

**23.6.** The SEIS specifically and quantitatively estimates the number of additional medical professionals and hospital beds that would be needed, based both on existing ratios and on more common Rau and Wooten ratios. The difference between the two reflects the additional needs created by the existing shortfalls.

**23.7.** The Draft SEIS included numerous measures to reduce impacts. The fact that they were not in a single section does not mean they were absent. A new Chapter 6.0 has been added to the Final SEIS to consolidate the discussion of mitigation measures.

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1 sacrifice their quality of life and pay out more in  
2 taxes to support a federal action.

3           Other -- and there was just one last thing.  
4 Other deficiencies with the SEIS are: Fort Bliss is  
5 asking for 352,000 more new acres to be used for  
6 maneuver, alternative number four. However, Bliss says  
7 that they only need 216,000 acres, alternative one.  
8 They're asking for 137,000 acres more than they need.

9           This additional acreage has the most  
10 fragile soils, wildlife habitat, and sensitive ecosystem  
11 of all of McGregor Range. A single pass from a tank in  
12 1975 was still visible on the ground 20 years later in  
13 gramma grasslands. What will hundreds of passes do?  
14 The SEIS needs to qualify this.

15           Bliss proposes to maneuver on more than  
16 63,000 acres of gramma grasslands. Folks, that's about  
17 100 square miles. Maneuver will impact up to 55 percent  
18 of the ground surface per year. What will happen to the  
19 habitat after 40 years?

20           Based on the data from the University of  
21 New Mexico scientists, the gramma Chihuahuan desert  
22 grasslands have been listed as globally impairable. The  
23 SEIS doesn't even address this fact. These grasslands  
24 have not been grazed for over half a century and are in  
25 better condition probably than anywhere else in the

23.8

23.9

**23.8.** The SEIS describes the expected effects of repeated off-road vehicle maneuvering, including loss of vegetation, reduction in wildlife density, transition in ecosystem stage, increased erosion, and other impacts.

**23.9.** The Army recognized the global importance of the black grama grasslands in the Fort Bliss INRMP (2001), which is incorporated in the SEIS by reference. The specific grassland alliance is the black grama-blue grama alliance, which comprises a portion of the mesa grassland vegetation shown in Section 4.8 of the SEIS. Approximately 18 percent of all the mesa grasslands on Fort Bliss are within the areas proposed for off-road vehicle maneuvers. Therefore, something less than 18 percent of the alliance is at risk by the Proposed Action, and the impact analysis points out that most of the mesa grasslands will continue to exist. This Alliance also occurs elsewhere in the Chihuahuan Desert.

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country.

Part of New Mexico's trophy antelope herd depends on this area. How will these be protected? The SEIS does not evaluate reasonable alternatives that prevent impacts of fragile ecosystems. The SEIS should have looked at use of basin areas on White Sands Missile Range and the use of relatively degraded BLM land west of McGregor Ra- -- McGregor, U.S. Highway 54.

Another alternative that wasn't evaluated is training more days a year on less fragile soils and vegetation, rather than opening additional land. The proposed action argues Bliss needs 528,000 square kilometer days of training per year, but notes they will only want to train for 240 days a year. They don't want to train on weekends. Nope. The 3rd Armored Cavalry regiment trained through weekends when stationed here. If training was conducted through weekends, Bliss wouldn't have to destroy as much land.

The SEIS needs to qualify impacts to natural resources; in particular, the long-term effects of soil compaction, erosion, vegetation loss, cumulative impacts of these over time, and habitat loss for wildlife.

Bliss has quite a lot of data gathered at taxpayer expense; for example, bird species' nest and

23.10

23.11

23.12

**23.10.** Most of the pronghorn at Fort Bliss are on Otero Mesa. No land use changes are proposed for Otero Mesa. Large numbers of pronghorn are not found in the Tularosa Basin below Otero Mesa, though some are regularly found in the mesa grasslands below the mesa. Off-road vehicle maneuvers may reduce the number of pronghorn in the area below Otero Mesa, but antelope are expected to continue to use this area. The Proposed Action is not expected to significantly affect pronghorn.

**23.11.** White Sands Missile Range does not currently provide adequate off-road vehicle maneuver capability to meet the needs of units that will be stationed at Fort Bliss. Expanding off-road vehicle maneuver capability at White Sands for training was eliminated from further consideration because that installation's primary mission is to support Research, Development, Test and Evaluation and it would not be able to sustain its primary mission and support the intensity of training needed by Fort Bliss units. Section 3.8 of the Final SEIS has been expanded to include this explanation.

Using public land for off-road vehicle maneuver training requires a withdrawal under the Engle Act. As noted in Section 3.8.3, the time required to acquire this land would not support the schedule imposed by the Base Realignment and Closure decisions.

**23.12.** It is expected that some training would occur over weekends, but 242 training days per year is considered a reasonable level of use for sustaining the training lands. Weather conditions, maintenance requirements, and environmental management activities are some of the practical factors that affect the percentage of time that a training area can be used. In addition, a higher level of use, which would be required under some of the alternatives analyzed, would affect public access to Fort Bliss lands for recreation and hunting. As noted in Section 3.3.2, even if the training areas currently authorized for off-road vehicle maneuver were used 365 days per year, there would be insufficient capability to meet Fort Bliss' training requirements.

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1 densities and habitat use, which could be used to  
2 extrapolate impacts -- impacts to the antelope herds,  
3 et cetera.

23.13

4                   Finally, the SEIS has almost 700 pages.  
5 Supporting documents, probably thousands more. The one  
6 month Fort Bliss gave the public to review and provide  
7 public comment is insufficient.

23.14

8                   And that's all of Kevin Von Finger's  
9 statement.

10                   MS. HILLER: Okay. Thank you, sir. Now --

11                   MR. ADDINGTON: I'll be able to give my  
12 statement later?

13                   MS. HILLER: You could, or if you wanted to  
14 now, we could give you seven minutes now.

15                   MR. ADDINGTON: It's up to you. I can  
16 go -- I can give everyone a rest and go -- come back  
17 after everyone's finished, if you'd like.

18                   MS. HILLER: I think we have time for that.

19                   MR. ADDINGTON: Okay.

20                   MS. HILLER: Okay.

21                   MR. ADDINGTON: Thank you, ma'am.

22                   MS. HILLER: Thank you.

23                   Now, I have been brought in, and I'm not  
24 from the local area, so that I'm a neutral moderator.

25 So if I mispronounce names, please forgive me, because

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**23.13.** All of these impacts were discussed in the Draft SEIS, specifically in Sections 5.5, 5.8, and 5.15. To the extent foreseeable, the Draft SEIS estimated effects quantitatively and described the context and intensity of the impacts, considering the factors listed in Council on Environmental Quality Regulations at 40 CFR 1508.27.

**23.14.** The Draft SEIS was available for public review for 60 days. The supporting documents were made available in local libraries, and everyone on the mailing list was sent a notice of their availability several months in advance to give the public more time to understand the information and review the Draft SEIS within the 60-day public review period.

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1 I'm from the north.

2                   So I'd like to now call on -- I think it's  
3 Richard Dayoub?

4                   MR. DAYOUB: That was pretty close. You  
5 did fine.

6                   Good evening. For the record, I am Richard  
7 Dayoub, or Dayoub, and I am the president of the El Paso  
8 Chamber of Commerce. I will try to keep my comments  
9 extremely brief, but I took some notes on Mr. -- I'm  
10 sorry.

11                   MR. ADDINGTON: Addington.

12                   MR. DAYOUB: -- Addington was speaking, and  
13 I just would like to point out a few things.

14                   I have no idea how long you've been in  
15 El Paso. I've been here for 36 years plus.

16                   MR. ADDINGTON: I've lived here all my  
17 life.

18                   MR. DAYOUB: And I was among the many  
19 people in this room who were here when we lost the  
20 3rd ACR, and I can tell you that was, as it should have  
21 been, a wake-up call for El Paso, and it was.

22                   And fortunately for us, General Costello  
23 was here at the time, and Congressman Reyes had just  
24 taken office. And together with them, we worked as a  
25 community to commit to ourselves, we would never allow

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1 something of that magnitude to impact our economy again.

2                   And for those of you who don't know the  
3 real numbers, we lost, at a minimum, 5,000 soldiers.  
4 That's not counting their families and other dependents  
5 that left El Paso. And we lost them. That impact to  
6 our economy was in the billions of dollars.

7                   Granted, there are challenges, and you  
8 pointed out some of those challenges with regard to an  
9 increased usage and a modified usage of the ranges from  
10 what we're currently experiencing with the PATRIOT  
11 program, as an example.

12                   But the realities are -- and I speak to  
13 this from experience -- that the other alternative would  
14 have been for Fort Bliss to shrink again. And I can  
15 tell you, because the chamber was actively engaged,  
16 along with our congressman and others in the community,  
17 our city, Red Coat Development Group joined us in the  
18 process, and we worked diligently over the last several  
19 years in the last round of BRAC.

20                   And I can tell you that we were very close  
21 to losing the current missions that we have here. And I  
22 can tell you that in a meeting with General Lust at the  
23 Pentagon, the message finally rang true when we  
24 delivered the message regarding our availability of  
25 water supply. And it wasn't until that decision was

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1 made and until that information was available for that  
2 decision, that we were recognizing that we had the  
3 opportunity to grow our installation and grow our  
4 economy.

5           The -- excuse me. The chamber sent out the  
6 message, by the way, to our membership not to come out  
7 here necessarily to speak to the issue, but to inform  
8 our members, because that's our primary mission. We  
9 have 1400 business members, which exceeds 11 percent of  
10 the business population in El Paso, and it's our  
11 responsibility to inform them of what's going on and how  
12 that may or may not impact their business.

13           As I mentioned, we were a primary  
14 participant in the BRAC process. We were also a partner  
15 with our congressman in working in Washington to make  
16 sure that the funding that came together with the Public  
17 Service Board's investment from the Pentagon, so that we  
18 could have the desalination plan that we have now under  
19 construction, hopefully to open in the -- in the fall of  
20 2007, with 26 and a half million gallons of fresh water  
21 produced daily, which not only improve our water supply,  
22 but will also help minimize the current dissipation, if  
23 you will, of our current fresh water supply that's in  
24 the bolson, along with the brackish water, a key  
25 component, I might add.

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1           There was a comment made with regard to  
2 increasing our taxes and our cost of living and  
3 challenging the quality of life. I would argue that it,  
4 in fact, is the opposite. We have a challenge in this  
5 community today, as many communities do, particularly on  
6 the border complexes; and that is, we don't have a tax  
7 base to support the needs of this community.

8           Without Fort Bliss, we are still a growing  
9 population. And with that growing population, we have a  
10 need for more schools, such as the one we're in tonight;  
11 a need for more highways; a need for better  
12 infrastructure in our community to support the growth of  
13 our community.

14           And what we've been doing in the past has  
15 been putting it on the backs -- exclusively almost -- we  
16 are an imbalance in El Paso versus the rest of the  
17 state. We are -- approximately 60 percent of our  
18 residential tax base supports our operations in this  
19 community and 40 percent business. It needs to be the  
20 reverse of that.

21           And we have companies who are relocating to  
22 El Paso all the time now, including ADP. And with that  
23 group of those businesses coming to El Paso, we're going  
24 to start seeing the proper shift and a bigger base of  
25 the business community supporting the tax infrastructure

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1 and a smaller base of the homeowners.

2           If we don't have more homes and we don't  
3 have more taxpayers in those homes, then we are destined  
4 to support from a small base a bigger burden. I mean,  
5 it's just simply basic mathematics. So I need to point  
6 that out to all those that are concerned about the  
7 infrastructure.

8           Tonight is not the time to get into a  
9 debate with regard to toll roads and other issues.  
10 Those are issues that we face irrespective of what  
11 happens at Fort Bliss.

12           But the economy today in El Paso depends on  
13 Fort Bliss, somewhere around 15 percent of our domestic  
14 annual product. With the growth of Fort Bliss, that  
15 number will easily reach the 18 to 19 percentile. And I  
16 can promise you that without Fort Bliss, our tax base  
17 and our -- and our domestic product, our gross annual  
18 domestic product, would diminish dramatically, and then  
19 we'd have a lot more people out of work and a lot more  
20 people who can't afford to make house payments, and then  
21 the rest of the community would be burdened with the  
22 support of all public services as a result of that.

23           I think, with my closing comment, I would  
24 just simply say that Fort Bliss -- and I know this  
25 because across the country, I'm being called by people

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40

1 asking me what the secret to our success has been. I  
2 will tell you that Fort Bliss will impact this community  
3 at a greater level -- and I might add, without a -- any  
4 tax incentives provided to them -- a greater impact to  
5 our economy than Toyota's plant in San Antonio.

6           I want to restate that for you. It is a  
7 greater economic impact to this community on an annual  
8 basis than the new Toyota plant will be to San Antonio.  
9 And I can promise you, the tax incentives that were  
10 provided in San Antonio to Toyota were in the hundreds  
11 of millions of dollars that that community will be  
12 paying for for the next 50 years.

13           So we need to embrace this environment and  
14 recognize that with plan four, Fort Bliss needs that  
15 space to work with. Their mission has changed. No  
16 matter what you feel or how you feel about the war going  
17 on in Iraq and Afghanistan, the reality of it is, we  
18 face challenges across the world today, and we must be  
19 prepared for that. We cannot prepare for that  
20 magically.

21           And I will add one last closing statement:  
22 If we're not prepared to service the needs of Fort  
23 Bliss, I can promise you, there are communities across  
24 this state and across this country that are literally  
25 licking their chops, hoping that we fail, so they can be

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1 the recipients of all these missions.

2 Thank you so much.

3 MS. HILLER: Thank you. Lawrence Gibson?

4 MR. GIBSON: I'll do written comments.

5 MS. HILLER: Okay. Thank you, Mr. Gibson.

6 Bob Geyer? Would you like me to adjust

7 that?

8 MR. GEYER: No, that's all right.

9 MS. HILLER: Thank you very much.

10 MR. GEYER: Hopefully, I won't be driving

11 the tanks.

12 Just a word, Mr. Dayoub. You and I go back

13 a ways, but --

14 And he's representing the chamber of

15 commerce. I just want everybody to know, I respect

16 Mr. Dayoub, but the chamber of commerce voted -- their

17 board of directors, 100 percent, for the reopening of

18 ASARCO, too. And I think --

19 MR. DAYOUB: That's incorrect, by the way.

20 MR. GEYER: Oh, excuse me?

21 MR. DAYOUB: That is incorrect.

22 MR. GEYER: What is correct, then?

23 MR. DAYOUB: The chamber did not support

24 the reopening or closing of ASARCO.

25 MR. GEYER: That is what I read in the

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1 paper.

2 MR. DAYOUB: That is not true.

3 MR. GEYER: Okay. Well, I'm glad to hear

4 that. I hope you-all come out and close it. But,

5 anyway, a lot of the business community is for the

6 reopening of ASARCO. I think I can say that safely.

7 I've seen that, particularly with our last senatorial

8 election.

9 Anyway, one thing that I'm concerned

10 about -- and I asked this question of some of the

11 experts here -- of whether or not depleted uranium would

12 be used. And the reason I ask that question, because I

13 know that M-1 tanks are -- will be used in this area.

14 In fact, I think they're already currently used out

15 there, my understanding.

16 And M-1 tanks, I can read that the most --

17 the most common depleted uranium weapons in the

18 U.S. arsenal are 120-millimeter shells fired by M-1

19 tanks and 30-millimeter shells fired by A-10 aircraft.

20 I did ask the question whether or not the

21 M-1 tanks were -- had the completed uranium. I was told

22 that that's something that's put on out in the

23 battlefield; that they're not used here. And I was also

24 told that the shells are not tipped with depleted

25 uranium.

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1 My understanding is, it's not in the  
2 environmental impact statement. I would ask that in the  
3 final statement, that it be included in writing that  
4 that will not -- not -- that that will be the case; that  
58 5 depleted uranium will not be used, okay?

6 The reason that I bring that up, the  
7 Fort -- excuse me. The Jefferson Proving Ground in  
8 Madison, Indiana contains over 150,000 pounds of  
9 depleted uranium shells and fragments. The U.S. Army  
10 wants to walk away from the contamination without  
11 performing any cleanup or ongoing environmental  
12 monitoring. I'll cite the citation, the U.S. Army  
13 Nuclear Regulatory Commission.

14 Depleted uranium has been found in the  
15 urine of Gulf War veterans and Iraqi civilians eight  
16 years after exposure, for those of you who don't think  
17 it's dangerous. And the Pentagon still likes to say  
18 it's not, by the way.

19 At the former Jefferson Proving Ground,  
20 which I quoted earlier, depleted uranium has entered the  
21 food chain and been found in deer, clams, and fish. And  
22 in Bosnia and Herzegovina, over seven years after its  
23 use, depleted uranium particles were found suspended in  
24 the air, inside buildings, and in drinking water.

25 For those of you who don't know what

8.1

**8.1.** U.S. Army Regulation 385-63, paragraph 2-5A (3), prohibits the firing of depleted uranium ammunition in the continental United States unless approved by the Chief of Staff of the Army or the Commandant of the Marine Corps. No exception has been provided to Fort Bliss nor is one anticipated. This regulation applies to tanks and A-10 aircraft. Furthermore, no live ammunition (rounds that explode) will be fired by M1 tanks on the live-fire and qualification ranges or anywhere on Fort Bliss. When using the ranges to qualify and train crews, tanks fire a 120 millimeter training round that consists of an inert steel dart. Targets are typically composed of wood, cardboard, or other synthetic materials. "Hits" are registered and scored electronically.

A discussion of depleted uranium has been added in Section 5.12 of the Final SEIS.

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1 depleted uranium is, it's -- you know, when uranium is  
2 broken down, there's always got to be some waste, and  
3 depleted uranium is one of those. And it can be --  
4 obviously, what it does, when a shell hits a tank, it  
5 causes a mild explosion, and what -- this helps  
6 penetrate the metal, and there is dust particles that  
7 are -- fly into the air, and this is depleted uranium  
8 that is exposed to the air.

9 Well, we all know about our wind around  
10 here, and our water supply, the Hueco Bolson, my  
11 understanding, is right underneath the McGregor Range  
12 site or certainly close by, and it's something that we  
13 should be concerned about.

14 You know, there are jobs with Fort Bliss.  
15 We all know that. There were jobs with ASARCO, but that  
16 doesn't mean the jobs are necessarily good for a  
17 community. And so it's something we need to watch, and  
18 hopefully I was told the truth tonight, but I would like  
19 that verified in the plan.

20 Depleted uranium contains uranium isotope  
21 238, 234, and 235. It has a half-life -- and that's how  
22 long until it turns into another substance -- of  
23 4.5 billion years. And the thing here is, you know,  
24 you're not just going in once. You're going to be using  
25 these weapons over and over and over again, like what

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1 was done in Indiana. So I hope I'm being told the  
2 truth.

3 Depleted uranium emits about 60 percent as  
4 much alpha radiation as natural-occurring uranium that  
5 has been processed and concentrated, about 85 percent as  
6 much gamma radiation, and essentially the same amount of  
7 beta radiation. Depleted uranium's chemical toxicity is  
8 the same as that of natural uranium. Anyway, I probably  
9 beat that horse long enough, but I hope it doesn't come  
10 up.

11 Anyway, second thing is, looking at the  
12 maps, I don't know if y'all looked there, but the one in  
13 the middle of the brown area dips way down lower than --  
14 than it presently does. And if you look at the maps,  
15 the brown area allows what's called mission -- mission  
16 action, or whatever, mission.

17 Well, I ask the question -- mission allows  
18 live firing, okay? Well, that's all to the south, and  
19 it dips way down, real close to the city limits of  
20 El Paso, and that's in alternative three and four, where  
21 that brown area dips way down. So I'm concerned about  
22 that, particularly depending on what type of weapons are  
23 used. But if you look at the other ones, the brown does  
24 not go down into -- into the tip, alternative one, two,  
25 and the existing situation up on the far right. I would

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1 ask y'all to look at those maps afterwards.

2                   And I was told that -- that the heavy-duty  
3 firing wouldn't be there. Well, then that needs to be  
4 so designated. And maybe it's in the plan, but I think  
5 it needs to be very explicit that that will not happen,  
6 because anytime you -- you know, we see it time and time  
7 again, zoning in El Paso. You can zone something, and  
8 they'll say, "Oh, but we're not going to do that there."  
9 Yeah, right. And then that changes.

10                   And, in fact, in the northeast, we've seen  
11 it change with the Jobe quarry just recently. It was an  
12 immaculate master plan and all, and, you know,  
13 politicians changed that not too long ago, because  
14 Mr. Jobe has some input.

15                   So, anyway, those two things I'd like to  
16 address. Thank you.

17                   MS. HILLER: Thank you very much.

18                   Would anyone at this time who's not yet  
19 spoken like to speak? And then I'll call upon Bill  
20 Addington. And, actually, I'd like to have Bill  
21 Addington speak first, since he signed up, and then I'll  
22 ask if anyone else would like to speak.

23                   Go ahead, Mr. Addington.

24                   MR. ADDINGTON: It should be brief. Again,  
25 I'm Bill Addington with the El Paso Sierra Club Regional

8.2

**8.2.** The Army proposes to add the training categories of Mission Support Facility, Weapons Firing, and Surface Danger Zone to all of the South Training Areas under Alternatives 3 and 4 in order to provide flexibility for siting facilities and firing ranges in those areas in the future. There are no plans to conduct heavy weapons firing in the South Training Areas, but there may be a future need for additional small-arms ranges there.

Weapons firing only occurs at designated live-fire ranges that are located and designed to ensure the associated Surface Danger Zones are wholly contained within the installation boundaries, following specific safety criteria. There will be no uncontained, general firing of live weapons in the training areas.

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1 Group here in El Paso, Texas. I'm a fifth-generation  
2 west Texan. I live in Sierra Blanca, Texas. I've lived  
3 here all my life. We have a farm in Sierra Blanca, just  
4 to qualify Mr. Dayoub's statements if I have lived here  
5 very long.

6 I made some notes. These are impromptu. I  
7 have not examined the SES [sic] document or the  
8 preceding document, which I intend to. I am familiar  
9 with NEBA law, having addressed it on previous  
10 occasions. I do have some impromptu observations and  
11 comments, which I'll keep brief.

12 This is Chihuahuan Desert, high-desert  
13 ranch land. It's very fragile. I know that. We've  
14 been ranching and farming in this region, like I said,  
15 for about five generations.

16 I believe, as I know of all of Chihuahuan  
17 high-desert rangeland, the grasses and desert is  
18 sensitive to off-road vehicle use, whether it be track  
19 vehicles or off-road vehicles of any kind, tanks,  
20 fighting vehicles, Jeeps, whatever. It is sensitive to  
21 it and takes a long time to recover, sometimes more than  
22 a hundred years.

23 The new mission which -- here at Fort  
24 Bliss, which I supported whole heartedly, was air  
25 defense, the main mission. Unfortunately, El Pasoans

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1 and the chamber of commerce -- I don't know if the  
2 chamber did or not. I shouldn't mention that -- but  
3 some of the leaders, I don't think, fought hard enough  
4 to retain that mission.

5 To me, that's where all the high-tech jobs  
6 were, where we got the best -- best economic benefit at  
7 the least impact for the city. I don't know how much  
8 Raytheon will be leaving, but I have friends working at  
9 Raytheon that were experts in the field of air defense.

10 Now we're moving to a new mission of tanks  
11 coming from Germany and elsewhere, track vehicles, not  
12 so high tech, maybe, and I know there will be an  
13 economic impact of sales and whatnot. There will also  
14 be impacts on -- I agree with Mr. Von Finger -- of  
15 quality of life, traffic, impacts to our water system,  
16 and demands on our water.

17 The dust problem. There will be a PM10 and  
18 PM2.5 hearing by TCEQ coming up recently at the state  
19 office on Franklin Avenue soon. The tanks -- I will be  
20 commenting about that. Tanks and vehicles will  
21 contribute to the PM10 dust problem and maybe the P- --  
22 the finer dust problem here in our region, which is  
23 already a problem, because the City right now, and has  
24 historically, allowed development, scraping of the land  
25 years before any buildings come on it. That needs to

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1 change.

2           The City of El Paso needs to not allow  
3 builders and developers to scrape off huge tracts of  
4 land and roads before any construction happens,  
5 to -- to -- this is for health and safety. It's not  
6 just an aesthetics issue.

7           So I am concerned, and I think that -- I  
8 did not read the document in depth. It is many pages,  
9 and it's a little over a month to review all these  
10 pages. I -- I did receive a copy on the 6th of October  
11 and I -- I don't know, having not read the entire  
12 document, having a job to work at, whether the PM10 dust  
13 was addressed.

1.1

14           Also -- I also want to go on record that  
15 NEBA requires that you seriously consider alternatives.  
16 I don't know if the Army and the staff and the  
17 consultants have seriously considered alternates with  
18 NEBA, National Environment Policy Act, requires by  
19 federal law.

1.2

20           Again, I'd like to mention and echo Bob  
21 Geyer's concerns about the M1 Abram tank. My research  
22 shows -- and I'm told now that the fabric that is  
23 armored -- the depleted uranium fabric to protect the  
24 front part of the tank would be done in the theater.

25           I did not qualify in the research that I

**1.1.** PM<sub>10</sub> from fugitive dust associated with the Proposed Action and other alternatives was addressed in Section 5.6 of the Draft SEIS.

**1.2.** The Draft SEIS examined five land use alternatives in detail, including the No Action Alternative.



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1.3

1 looked at that said that it has fabric built into the  
2 front part of the tank on all of the M1A1 Abram's tanks.

3 I don't know. I'm sure the Army personnel and Army  
4 people know a lot more about the M1 Abram tank than I  
5 ever could know, but I do know that the M1 Abram tank  
6 can fire -- and it does fire in the theater -- DU tank  
7 shell projectiles.

8 So in closing, I do have very serious  
9 concerns about the water supply. The part -- you know,  
10 Fort Bliss should be -- I know they're trying to do  
11 their part. I know they're partners with the Public  
12 Service Board and El Paso Water Utilities for the  
13 desalination plant.

14 The -- the United States Geological Service  
15 issued a report four or five years ago which took the  
16 PSB two years to study it and peer review it, saying  
17 that there was over a hundred years of fresh water in  
18 storage in the Hueco bolson here in El Paso city -- the  
19 city limits of El Paso, and over -- I think, if  
20 Mr. Hutchison could correct me if I'm wrong -- I think  
21 it's up to 300 years of slightly brackish, desalinatable  
22 water existing here in the bolson.

23 My question is, what -- I just mentioned  
24 him, and I think this should be addressed possibly in  
25 the statement for the mission of Fort Bliss: Why look

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**1.3.** Beginning in 1985, "heavy" versions of M1A1 and M1A2 tanks were produced using steel encased depleted uranium (DU) in the turret. The Army has also been upgrading a limited number of M1A1s to M1A2s. It is reasonable to assume that most of the M1 tanks used on Fort Bliss will be A1s or A2s. Radiation exposure from the DU armor is substantially reduced because the DU is encased and therefore not directly exposed to the environment.

U.S. Army Regulation 385-63, paragraph 2-5A (3), prohibits the firing of DU ammunition in the continental United States.

A discussion of depleted uranium has been added to Section 5.12 of the Final SEIS.

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1 at importation into a county with a long-distance  
2 pipeline that could cost anywhere from 600,000,000 to  
3 \$1,000,000,000 of city rate payers' money, with a  
4 hundred-mile, five-foot-diameter pipeline to Dell City,  
5 Texas, buying out the entire town of Dell City, 35,000  
6 acres of fertile farmland, to -- for a project that is  
7 not needed, when there is plenty of water and storage  
8 here in El Paso?

9           The City and the Army, for the continued  
10 mission, needs to desalinate more water. I'd agree  
11 whole heartedly with Mr. Von Finger, but I'd implore  
12 Mr. Reyes to look for more funding, to increase the  
13 desalination capacity of the slightly brackish water.

14           There is much -- the USDS report shows many  
15 hundreds of years of slightly brackish water in storage  
16 for -- even for future growth, so I question if this  
17 pipeline is even necessary. And I do want to go on  
18 record, and I will keep, continuing saying this, because  
19 this will be coming from a -- from an aquifer -- the  
20 Bones Springs aquifer in my home, in Dell City, near the  
21 Guadalupe Mountains National Park, which is a finite  
22 aquifer that -- that can't be depleted by drawdowns and  
23 by salt water intrusion.

24           And so this -- before any -- any statements  
25 are made, "We're going to be importing water in 2030,"

1.3

**1.3.** These measures are in the Far West Texas Water Plan, prepared by a group of stakeholders and experts and reviewed by the Texas Water Development Board and the general public. This plan indicates that the current availability of high quality potable water is limited in the El Paso area.

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1 there needs to be alternatives looked at by the El Paso  
2 Water Utilities, and, of course, the USGS study shows  
3 that they need to be looking at these studies.

4           So, in closing, I thank you for the  
5 opportunity to speak here at the SEIS public comment  
6 portion tonight, and I look forward to commenting and  
7 completely participating in the NEBA process regarding  
8 this issue. Thank you.

9           MS. HILLER: Thank you.

10           I do want to acknowledge that it's just a  
11 few minutes before 8:00. We have one additional  
12 speaker, yes?

13           Do you still -- when you come up, would you  
14 please just state your name clearly for the record?

15 Thank you.

16           And are there others who wish to speak  
17 tonight at this point?

18           (No response.)

19           MS. MCMURRAY: My name is Heather McMurray,  
20 and the SEIS is an impressive document, very thick. I  
21 wanted to go on record to say that we found out a few  
22 months back and announced last month -- also in a  
23 New York Times article -- that the -- our smelter here,  
24 the largest custom smelter in the world for a long time,  
25 about a hundred years old, 120 years old, burned and

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1 manifested hazardous waste, and we figure it burned it  
2 for about a decade.

3           The document that really showed this was  
4 held confidential by our Department of Justice, our  
5 federal Department of Justice, for the last eight years  
6 and was released to us this past July. That's in the  
7 New York Times article.

8           Material that was burned by the smelter  
9 came from places like Rocky Mountain Arsenal, a naval  
10 air station. It was handled through Corpus Christi at  
11 an ASARCO-owned site called Encycle, and then was  
12 brought up here. Some of the materials that Encycle  
13 handled were not ever processed, just shipped. They  
14 were shipped here, and they were shipped to Helena,  
15 Montana and burned, processed by our smelter,  
16 incinerated, handled by CONTOP.

17           We know that material from the smelter  
18 traveled at least eight miles, and word of mouth is that  
19 ASARCO in the past would pay farmers a hundred miles  
20 away for damage from the old-style materials that they  
21 burned. So it traveled a long way.

22           And I would ask that in this SEIS, we would  
23 get the cooperation of our fort in determining what it  
24 was that we were poisoned by. We are still asking our  
25 community, our TCEQ, our EPA what it was and what

14.1

**14.1.** The ASARCO plant is not related to or affected by any action being contemplated in this SEIS. The SEIS is being prepared to assist the Army in making land use decisions on Fort Bliss. The requested information is outside the scope of this decision and the SEIS analysis.

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1 they're hiding from us, because we have a memo that  
2 shows that they are very concerned that we find out what  
3 it was.

4                   And it would have impacted probably Bliss,  
56 5 also. There -- at least part of it is within air  
6 particulate range of the smelter. And the materials  
7 that they handled went -- were hundreds of feet,  
8 actually, from our water supply, which recently  
9 we -- because of the drought, we have to get water from  
2 10 about March through October from the Rio Grande.

11                   And the American's share of that water  
12 starts at the American dam by ASARCO, and then branches  
13 into a canal that handles about 70, 80 miles of  
14 irrigation canal and city water. Presently, that canal  
8 15 has failed. The concrete -- concrete has uplifted and  
16 is exposing the water running through it to the ASARCO  
17 contamination underneath it.

18                   So ASARCO impacted us quite a bit, and I  
19 think that the SEIS would not necessarily have to  
2 20 address the water issue, because they're getting their  
21 water from other sources, perhaps, than this desal  
22 plant.

23                   But if we could get some help finding out  
24 what it was that fell on us from the air and that  
0 25 apparently is still being monitored by ASARCO in the

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1 northeast corner of their property, when the rain  
2 travels down through the arroyo there and enters their  
3 property, we'd really appreciate it.

4                   Thank you.

48 5                   MS. HILLER: Thank you.

6                   Okay. I want to thank you-all for  
7 participating in this public meeting for the Fort Bliss  
8 Mission and Master Plan Draft Supplemental Programmatic  
9 Environmental Impact Statement. If you decided not to  
04 10 provide comments this evening, either in writing or with  
11 public testimony, we do have public comment forms  
12 available at the back, written, "Comment table." These  
13 forms look like this.

14                   You can -- you can deliver these to us in  
26 15 several formats: Either by mailing this form in, or in  
16 your own format, which can be a letter or an e-mail.  
17 There are forms in the back of the room that also give  
18 you this information, which includes the e-mail address  
19 and mailing address for comments, as well as a fax  
4 20 number.

21                   We do request that these comments be  
22 submitted between now and December 12th. That way, they  
23 will be able to be considered into the final  
24 Environmental -- SEIS.

26 25                   So this concludes the meeting. I want to

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1 thank you-all for being here and thanking -- and thank  
2 you-all for providing input into the SEIS process.  
3                   We're adjourned.  
4                   (Deposition concluded at 8:06 p.m.)

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1  
2  
3 State of Texas            )  
4 County of El Paso        )

5                   I, Ginger G. Zachary, Registered  
6 Professional Reporter, Certified Realtime Reporter, and  
7 Certified Shorthand Reporter in and for the State of  
8 Texas, do hereby certify that this transcript is a true  
9 record of the Public Meeting for Comments of SEIS, and  
10 that said transcription is done to the best of my  
11 ability.

12  
13                   Given under my hand and seal of office on  
14 this 17th day of November, 2006.

15  
16  
17   
18 \_\_\_\_\_  
19 Ginger G. Zachary, RPR, CRR, CSR Texas #5710  
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UNITED STATES AND MEXICO

NOV 0 0 2006

Mr. John F. Barrera  
Attn: IMSW-BLS-Z  
1733 Pleasonton Road  
Fort Bliss, TX 79916-6812

Dear Mr. Barrera:

Thank you for the opportunity to review and comment on the Draft Supplemental Environmental Impact Statement (DSEIS) for the "Final Fort Bliss, Texas and New Mexico, Mission and Master Plan Programmatic Environmental Impact Statement" dated October 2006.

The proposed action would change the land use in the Main Cantonment area and in the Fort Bliss Training Complex, specifically the Tularosa Basin portion of McGregor Range. The United States Section of the International Boundary and Water Commission (USIBWC) has reviewed the DSEIS and does not anticipate the proposed action(s) will conflict with any project or mission of this agency. Please keep us informed of any future projects that may impact USIBWC properties within the area. If you have any questions, please feel free to contact me at (915) 832-4702.

Sincerely,

Gilbert G. Anaya  
Supervisory Environmental Protection Specialist  
Environmental Management Division


The Commons, Building C, Suite 100 • 4171 N. Mesa Street • El Paso, Texas 79902  
(915) 832-4100 • (FAX) (915) 832-4190 • <http://www.ibwc.state.gov>

Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS

Dec 13 06 12:35p RCHP  
DEC-13-06 09:34 FROM:HPDADMIN

606 5072  
ID: 6028717886

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 **THE NAVAJO NATION**

JOE SHIRLEY, JR.  
PRESIDENT

FRANK J. DAYISH, JR.  
VICE-PRESIDENT

December 11, 2006

OPTIONAL FORM 99 (7-90)  
**FAX TRANSMITTAL** # of pages 2

To: Cuss Sackett From: Kelly Fairview  
Dept./Agency: Fort Bliss Phone #: 202-666-8583  
Fax #: 915-568-3548 Fax #: 202-666-5672  
NSN 7540-01-317-7568 5099-101 GENERAL SERVICES ADMINISTRATION

Robert P. Lennox  
Major General, US Army  
Commanding  
Fort Bliss, Texas 79916

Subject: Fort Bliss, Texas and New Mexico, Mission and Master Plan, Draft Supplemental Programmatic Environmental Impact Statement, October 2006.


General Lennox:

It has come to the attention of the Historic Preservation Department – Traditional Culture Program (HPD-TCP) that the Navajo Nation was not invited to consult on the above mentioned proposed undertakings via a government-to-government process. Therefore, the Navajo Nation has not been provided ample amount of time to review the proposed major undertakings pursuant to 36 CFR part 800.1 (c)(2)(iii).

The Navajo Nation has serious concerns about Fort Bliss' proposal to open 352,000 acres of additional off-road maneuver area on McGregor Range. The HPD-TCP believes Fort Bliss and McGregor Range may contain cultural, religious, or ancestral values of vital importance to the Navajo Nation, as well as other Native American Tribes. However, this cannot be determined by Fort Bliss until it initiates "good faith, government-to-government" consultations with all Native American Tribes who may have vested interest in the proposed undertaking and proposed project area. 3.1

In closing, the HPD-TCP recommends Fort Bliss to initiate government-to-government consultations with all Native American Tribes who may have cultural interests regarding the proposed undertaking and proposed project area, their potential to affect cultural resources, and the mitigations Fort Bliss' is proposing and responsible for pursuant to 36 CFR part 800.1 (c)(2)(iii).

Sincerely,

  
Marklyn Chee, Cultural Specialist (Section 106 Consultations)

HISTORIC PRESERVATION DEPARTMENT P.O. BOX 4960 WINDOW ROCK, ARIZONA 86615 928.871.7198 (v) 928.871.7286 (fax)

3.1. The Mescalero Apache Tribe and the Ysleta del Sur Pueblo were invited to consult but chose not to. Consultation has been initiated with The Navajo Nation as well as reinitiated with the Mescalero Apache Tribe and the Ysleta del Sur Pueblo. The Comanche Tribe has also been contacted to initiate consultation. The Tribe has indicated it may have an interest in Fort Bliss lands but does not have specific interests in the SEIS. The Hopi Tribal Council has indicated that they do not have interests in lands managed by Fort Bliss. They recognize the Mescalero Apache Tribe and the Ysleta del Sur Pueblo as the Tribes that have traditional interests and that Fort Bliss should be consulting with. Tribal concerns are addressed in the Programmatic Agreement for historic properties, which can be amended at any time during its life upon request by the Tribe(s).



**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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Dec 13 06 12:35p ACHP  
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Navajo Nation Division of Natural Resources  
Historic Preservation Department – Traditional Culture Program  
P.O. 4950  
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TCP 07-010  
cc: Katherine Sliok, Director, New Mexico State Historic Preservation Officer.  
Valerie Hauer, Advisory Council on Historic Preservation, Washington, DC.  
Monique Fordham, Advisory Council on Historic Preservation, Washington, DC.  
File: Fort Bliss, TX.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**



**TEXAS  
HISTORICAL  
COMMISSION**

*The State Agency for Historic Preservation*

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWRENCE OAKS, EXECUTIVE DIRECTOR

December 6, 2006

Mr. John Barrera, NEPA Manager  
Directorate of Environment  
Bldg. 624, Pleasonton Road  
Fort Bliss, TX 79916-6812

12-2-06  
FLO

Re: *Project review under Section 106 of the National Historic Preservation Act of 1966  
Fort Bliss, Texas and New Mexico Mission and Master Plan Draft Supplemental Environmental  
Impact Statement, Fort Bliss, El Paso County (Army/106)*

Dear Mr. Barrera;

Thank you for this opportunity to comment on the above referenced project. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Quana Childs, has completed its review of the *Fort Bliss, Texas and New Mexico Mission and Master Plan Draft Supplemental Environmental Impact Statement*. As stated in the Draft SEIS, the treatment of historic resources is set forth in the *Programmatic Agreement Among the Fort Bliss Garrison Command and the New Mexico State Historic Preservation Officer and the Texas Historic Preservation Officer and the Advisory Council on Historic Preservation for the Management of Historic Properties on Fort Bliss Fort Bliss, Texas, Under Sections 106 and 110 of the National Historic Preservation Act of 1966 (As Amended)*. The implementation of the preferred alternative has the potential to significantly impact historic and cultural resources. At this time not enough information is known about the action to determine the impacts. We look forward to reviewing the projects under the Programmatic Agreement. The Army and installation's strict adherence to the Standard Operating Procedures for the implementation should serve to avoid, minimize, or mitigate any adverse effects.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Quana Childs at 512/463-9122.**

Yours truly,

Quana Childs, Architect  
for: F. Lawrence Oaks, State Historic Preservation Officer

cc: El Paso County Historical Commission  
FLO/QC

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**



**BILL RICHARDSON**  
GOVERNOR

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**  
*Office of the Secretary*  
**Harold Runnels Building**  
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**ORIGINAL**



**RON CURRY**  
SECRETARY

**DERRITH WATCHMAN-MOORE**  
DEPUTY SECRETARY

December 4, 2006

John Barrera  
NEPA Manager  
Directorate of Environment  
Bldg. 624, Pleasonton Road  
Fort Bliss, TX 79916-6812

Fax: 915.568.3548

Dear Mr. Barrera:

**RE: DRAFT SUPPLEMENTAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (DSEIS) FOR CHANGES TO THE FORT BLISS, TEXAS AND NEW MEXICO, MISSION AND MASTER PLAN (OCTOBER 2006)**

This transmits New Mexico Environment Department (NMED) comments concerning the above- referenced Draft Supplemental Programmatic Environmental Impact Statement (DSEIS).

Surface Water Quality

The U.S. Environmental Protection Agency (USEPA) requires National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) coverage for storm water discharges from construction projects (common plans of development) that will result in the disturbance (or re-disturbance) of one or more acres, including expansions, of total land area. According to the project information submitted, this project appears to involve several construction projects in New Mexico.

Among other things, this permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMPs) be installed and maintained both during and after construction to prevent, to the extent practicable, pollutants (primarily sediment, oil & grease and construction materials from construction sites) in storm water runoff from entering waters of the U.S. This permit also requires that permanent stabilization measures (revegetation, paving, etc.), and permanent storm water management measures (storm water detention/retention structures, velocity dissipation devices, etc.) be implemented post construction to minimize, in the long term, pollutants in storm water runoff from entering these waters. In addition, permittees must ensure that there is no increase in sediment yield and flow velocity from the construction site (both during and after construction) compared to pre-construction, undisturbed conditions (see Subpart 9.C.1)

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John Barrera  
December 4, 2006  
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You should also be aware that EPA requires that all "operators" (see Appendix A) obtain NPDES permit coverage for construction projects. Generally, this means that at least two parties will require permit coverage. The owner/developer of this construction project who has operational control over project specifications (probably Ft. Bliss in this case), the general contractor who has day-to-day operational control of those activities at the site, which are necessary to ensure compliance with the storm water pollution plan and other permit conditions, and possibly other "operators" will require appropriate NPDES permit coverage for this project.

In addition, operation of many of the types of activities, existing and proposed, at this facility require Storm Water Multi-sector General Permit (see Federal Register/Vol. 65, No. 210/Monday, October 30, 2000) coverage. This permit also requires preparation of a SWPPP, and installation of appropriate storm water runoff control practices (per the SWPPP).

Fort Bliss has NPDES Storm Water Multi-sector General Permit coverage (NMR05B091) for various industrial activities at this facility. The permittee should amend the existing Storm Water Pollution Prevention Plan to incorporate any additional activities and pollutant controls dictated by this proposed action.

5.1

Ground Water Quality

The DSEIS describes potential environmental impacts and mitigation actions associated with land use and management decisions regarding installation assets, capabilities, and infrastructure to support current and future missions. Four alternatives were identified for analysis in the document: the no-action alternative plus three other alternatives that consider the implementation of various projects and new land use scenarios.

The analyses of the various alternatives considered impacts to ground water only from the perspective of effects on water quantity due to potential increases in ground water withdrawals for potable use. Although it is not anticipated that activities performed pursuant to any of the four alternatives would have a substantial likelihood of causing ground water contamination, the DSEIS should nonetheless address the potential for impacts to ground water quality, in addition to effects on ground water quantity.

5.2

The DSEIS notes that domestic wastewater generated at the Dona Ana Range-North Training Area and McGregor Range (both areas are located in New Mexico) is discharged to wastewater lagoon systems. It is likely that these discharges require Discharge Permits issued by the NMED-GWQB in accordance with the New Mexico Water Quality Control Commission Regulations. Fort Bliss is advised to submit a Notice of Intent to Discharge for each area, as required by 20.6.2.1201 NMAC, to the Ground Water Quality Bureau. NMED-GWQB will review the submittals and inform Fort Bliss if Discharge Permits are required for the domestic waste discharges.

5.3

The DSEIS indicates that hazardous wastes generated at Fort Bliss are regulated by TNRCC (now TCEQ) and NMED, depending upon the location of the specific area within Fort Bliss where the wastes are generated. Any changes in types or volumes of hazardous wastes resulting from implantation of any of the alternatives will continue to be addressed by the hazardous waste programs of TCEQ and NMED.

**5.1.** Fort Bliss terminated this permit on 10 September 2002.

**5.2.** Potable groundwater in the Tularosa Basin is found at depths generally greater than 200 feet. Because of this depth, surface spills are unlikely to have an appreciable impact on groundwater quality. Additional information has been added to Section 5.7 of the Final SEIS to address this issue.

**5.3.** The Army position is that groundwater as situated in New Mexico on Fort Bliss is not amenable to state regulation. (Reference letter dated March 15, 2002 from Mr. Landreth, Director of Environment at Fort Bliss, to Mr. Bearzi, NMED Hazardous Waste Division Chief.) The oxidation ponds at Doña Ana and McGregor Ranges are fully lined receptacles designed to receive and contain pond influent. They are not designed to discharge influent into the ground. Further, the periodic sampling results of pond influent, provided to the NMED Hazardous Waste Division, evidences that the ponds are not receiving contaminants that could affect any potable water supply or compromise public health.

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Implementation of new projects at Fort Bliss may involve the use of heavy equipment, thereby leading to the possibility of contaminant releases (e.g., fuel, hydraulic fluid, etc.) associated with equipment malfunctions. We advise all parties involved in the project to be aware of discharge notification requirements contained in Section 20.6.2.1203 NMAC. Compliance with the notification and response requirements will ensure the protection of ground water quality in the vicinity of the project.

5.4

Hazardous Waste

We want to stress a number of items in this section:

- The US Army's Installation Hazardous Waste Management Plan and Standard Operation Procedures (SOPs) for handling and storage of hazardous waste must be adequate
- The United States Army (US Army) states in Section 5.12.6 that approximately 12,000 pounds per year of additional hazardous waste may be generated under proposed Alternative 4. If the US Army plans on storing hazardous waste in New Mexico for more than 90 days, then a Resource Conservation and Recovery Act (RCRA) permit would be required.
- When ordnance impacts on-site during training and testing exercises, the US Army is exempt from RCRA. However, if the US Army manages impact sites and contaminated soil, then the US Army's remediation and recovery efforts may be subject to RCRA Subtitle C and/or D. Management of contaminated media and newly created waste associated with training exercises and contaminated soil is potentially subject to RCRA.
- If ordnance impacts off-site during training and testing exercises, then the US Army is subject to the Military Munitions Rule (see Subpart M to 40 CFR 266). This scenario is not addressed in the DSEIS.
- If training activities impact on-site in an aquifer recharge zone in the Tularosa, Mesilla, Salt, and/or Hueco Basins, then the US Army may be subject to the New Mexico's Water Quality Control Commission (WQCC) and/or Drinking Water Regulations.

5.5

Air Quality

Fort Bliss is in part located in New Mexico's Doña Ana and Otero Counties, which are currently considered to be in attainment with New Mexico and National Ambient Air Quality Standards (NAAQS); however, the Department's Air Quality Bureau (aqb) has recorded exceedances of the standard for particulate matter (PM10) in Doña Ana County. In response to the recorded exceedances of the standard for PM10, a Natural Events Action Plan (NEAP) for Doña Ana County has been prepared and submitted to the U.S. Environmental Protection Agency for approval. As part of the NEAP, a dust control ordinance (Doña Ana County Ordinance No. 194-2000; Erosion Control Regulation) was adopted by Doña Ana County. To ensure air quality standards are met, applicable local or county regulations requiring noise and/or dust control must be followed; if none are in effect for as specific project area, controlling construction-related air quality impacts during

5.6

**5.4.** Notification requirements for contaminant releases were described in Section 2.1.6.4 of the Draft SEIS. Additional information has also been added to Section 5.7 the Final SEIS to clarify this requirement.

**5.5.** Firing ranges and impact areas on Fort Bliss are designed and located so that the associated surface danger zones are completely contained within the installation boundaries. Therefore, ordnance is not expected to impact off site. However, the Army recognizes that any off-site impacts would be subject to the Military Munitions Rule, and a comment to that effect has been added in Section 5.12 of the Final SEIS.

**5.6.** The NEAP for Doña Ana County was referenced in Section 4.6.3.2 of the Draft SEIS. Fort Bliss supports the Doña Ana County NEAP and will abide by its provisions, although it is unlikely to be a prime source of windblown dust for most of the county's populated areas. Fort Bliss is currently controlling fugitive dust by limiting access and vehicle speed on its property.

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projects should be considered to reduce the impact of fugitive dust and/or noise on community members. The NEAP for Doña Ana County, and County Ordinance 194-2000 if applicable, should be referenced in the final environmental impact statement.

Please be advised that older buildings may contain asbestos. Rehabilitation, renovation, or demolition of these buildings are regulated through the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, Subpart M.

One of our concerns regarding rehabilitation, renovation, or demolition projects is that asbestos-containing material may be present and could be disturbed during the course of the project. If asbestos containing materials are disturbed without insuring that proper and safe procedures are used, then there is a risk of asbestos contamination to the environment as well as a risk of asbestos exposure by the public. If you have any questions concerning asbestos please call (505) 827-1494 and ask for Royce Wyrick or visit the New Mexico Environment Department website at <http://www.nmenv.state.nm.us/aqb/index.html> and click on the Asbestos link for more information.

Please note that an Environmental Assessment does not meet the requirements for a thorough asbestos inspection.

Compliance with New Mexico's smoke management regulation may be required for any prescribed burning activities that may take place. Emission reduction techniques for smoke should be developed and used. The use of at least one emission reduction technique is required for prescribed burns of more than 23 acres or 5000 cubic feet of pile volume per day. Additional requirements of the smoke management program include documentation on non-use of alternatives to fire, public notification, registration, and tracking. Information on all requirements is available on the Department's web site at [http://www.nmenv.state.nm.us/aqb/SMP/smp\\_index.html](http://www.nmenv.state.nm.us/aqb/SMP/smp_index.html).

Potential exists for temporary increases in dust and emissions from earthmoving, construction equipment, and other vehicles; however, the increases should not result in non-attainment of air quality standards. Dust control measures should be taken to minimize the release of particulates due to vehicular traffic and construction. Areas disturbed by the construction activities, within and adjacent to the project area should be reclaimed to avoid long-term problems with erosion and fugitive dust.

All asphalt, concrete, quarrying, crushing and screening facilities contracted in conjunction with the proposed project must have current and proper air quality permits. For more information on air quality permitting and modeling requirements, please refer to 20.2.72 NMAC.

If a back up generator is used at the facility, be advised that records should be kept of the hours of operation of the generator. An application for construction permit must be submitted for standby generators used 500 hours per year or more.

5.7

There should not be any long-term significant impacts to ambient air quality from activities as proposed in the DSEIS.

We appreciate the opportunity to comment on this document. Please let us know if you have any questions.

5.7. Records are kept of the hours of operation of each generator. No generator is used more than 500 hours per year.

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John Barrera  
December 4, 2006  
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Sincerely,

A handwritten signature in black ink, appearing to read "Ron Curry", is written over the word "Sincerely,".

Ron Curry  
Secretary

NMED File No. 2369ER

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**

**Comments Submitted December 11, 2006 by Glen DeGarmo in Response to:  
Fort Bliss, Texas and New Mexico, Mission and Master Plan.  
Draft Supplemental Programmatic Environmental Impact Statement, October 2006**

**Abstract:** The following several comments are organized around two principal topics: (1) Based upon the Department of Defense (DoD) standard for Heavy Brigade Combat Teams (HBCT), it is argued that the draft SEIS fails to justify its claim that additional off-road maneuver area is required on the McGregor Range of Fort Bliss. In fact, the argument presented in the SEIS is vague in its logic, its quantitative analysis lacks detail, and it is unsubstantiated. (2) The SEIS also is woefully deficient in its disclosure of data and information about the historic resources on Fort Bliss, particularly archaeological resources. The SEIS does not inform even a casual archaeologist about the characteristics of the historic resources on Fort Bliss, the irreplaceable scientific values inherent in those resources, or the probable severe adverse effect to those values expected to be caused by HBCTs' off-road maneuver in one of the most undisturbed areas of Fort Bliss. The proposed mitigation of those adverse effects merely consists of narratives describing several SOPs whose past and future effectiveness cannot be evaluated.

**To the Fort Bliss Command:** It would be a mistake to interpret the following several, critical comments as based upon a desire to completely eliminate the option of ever opening McGregor Range for off-road maneuver. And, the following strategy is suggested as a means to respond to the needs of the military mission of Fort Bliss while at the same time professionally respecting and preserving the scientific values in the archaeological record on Fort Bliss.

A. The probable severity of the adverse effects to the archaeological record is such that good management responding to the needs of the military mission and to the scientific values of the archaeological record requires that opening any area on McGregor Range for off-road maneuver be preceded by (1) disclosures permitting well founded understandings of the complexity of the archaeological record on the Range, (2) a thorough disclosure of the adverse effects expected to be caused to that record by the proposed use of the Range for off-road maneuvers by HBCTs, and (3) development and implementation of an appropriate, well designed mitigation program responsive to those effects.

B. Fort Bliss' military mission and the scientific values of the archaeological record on Fort Bliss would be well served if the elements of Paragraph A, above, could be accomplished with participation and oversight by independent archaeologists having the professional and academic archaeological knowledge and interests necessary to help develop and then to support the overall design and implementation of the archaeological component of the historic resources program. The irreplaceable scientific importance of the archaeological record on the Range demands no less. Therefore, I propose the following:

C. **Proposed Strategy for Opening additional off-Road maneuver area:** The near term (next several years) need for additional off-road maneuver area has not been justified by data and information in the draft SEIS, or by DoD standards. DoD standards indicate the existing off-road maneuver area on Fort Bliss is more than adequate to train the HCBTs currently scheduled to be stationed there. It then is reasonable to propose confining off-road maneuver to the existing maneuver areas until the historic resources program (cf. Paragraphs A and B above) is completed and mitigations enacted for sequentially selected areas on McGregor Range, at which time off-road maneuver in such areas could begin. The areas sequentially selected as having priority for this strategy could be those identified as contributing most meaningfully to training requirements. Assuming such priority areas would be closest to and bordering on existing maneuver areas, then the available maneuver area could be gradually expanded to accommodate those training requirements.

7.1

7.2

12-11-06 A. 124 12  
by [signature] 12 Oct 2006

Comments; Glen DeGarmo, Draft SEIS ---- GD-1

**7.1.** Fort Bliss has professional staff that meets the Secretary of the Interior's professional standards for archaeologists. There are contractors with some of the most knowledgeable Jornada Mogollon archaeologists working on projects for Fort Bliss. The revised Significance Standards are a collaborative effort with all of these professionals working on Fort Bliss, both Texas and New Mexico State Historic Preservation Officers, and the Tribes. Oversight by independent archaeologists having the professional academic knowledge and interests is provided through regular consultation with the two SHPOs and the Advisory Council on Historic Preservation.

**7.2.** Surveys and evaluations planned in accordance with the Programmatic Agreement for historic resources on Fort Bliss will be completed before new training areas are opened to off-road vehicle maneuvers, and appropriate mitigation measures will be in place before these areas are used for those maneuvers. The required surveys, evaluations, and mitigations will be completed in an expeditious manner in order to make as much maneuver area as possible available, consistent with the selected alternative. This approach will allow unit commanders to decide which areas best provide the training needed, based on various factors. This may not necessarily always be the closest-in areas, as one of the requirements is to provide variety in the training environment.



**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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**COMMENTS**

**Comment 1:** The SEIS fails to justify that the Heavy Brigade Combat Teams (HBCT) to be stationed at Fort Bliss require 216,000 to 352,000 acres (Alternatives 1-4) more off-road maneuver area than the 335,000 acres already available there. This conclusion is based upon several factors: (1) the much smaller amounts of maneuver area available at other installations where the number of HBCTs to be stationed is equal to or larger than at Fort Bliss, (2) the number of HBCTs typically to be in residence at Fort Bliss, and (3) The Department of Defense (DoD) standard for HBCT maneuver area compared the Fort Bliss' existing off-road maneuver area.

A. Four or more HBCTs will home station at five Army posts. Fort Bliss and one other post have roughly the same amounts of off-road maneuver area. The other three have significantly less. The five posts are: Fort Bliss, TX, 4 HBCTs, 335,000 acres; Fort Bragg, NC, 4 HBCTs, 105,733 acres; Fort Campbell, KY, 4 HBCTs, 66,424 acres; Fort Carson, CO, 4 HBCTs, 351,124 acres; and Fort Hood TX, 5 HBCTs, 136,912 acres (Army News, 2005. BRAC 2004. DoD May 2005, Table 7-5, page 57. SEIS, page S-6, lines 204-208 and Figure S-1, page S-3).

B. Typically only three of the four HBCTs home stationed at Fort Bliss will be in residence at one time. The four brigades will sequentially deploy to another station according to the Army's planned rotational cycle (DoD, May 2005, page A-37; SEIS, page S-5, lines 169-172).

C. The SEIS (page S-4, lines 121-137) shows calculations that 7,000 km<sup>2</sup>days are needed for two battalion (one component of a HBCT) exercises per year. Then 528,000 km<sup>2</sup>d are said to be required for four HBCTs (cf. Paragraph B, above) and for other unidentified users whose requirements are not disclosed. The SEIS provides no data justifying the 528,000 km<sup>2</sup>d requirement for off-road maneuver area. A recent DoD standard is used below to evaluate Fort Bliss' existing off-road maneuver area capability compared to foreseeable need.

(I) The SEIS states that Army Training Circular TC-25-1 is the source of information about HBCTs' requirement for training area. But, DoD says that TC-25-1, last updated 15 March 2004, does not identify the training area required to train HBCTs (DoD, May 2005, page A-31. Doctrine and Training Publications 2006). DoD then evaluates that need and concludes the requirement is 39,056,875 annual acre days or 158,125 annual km<sup>2</sup>d for one HBCT to train to standard (calculated from DoD, May 2005, Table 22, page A-32. cf. Footnote 1).

(II) Fort Bliss has 335,000 acres (1,356 km<sup>2</sup>) of existing off-road maneuver area (SEIS, page S-6). Assuming 351 training days annually (cf. Footnote 2), there are 475,956 annual km<sup>2</sup>d now available on Fort Bliss. If two HBCTs are continuously in the field they require 316,250 annual km<sup>2</sup>d, and there is an excess of 159,706 km<sup>2</sup>d available. When three HBCTs are in residence in FY2010, they require 474,375 km<sup>2</sup>days if they train continuously. The existing off-road maneuver areas still have an excess of 1,581 annual km<sup>2</sup>days (cf. SEIS Figure 3.2-1, page 3.2-3 and Footnote 3).

7.3

7.4

**Footnotes:**

1. Other data in the referenced DoD document confuse the issue, for without explanation of its derivation 51,738 km<sup>2</sup>d also are stated as necessary to train a "Heavy Maneuver Brigade" conducting "mounted" exercises and 896 km<sup>2</sup>d for "dismounted" exercises (DoD, May 2005, Table 7, page A-17). The analysis in Comment 1 C (I) uses the larger km<sup>2</sup>d requirement.

2. This calculation uses 351 days (365 days - 14 days for Xmas holidays) instead of the Army's 242 annual training days. The 242 day standard apparently is the time an individual soldier is expected to spend on duty each year. However, the availability of off-maneuver areas for training is neither determined by nor limited by weekends and holidays. They can have virtually continuous usage as different units (platoon, company, battalion, brigade) rotate into and out of the maneuver area.

3. Realistically, the HBCTs' equipment and personnel cannot be in the field continuously. Using as a model the rotational cycle of the three line squadrons of the 3<sup>rd</sup> ACR when it was home stationed at Fort Bliss, each brigade will be in the field only one month in every three. During two months in the three month rotational cycle, a brigade having just completed one continuous month in the field will provide "training holidays" and leave time, perform equipment maintenance and repair, post support, live fire gunnery, and preparation for its next rotation into the maneuver area. There probably will be two brigades in the field only for short periods (perhaps 14-21 days annually) if they conduct brigade-on-brigade exercises.

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7.3. An expanded discussion in Section 1.3.5 of the Final SEIS provides more detail on how TC 25-1 was used to calculate the total training requirement. Because training doctrine is being refined in response to the move to a modular force, the 4<sup>th</sup> BCT, 1<sup>st</sup> Cavalry Division was consulted to adapt relevant portions of TC 25-1 to more accurately reflect the needs of the Heavy BCTs.

This information resulted in an estimated annual requirement of approximately 109,000 km<sup>2</sup>d per Heavy BCT, which is somewhat less than the 158,125 km<sup>2</sup>d noted in this comment. If, based on FORSCOM rotation policy, three of the four Heavy BCTs are training at Fort Bliss at any give time, the requirement is 327,000 km<sup>2</sup>d/year for the 1<sup>st</sup> Armor Division alone. Other units identified through Base Realignment and Closure for stationing at Fort Bliss include an Artillery Brigade, a Sustainment Brigade, and a Combat Aviation Brigade, as well as Echelons Above Brigade, all of which also require training. In addition, Fort Bliss continues to support a mobilization mission with an estimated off-road vehicle maneuver requirement of approximately 55,000 km<sup>2</sup>d/year. As Section 1.3.5 of the Final SEIS shows, together, all the requirements sum to approximately 528,000 km<sup>2</sup>d/year.

7.4. As the SEIS also indicates, it would be difficult and impractical to provide 351 off-road vehicle training days annually for a number of reasons. First, this would leave no time for other types of training, including missile firings that are still part of the Fort Bliss mission. Second, this would eliminate any public access to installation lands for recreation and hunting. Third, it would leave inadequate time for maintenance and environmental management activities needed to sustain the land and training base.

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**Comment 2.** The SEIS fails to disclose data and information needed by archaeologists to evaluate the characteristics and importance of the archaeological record on Fort Bliss. The SEIS also does not disclose that (1) the thousands of archaeological resources on Fort Bliss document several thousand years of human prehistory, (2) the resources on McGregor Range are some of the best preserved on the installation, and (3) the substantial environmental variability encompassed by Fort Bliss provides opportunities for identification and study of the processes by which prehistoric human populations developed different technologies, organizational features, and land use strategies to adapt to and use, and to adjust to long term changes in, that variability.

A. The SEIS does not disclose quantitative data about either the numbers of sites or the functional variability of sites within and between the different cultural periods and phases represented in the archaeological record on Fort Bliss. The principal information provided is in one table (Table 4.9-1, page 4.9-5) reporting the total archaeological sites recorded in different real estate management areas of Fort Bliss and the number of sites in each area with different National Register of Historic Places (NRHP) status. These generalized data do not disclose quantitative data and fundamental interpretive information required even for primitive archaeological descriptive purposes (cf. pages 4.9-6 to 4.9-9 and Footnote 3).

7.5

B. The SEIS does not disclose the level of confidence associated with the reported densities of 2.5 - 30 archaeological sites/km<sup>2</sup> in different land management units of the installation (cf. Table 4.9-2, page 4.9-7). There is no disclosure about how these data were calculated, whether the raw data resulting from different projects' survey techniques were lumped together, or if the different surveys' results were standardized using some unreported procedure. Note: experiments testing survey techniques have recorded 20-60 sites/km<sup>2</sup> on the desert floor of the Tularosa Basin (cf. Footnote 4).

7.6

C. The SEIS does not disclose how distributions of different kinds of sites correlate to Fort Bliss' substantial environmental variability (cf. Affected Environment, 4.0; subsections 4.5, 4.7, and 4.8. and Footnote 5).

D. Given that the SEIS does not disclose the kinds of data and information identified in the three paragraphs above, it is impossible for archaeologists to understand the analytic and scientific characteristics of the archaeological record on Fort Bliss, or to identify the kinds of data thought to be "important in prehistory" (NRHP) contained in that record. Many of these raw data may be in Fort Bliss' data base (page 4.9-9, lines 331-333), but that does make them available to archaeologists unassociated with Fort Bliss. Since these data have not regularly been made easily available to the archaeological community in accordance with recognized professional standards, it is Fort Bliss responsibility to describe, synthesize, interpret, and disclose those data in EIS documents. Note, Incorporating by reference documents not previously available is inadequate disclosure (Footnote 3).

7.7

**Footnotes:**

3. Historically, lack of access to Fort Bliss' archaeological reports since 1994 has made it difficult for archaeologists to independently study and synthesize data and information about the archaeological record on Fort Bliss. Fort Bliss recently has commenced a flurry of effort to make reports and data available, but it has not been sufficiently timely for meaningful access by the archaeological community. For example, copies of over 100 archaeological project reports finally were provided to three libraries in the vicinity of Fort Bliss at the end of August 2006. However, none were made available to the libraries in other parts of New Mexico, (e.g., Albuquerque and Santa Fe) where there are substantial numbers of practicing and academic archaeologists. A large volume of site and project reports also was sent to the archaeological records division of the SHPO's office in Santa Fe, NM about the same time. The volume is so large that Fort Bliss is funding a full, two year position for the SHPO's staff to help organize and enter those data into the state's computerized archaeological data base. The CRM SOP #12 (paragraph 12.5.2) also states that Fort Bliss will begin to make archeological reports with "research value" available to universities and others sometime in the future.

4. There were major differences in contracted archaeological surveys performed on the installation prior to about 1982. Some crew member spacings of 2-300 meters were later unofficially reported. Subsequent projects standardized crew member spacing at a nominal 33 meters. The different spacings resulted in significant differences in both densities and sizes of recorded sites. These differences can easily be seen by comparing the known site density in 1986 between Maneuver Areas 1 and 2 and between McGregor Range and Maneuver Areas 3-7. The SEIS does not disclose these differences. Note: experimental survey projects were conducted prior to 1994 to test results of various crew member spacing. One 2 km<sup>2</sup> block was repeatedly surveyed with different crews with different spacings (1, 16, 33, and 46 meters) with surprising differences in results; another project "piece plotted" a 14 km<sup>2</sup> block in Maneuver Area 2. Site densities of 20-60 sites per km<sup>2</sup> were recorded.

5. Archaeologists have long known that different kinds of sites have different densities in different environmental zones as a result of different land use and residential patterns characteristic of the human populations in different prehistoric time periods.

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7.5. Quantitative data on total number of sites by management area is disclosed in Table 4.9-1 of the Draft SEIS, which also reports the NRHP eligibility recommendations of the Fort Bliss Directorate of Environment. Archaeological data and fundamental interpretive data can be found in the numerous reports made available at the libraries in El Paso, Las Cruces, and Alamogordo prior to and during the review period for the Draft SEIS.

7.6. For the experiment mentioned in which results were yielding 20-60 sites per km<sup>2</sup>, this is likely the result of the site definition criteria employed. During that period, sites were defined as any three "data types" and often consisted of only a handful of artifacts (for example, a single flake, one ceramic sherd, and one piece of fire-cracked rock would qualify as a "site").

The new criteria for sites are outlined in Section 4.4.1.2.3.2 of the PA, which essentially eliminates many of the very low density sites that are better treated as Isolated Occurrences. This was done in consultation with the ACHP, and Texas and New Mexico SHPOs.

Information on the distribution of different kinds of sites in different environmental zones can be found in a number of the publications that are available publicly. Information is also available in the Significance Standards (Abbott et al. 1996), also in the local libraries.

Known site data are broadly summarized for the range areas in the SEIS at a level of detail appropriate for the analysis and decisions being made pursuant to the SEIS. More detailed data correlating site type with landform and resource distribution are found in the reports available in local libraries.

7.7. The data considered important to prehistory are outlined in the Significance Standards (Abbott et al. 1996), which were consulted on by both the Texas and New Mexico SHPOs and which are available at local libraries. Much of this raw data is also available to the archaeological community through the various published reports describing these projects. This information is also currently available in the libraries, through the New Mexico ARMS, and directly to professional archaeologists who contact the Fort Bliss Directorate of Environment. Every effort has been made to provide either a paper or digital copy of any report that is requested, and it is usually mailed at no expense to the researcher. In addition, the Fort Bliss Directorate of Environment keeps a mailing list of interested people who receive a copy of the brochure that summarizes each project in which the final deliverables are accepted.

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**Comment 3:** The SEIS' disclosure of probable adverse effects (loss of scientific data) to the thousands of historic resources on Fort Bliss is superficial at best. Off-road maneuver is not identified as the principal source of expected impact. There is no disclosure that off-road maneuver can result in irreplaceable loss of untold amounts of data with the potential to provide understandings of the prehistory of the entire Tularosa Basin and to form the bases for new understandings of the prehistory of south central New Mexico. There is no disclosure that maneuver will cause different levels of adverse effect to sites of different sizes, cultural periods and phases, depositional characteristics, and locations. The relevant text in the SEIS is superficial and merely states the obvious.

7.8

A. "Ground disturbing activities that occur on Fort Bliss can potentially impact historic properties through destruction of the resource or through damaging the resource's integrity .."(page 5.9-2, lines 80-82. cf. page 5.15-12, lines 497-498).

B. In "Cumulative Impacts" it is stated that "The primary cultural resources cumulative impact issue is the potential loss of historic resources and the scientific information they may offer due to increased ground disturbance and increased exposure to vandalism with the population growth ..." (page 5.15-12, lines 493-496).

C. In "Summary of Irreversible and Irretrievable Commitments of Resources" there is the bland statement that "It would be considered an irretrievable commitment if historic properties [sic] that may be eligible for listing in the National Register of Historic Places were inadvertently lost or damaged during ground disturbing activities or training or due to vandalism" (page 5.16-1, lines 17-19).

D. The SEIS' lack of disclosure of adverse effects is illustrated in "Summary of Probable Adverse Effects That Cannot be Avoided" in which adverse effects to historic resources are not even mentioned (page 5.18-1. cf. Footnote 6).

7.9

**Comment 4:** The SEIS' disclosure of the proposed mitigation principally consists of narratives (SOPs) in a Programmatic Agreement (Table 3.9-2, page 3.9-5; Appendix B; cf. Footnote 7). But, the SEIS does not disclose how effective these procedures have been even though much of their language is drawn from Fort Bliss' Integrated Cultural Resources Management Plan (ICRMP) drafted in 1998 (cf. Footnote 8). There is no disclosure describing if these procedures result in adverse effects being effectively "reduced or mitigated in accordance with the Programmatic Agreement and the ICRMP" (Cultural Resources, Table 3.9-1, page 3.9-5), and there are no bases for evaluating if continuing the same procedures will be effective.

7.10

A. The SEIS does not disclose if the red zones (page 5.9-4, lines 180-181. page 5.9-5, lines 218-220) are an effective element of the mitigation strategy (cf. Footnote 9). Whether or not their probable future content will adequately represent the archaeological record also cannot be evaluated, for the SEIS states that "Fort Bliss is in the process of redefining Red and Green zones throughout [Fort Bliss], including McGregor Range, based on resurveys and NRHP eligibility" (page 4.9-5, lines 194-196). The SEIS does not disclose what data or new interpretations justify the redefinitions; titles of some reports suggest that such information may exist (cf. Footnote 3). There also is no disclosure of how new translations of NRHP criteria will be operationalized for redefinition of existing and for additional red or green zones (cf. Comment 6 A.).

7.11

B. The SEIS does not disclose, and it is not possible to evaluate the possible future effectiveness of mitigations being proposed in the revised Programmatic Agreement being negotiated "... with the Advisory Council on Historic Preservation and the cognizant State historic Preservation Officers ...", (page 5.13-12, lines 500-502). Further, the SEIS also does not disclose, and it is impossible to evaluate planned revisions to the ICRMP (page 4.9-4, lines 159-161).

7.12

C. The SEIS does not disclose if maps always prepared for off-road FTxs routinely receive a REC (page A-11, lines 284-287) or if maps are reviewed and planned concentrations of ground disturbing activities (e.g., assembly areas, anti-tank ditches, field fortifications, FARPs, phase lines with hull-down positions) are identified and their locations adjusted to reduce adverse effect to known historic resources with undetermined eligibility for the NRHP (cf. Appendix B, page 80).

7.13

**Footnotes:**

6. It is naive, if not dishonest, to imply that all adverse effects to historic resources will be avoided.

7. The effectiveness, or lack thereof, of any procedure is as effective as its implementation.

8. The 1982 Historic Preservation Plan and the ICRMP are not identified in the list of Fort Bliss' reports (Footnote 3).

9. This information was requested in scoping comments for the SEIS (DeGarmo 2006, Paragraph VI).

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Upon receipt of this brochure, if there is interest in having the report, the recipient may contact Fort Bliss and a paper or digital copy will be provided when available. These documents have been readily available to any archaeologist who has contacted Fort Bliss since 1995. The reports are also available through the appropriate SHPO office.

**7.8.** Loss of data can occur due to impacts from off-road vehicles as noted in Section 5.9 of the Draft SEIS. Any effects would only be adverse effects if they occur to NRHP-eligible properties per the National Historic Preservation Act. Mitigation measures will be put in place per the Programmatic Agreement to minimize or avoid those impacts. Properties of undetermined eligibility are treated as eligible until a determination has been made and concurred in by the SHPO.

There are at present no data to suggest that off-road vehicle maneuvers will cause different levels of adverse effects to different cultural periods and phases. However, the potential to cause differing effects to different depositional characteristics, sizes, and locations will have to be studied over time through careful archaeological monitoring and continued site evaluations on McGregor Range. If the signatories of the PA determine the measures are not effective, new measures will be developed in consultation with all parties to the PA, and the PA will be amended as needed.

**7.9.** Section 5.18 of the Draft SEIS did not list impacts to historic resources as unavoidable because measures exist to mitigate effects to historic properties. However, it is acknowledged that some loss of cultural resources is likely unavoidable, as is noted in Section 5.9 of the Draft SEIS, and a statement to this effect has been added in Section 5.18 of the Final SEIS.

**7.10.** The procedures for managing these properties incorporate some of the aspects of the ICRMP, but otherwise are new procedures that will have to be evaluated as they are implemented. In the event that these procedures do not provide adequate management as determined by one or more of the signatories of the PA, new procedures will need to be developed through consultation with the SHPOs and the ACHP, and the PA will be amended as needed.

**7.11.** Restricted areas have been minimally impacted and still contain sufficient integrity and data to be considered significant under the NHPA; Fort Bliss believes these restricted areas have been successful in preserving archaeological sites. Complete data for defining restricted areas are not yet available and data collection is currently in progress.

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**Comment 5:** The SEIS does not disclose the analytical rationale for using environmental variables defined for Fort Bliss' GIS, ITAM data base to identify environmental areas with high priority archaeological survey (page 5.9-1, lines 13-17. PA, pages 35-36). The SEIS does not disclose if the variables will be used only to try to identify areas with high densities of sites or if the intent is also to test the utility of those variables for predictions about the distributional characteristics of different kinds of sites (cf. Comment 2, Paragraph C and Footnote 10). Given the cautionary "Concluding Comments" of Judge and Sebastian (1988: 638-641), it is troubling that the SEIS fails to disclose that confidence in the GIS data base has been established by previous tests of site distributions using Tularosa Basin archaeological data.

7.14

**Comment 6:** There is inadequate disclosure of criteria that have been, and will be, used to evaluate archaeological resources ... a fundamental analytical and resource management issue. Determination of the actual and potential eligibility of archaeological resources for inclusion in the NRHP determines whether or not adverse effects to sites and areas will be mitigated. Some statements in the SEIS are cause for concern about this issue.

A. The SEIS does not disclose the operational translations of the generalized NRHP eligibility criteria developed by Abbott et al. (1996) and used by Fort Bliss to determine eligibility, or lack thereof, for different sites. Further, the SEIS states that "A contract is currently underway to revise and update these [translations] incorporating what we have learned about the nature and extent of archaeology in this region in the last ten years" (Appendix B, Section 4.4.2, pages 28-29). However, the SEIS does not disclose the justification(s) for why or how these translations need to be changed. The lack of disclosures prevents archaeologists from independently evaluating if Fort Bliss' implementation of the NRHP's criteria has demonstrated a high probability of identifying scientifically important values of the archaeological record or if future evaluations will have a high probability of identifying those values.

7.15

B. The SEIS contains statements implying the paradigm (Kuhn 1996) underlying planned translations of NRHP criteria and the implementation of the ICRMP may not represent the best interests of both the military mission and the scientific values inherent in the archaeological record. Detailed disclosure of the statements' meanings is needed for clarification of their intent, for they could be interpreted to mean: (1) Hundreds of sites with minor loss of integrity from off-road maneuver can be evaluated as not being eligible for the NRHP and requiring no further consideration by the ICRMP; (2) A statement about the red zones implies there may be no statistical bases for concern with other sites on Fort Bliss; (3) A statement about "acceptable loss" combined with the planned changed translations of the NRHP can have various meanings, some disastrous. For example, all sites on Fort Bliss deemed to be "repetitive" with a Mesilla Phase pithouse village or a burned rock midden either on or off post could be evaluated as ineligible for the NRHP and their loss "acceptable" with no testing, data recovery, or interpretation. I frequently heard this point of view expressed by Fort Bliss personnel between 1977 and 1994. These statements include (a) Resource integrity is "a key criterion for determining historic resources' eligibility to the NRHP" (page 5.9-2, lines 80-82). (b) The SEIS states that red zones "contain representative samples of the type of sites present on Fort Bliss" (page 4.9-5, lines 189-191. cf. Footnote 11). (c) "Acceptable Loss" of archaeological sites is defined in CRM SOP #8 as those "... cases of repetitive site types that offer no new information available at other sites or already obtained ..." (Appendix B, page 45 and Section 4.4.2, pages 28-29).

7.16

**Footnote:**

10. If the GIS model is used only to try to identify areas of high site density, then there is the distinct danger of not locating sites essential for developing interpretations of significant elements of the archaeological record. Some simple examples of the issue (cf. Cordell 1984; Cordell and Gumerman 1989; Stuart and Gauthier 1981): (1) Different sites of both the Mesilla and El Paso Phases probably have different densities correlated with different environmental variables important to their use. (2) Both PaleoIndian and Archaic sites probably have low densities with a different environmental distributions than Formative Period sites. This general issue is of extreme importance given that archaeological sites on McGregor Range have greater integrity than those in most other parts of the installation and that these sites probably have greater informational potential that will suffer extensive adverse effect from off-road maneuvering by hundreds of tanks, APCs, and wheeled vehicles.

11. The statement is false. The original red zones were never intended to contain, and were never described as containing, valid statistical samples of well analyzed and interpreted, chronological and functional variability in sites comprising the archaeological record on Fort Bliss (cf. Fort Bliss 1982: 8-10). The red zones contained sites parsed by cultural phase. Intra-phase samples of sites then were defined using the Binomial Distribution on the distribution of intra-phase counts of the different artifact types on individual sites recorded during field surveys conducted prior to 1982. The cumulative sum of all sites in all samples then were grouped into red zones distributed throughout the existing maneuver area. The sites in the red zones never had been tested, excavated, analyzed, interpreted, and synthesized as required for the SEIS' statement to be applicable even to the existing maneuver areas.

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The new translations of the NRHP criteria will be well defined in the revised Significance Standards, currently being prepared, and will be done in consultation with the New Mexico and Texas SHPOs. Once these are agreed upon by all parties to the Programmatic Agreement, they will become a document incorporated in the PA.

**7.12.** Revisions to the ICRMP will be done in consultation with the SHPOs and an environmental assessment will be prepared, which will allow public comment on the document. The ICRMP will be revised to reflect the Programmatic Agreement and will include Standard Operating Procedures for complying with NAGPRA and ARPA.

**7.13.** All training exercises with the potential to affect historic properties are reviewed through the Range Facility Management Support System (RFMSS) or Form 88 system described in Appendix A of the SEIS and analyzed by the Fort Bliss Directorate of Environment before approval is sent to Range Scheduling. Coordinates are provided and planned concentrations of ground disturbing activities are identified and their locations adjusted to reduce adverse effects to NRHP-eligible and undetermined properties. In addition, Range Liaisons periodically check the units in the field to ensure they are set up in the proper locations.

**7.14.** The model adopted methods from practices and findings of Predictive Locational Modeling of Archaeological Resources in McGregor Range, Southern Tularosa Basin, New Mexico (Zeidler, Hargrave, and Haag 2002) and Significance Standards for Prehistoric Archaeological Site at Fort Bliss: A Design for Further Research and the Management of Cultural Resources (Abbott et. al 1996). Parameters include: unsurveyed areas west of Otero Mesa on McGregor Range, distance/proximity of water sources (playas, depressions, alluvial fans, intermittent drainages, streams), soils/geomorphology appropriate for survey including surface visibility and depositional/erosional environment, and slope (1-10 percent optimal). This was done through a variety of environmental layers and tools available in ArcGIS. The intent is to identify areas with high potential for archaeological sites for survey unit placement. At present, it is not being used to test the utility of those variables for predictions about distributional characteristics of different types of sites. Fort Bliss is using this as a way of selecting survey locations with the good-faith intent of identifying historic properties within the 30 percent sample parcels to increase understanding of the archaeological record on McGregor Range.

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**Miscellaneous Comments:** The comments in this section are concerned with several topics, all of which are relevant to how the Programmatic Agreement and the ICRMP have been and will be implemented.

**Comment 7:** Ref: Appendix B, SOP #8, page 45: "Justification to conduct data recovery is typically found in a research design or data recovery plan related to a specific archaeological site." **A difficult but significant question:** What was the paradigm (Kuhn 1996) that characterized the ICRMP's and PA's formulators' views about the value of the archaeological record and its component sites, the specific kinds of questions incorporated into research designs, revisions of red zones and the establishment of new ones, translation of criteria for inclusion in the NRHP, the value of scientific study of the archaeological record, and indeed the anticipated product of the ICRMP and the PA (cf. Fort Bliss 1982: 2-7)? Potential answers to this question are highly variable, but they disclose the intellectual underpinning for the entire historic resources program on Fort Bliss. A response that translates into "compliance with applicable law and regulation" does not answer this question, for potentially there are many philosophies that can underlie strategies for some kinds of compliance.

7.17

**Comment 8:** Ref: Figures 4.1-1 and 4.1-2 show locations, configurations, and apparent sizes of red zones to be the same as originally defined. **Question:** Have the red zones not already been effectively redefined for CX and REC purposes using the results of the several studies conducted on sites they contain?

7.18

**Comment 9:** Ref: Appendix B, SOP #1, section 1.4.1: **Questions:** What method is used to identify red zones to personnel conducting a military field training exercise (FTX)? Are red zones monitored to evaluate their "no activity" designation? If red zones are monitored, then how often are they monitored and by whom? What procedures are followed and what remedial actions are taken if violations of red zones are identified (cf. Footnote 9)?

7.19

**Comment 10:** Ref: page 5.9-5, lines 219-220, et al.: "Management ... would include defining Red and Green zones within [additional off-road maneuver area on McGregor Range]." **Question:** Will the strategy to define new red zones be an "individual site" strategy where individual sites will be defined as red zones, or will it be a populational strategy whose results are represented by the cumulative sum of samples of all the several kinds of sites contained in the red zones (Ref. Comment 2 and Comment 7)? If the latter, then how will suitable "samples" be identified?

7.20

**Comment 11:** Ref Comment 7: Many possible sampling and funding strategies might be used to design data recovery projects. **Questions:** (1) What sampling philosophy (cf. Footnote 12) underlies Fort Bliss staff's evaluations that data recovery projects submitted by archaeological contractors do or do not include appropriate, representative sampling criteria? (2) What provisions are made to ensure funding is available to respond to surprise findings requiring more extensive excavation, analysis, and funding than initially provided for data recovery projects (cf. Footnotes 9 and 13)?

7.21

**Comment 12:** Ref: Appendix B, SOP #10, page 52: "In the event of accidental discovery of archaeological material during a ... field training exercise in the maneuver areas, all [training] affecting the materials must cease immediately." **Question:** What evidence exists that military personnel will adjust FTX activity if archaeological materials are seen? This requirement is merely a "paper tiger," for given the quantity of unprotected (non red zone) materials/sites that will exist on McGregor Range, FTX personnel will not know what is, or is not, already discovered. Moreover, given the intensity of FTXs, FTX personnel have recognizing, reporting, and avoiding archaeological materials at the bottom of their priorities.

7.22

**Footnotes:**

12. A data recovery project may provide data for well grounded or seriously flawed interpretations. Some excavation projects can be concerned principally with chronological questions for which limited sampling might be sufficient. Excavation only inside pueblo or pithouse structures may provide information about chronology, construction techniques, variation in interior features, and activities conducted inside the structures. But, there would be no data or information about outside storage facilities, activity areas, or middens that were significant components of residential locations. Modern excavation projects are concerned with answering questions about seasonality, land use strategy and resource utilization, technology, social organization, inter- and intra-regional trade, and other questions for which well grounded sampling strategies are required.

13. Test excavations, even if very extensive, only provide hints about a site's characteristics and its data content. But, estimates of the amount of excavation and analysis needed for data recovery projects are grounded upon the results of test excavations. Therefore, data recovery projects frequently encounter surprises, sometimes major, requiring more extensive excavation, analysis, and funding responsive to a site's unexpected complexity.

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7.15. Abbott et al. 1996 is available for review at public libraries in El Paso, Alamogordo, and Las Cruces. This document was done in consultation with the Texas and New Mexico SHPOs. The revised Significance Standards will address the body of knowledge available and what translations may need to be changed. This will be done in consultation with the SHPOs and the ACHP.

7.16. Minor loss of integrity is unlikely to be sufficient to find a site ineligible for the NRHP and cannot be taken out of context without an evaluation of the data potential and its significance on that site.

At present, new restricted areas are being defined with regard to their potential to provide significant data as outlined in the Significance Standards. This procedure is subjective and conducted in consultation with the appropriate SHPO. In the future, a statistical procedure may be developed.

As the PA indicates, (Section 8.2), loss cannot be considered acceptable until the requirements of 36 CFR 800 and other SOPs in the PA are met. Any mitigation sampling strategy in which redundant site data is being considered would be done in consultation with the signatories of the PA. If they are agreed upon, then they would satisfy the requirements of Section 106 of the NHPA.

7.17. Fort Bliss no longer limits itself to the previous, strict paradigm of Julian Steward Cultural Ecology. Currently, a variety of theoretical perspectives is incorporated, depending on the project, questions being asked, and researchers conducting the work. These perspectives may include Processualism/Cultural Ecology, Behavioral Archaeology, Human Behavioral Ecology, and others. A discussion of paradigms and theoretical perspectives will be included in the revised Significance Standards but will not be strictly limited as previously to Cultural Ecology and Systems Theory.

All Research Designs are submitted to the Texas and New Mexico SHPOs and the Tribes for review. Their input is incorporated into those documents to produce a professional and scientific program for data collection, analysis, and interpretation.

7.18. No, the restricted areas have not been redefined for CX and REC purposes.

7.19. Restricted areas are clearly marked on all range maps. They are uploaded for training purposes into the GIS section of RFMSS for training planners, they are considered when RFMSS and Form 88 requests are provided, and if any training locations are requested in restricted areas, the requester is told to move the locations out of the restricted areas.



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**Comment 13:** The Department of Defense (DoD) reported to BRAC that Fort Bliss has 992,303 acres of "maneuver area." (DoD 2005: Table 30, page A-30). The text in DoD (2005) clearly shows this acreage was one of the major factors contributing to DoD's recommendation to convert Fort Bliss into a "major mounted maneuver post." BRAC's subsequent approval for stationing 4 HBCTs at Fort Bliss, and Fort Bliss' subsequent development of this SEIS. Without clarification, the acreage reported by DoD is subject to significant differences in interpretation. **Question:** Who reported the acreage to DoD that was in turn reported to BRAC as available "maneuver area" on Fort Bliss and why was that submission not clarified to report that only 335,000 acres of existing off-road maneuver were available?

7.23

**Comment 14:** Ref. Briefing slide produced by Team Bliss reportedly for DoD's briefing to BRAC (personal communication) contains the bullet point "**Largest Maneuver Area in the Army - One Million acres of training space - with no environmental limitations!**" [Emphasis in the original], and the SEIS' statement (page S-1, lines 26-29) that Fort Bliss' proposes to "Modify current land use on Fort Bliss ... without compromising the commitment to stewardship of natural and cultural resources." The messages of the bullet point and the SEIS statement are significantly contradictory. **Question:** Given these contradictory statements and the many issues raised by the comments provided in this submission, what is Fort Bliss' commitment to high quality, professional stewardship of natural and cultural resources ?

7.24

**BIBLIOGRAPHY**

- Army News Service  
2005 "Army Active Brigade Combat Team Locations." August 1, 2005
- BRAC  
2004 "Jun 04 USA Stationing Baseline." Briefing graphic for Senior Review Group #21 meeting November 23, 2004  
2004
- DeGarmo, Glen  
2006 Scoping comments submitted January 5, 2006.
- Department of Defense  
2005 Department of Defense Report to the Defense Base Closure and Realignment Commission, "Department of the Army Analysis and Recommendations, BRAC 2005," Volume III, May 2005
- Doctrine and Training Publications  
2006 List of Training Circulars (et al) downloaded from AKO Army online December 1, 2006.
- Fort Bliss  
1982 Historic Preservation Plan for Fort Bliss Texas, Fort Bliss, Texas. 7 April 1982.
- 1998 United States Army Integrated Cultural Resources Management Plan for Fort Bliss Through Fiscal Year 2000. Draft for Review. Fort Bliss. June 1998.
- Judge, James W. And Lynne Sebastian (eds)  
1988 Quantifying the Present and Predicting the Past: Theory, Method and Applications of Archaeological Predictive Modeling. U.S. Department of the Interior, Bureau of Land Management Service Center. Denver, CO.
- Kuhn, Thomas S.  
1996 The Structure of Scientific Revolutions, 3<sup>rd</sup> Edition. The University of Chicago Press, Chicago and London.
- Training Circular No. 25-1  
2004 "Training Land." Headquarters, Department of the Army. Washington, DC. 15 March 2004.

Glen DeGarmo: Comments, Draft SEIS ---- GD-7

In the field, restricted areas have been marked around the perimeter with siber stakes (t-post with reflector tubes) and "Off Limits" signs. This is briefed to all incoming units, the Commanders Training Course, and the Environmental Compliance Officers course.

There are signs near the restricted areas that describe what a siber stake is and that they must be avoided. Restricted areas are periodically monitored by the Range Liaisons as well as the Combined Arms Battalion during routine patrols of the ranges. In addition, specific restricted areas are identified for monitoring when units have requested training areas nearby.

**7.20.** Both population and individual sites will be used. For example, McGregor Pueblo and Escondido Pueblo will be single site restricted areas. Large groups of high density sites representing different site types, as defined in the revised Significance Standards, with different cultural temporal affiliations will be assigned as restricted areas in consultation with the appropriate SHPOs. No statistical method has been developed at present.

**7.21.** The data recovery plan, reports, and results are all reviewed by qualified on-staff professional archaeologists and then submitted for consultation with the appropriate SHPOs, ACHP, and Tribes to ensure their adequacy.

In the event of surprise findings, the Fort Bliss Directorate of Environment obtains additional funding and modifies an existing contract or issues a new contract to complete the work.

**7.22.** Periodic monitoring by the Range Liaisons checks the units to ensure their locations match that of the range request. If they do not, they are notified and will move locations. Extensive training is made available to the units concerning their responsibilities in the event cultural materials are found. Each unit is assigned a trained Environmental Compliance Officer (ECO) whose responsibility is to notify the Directorate of Environment in the case of accidental discovery. Not all accidental discoveries will be reported, but Fort Bliss will continue to educate and reinforce the importance of doing so.

**7.23.** The Army accurately reported Fort Bliss' capabilities to the BRAC Commission. Fort Bliss includes a total of approximately 1,116,539 acres (see Section 4.1 of the Draft SEIS). Subtracting the Main Cantonment Area, Castner Range, the portion of McGregor Range leased from the U.S. Forest Service, Culp Canyon Wilderness Study Area, and the impact area of Doña Ana Range, which are not suitable for off-road vehicle maneuvers, leaves approximately 992,000 acres, including lands withdrawn under Public Law (PL) 106-65 for "military

**maneuvering**, training, and equipment development and testing...” [emphasis added]. The information provided to the BRAC Commission included a land use map of Fort Bliss similar to Figure 3.1-2 in the Draft SEIS, which clearly shows where off-road vehicle maneuvers are permitted.

It should be noted that “maneuvers” include on-road vehicle and dismounted (on-foot) training, in addition to off-road vehicle maneuvers. As Figure 3.1-2 shows, dismounted maneuvers were authorized in all training areas on Fort Bliss, and on-road vehicle maneuvers were authorized in all training areas except Culp Canyon Wilderness Study Area in the Record of Decision for the 2000 Mission and Master Plan PEIS.

**7.24.** Fort Bliss’ extensive environmental stewardship program is detailed in Chapter 2 and further in Appendix A of the Draft SEIS. Stewardship plans, including the Integrated Natural Resources Management Plan and the Integrated Cultural Resources Management Plan, were in place when the BRAC Commission conducted its deliberations and are an integral part of the management of Fort Bliss lands and resources. They have been designed specifically to ensure both high quality military training and resource sustainability, as well as compliance with applicable environmental laws and regulations. These programs have been successful in providing environmental stewardship because they are integrated into land management in such a way that training is not degraded by environmental limitations. This is accomplished through a partnership between Fort Bliss land managers and units training on the installation, which allows, for example, restricted areas that are off-limits to be incorporated as part of the training scenario.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**

Mr. John Barrera, NEPA Manager  
Directorate of Environment  
Bldg. 624, Pleasonton Road  
Ft Bliss, TX 79916-6812  
(915) 568-3908

12-10-06 8:03:11 AM JTB  
Postmarked 12 Dec 2006

Dear Sir,

12 December 2006

As an Alamogordo resident, retired USAF officer and member of the Alamogordo Forum, I have followed this issue for over a decade. I recently attended the public meeting held at the Alamogordo City Hall. My recommendation is for Ft Bliss to go for everything but at the expense of providing a few reasonable concessions to the ranchers.

These concessions are as follows:

- 1) Whenever there is a higher level of fires due to weather and training/test conditions, one of the Ft Bliss stationed helicopters should be equipped with fire fighting equipment, a trained crew, stationed at the appropriate location and put on 5 minute alert. Although it can be argued that this gets in the way of "normal" training, combat requires adaptation. This should be considered part of training for real world combat conditions. 9.1
- 2) The ranchers should not be put into conditions where they can not get access to Alamogordo along 506. This can be accomplished through a variety of techniques including the building of one or more overpasses, the building of temporary bridges (part of combat training) or a very elaborate communications system between the Army and the ranchers (also something that compares to a real combat situation). 9.2
- 3) Ranchers should be allowed to maintain access to the mentioned BLM land used for grazing. 9.3

I was impressed by the general "reasonableness" displayed by the ranchers who expressed their opinions at the meeting. These people need to be recognized, accommodated and made full partners in how the increased use of McGreggor Ranch is accomplished. Their support can be achieved and maintained for generations by providing the above concessions, now.

Sincerely,



Lance C. Grace  
Lt Col, USAF, Retired  
44 Marble Canyon Estates  
Alamogordo, NM 88310  
(505) 437-5499  
lcgrace@hauns.com

**9.1.** Procedures for minimizing fire risk and responding to wildfires are included in the Range Standard Operating Procedures. More information on fire hazard in the Fort Bliss Training Complex and the Range SOP has been added to Sections 4.11 and 5.11 of the Final SEIS.

**9.2.** Crossings will be limited to company-size elements, will include traffic control, and will typically take less than 15 minutes. No additional mitigation should be needed.

**9.3.** Access will continue to be provided to all areas that are leased for grazing. It remains to be determined whether training areas that are used for off-road vehicle maneuvers will continue to be leased by BLM for grazing. Several factors need to be considered before that determination can be made. The Army will work with BLM and any affected leaseholders to evaluate the feasibility of continued grazing in Units 1, 2, and 3, should Alternative 2 or 4 be selected. Access will continue to be available to all other grazing units under all alternatives.



Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS

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5054768128

To: 919155683548

P. 2/6

GOVERNOR  
Bill Richardson



DIRECTOR AND SECRETARY  
TO THE COMMISSION  
Bruce C. Thompson, Ph.D.

Tod Stevenson, Deputy Director

STATE OF NEW MEXICO  
DEPARTMENT OF GAME & FISH

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5054768128

To: 919155683548

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Mr. John Barrera

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December 12, 2006

approximately 335,000 acres in the North Training Areas, South Training Areas, and a small portion of McGregor Range.

Alternative 1 would provide approximately 216,000 additional acres of off-road vehicle maneuver space in the Tularosa Basin portion of McGregor Range, south of New Mexico Highway 506. Alternative 2 would include land in the Tularosa Basin portion of McGregor Range north of Highway 506, increasing the amount of available off-road maneuver space by approximately 280,000 acres. Alternative 3 would provide approximately 287,000 acres of additional off-road vehicle maneuver space in the south and southeast Tularosa Basin portions 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 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 Department understands the magnitude of the importance of expanding overland training maneuvers on Fort Bliss for troop training, and recognizes that ecological sacrifices will be made to achieve this goal. The Department also recognizes that multiple alternatives outlined in the SPEIS meet the primary components of the purpose and need for the new mission (e.g., overland maneuvers), while differing in potential additive and cumulative ecological effects that may be irreversible over time. Page 5.16-1 of the SPEIS states:

"While damage to land in the Tularosa Basin portion of McGregor Range from off-road vehicle maneuvers may not be completely irreversible, the time required to recover from significant damage to the biological crust and to vegetation and soil could be sufficiently long to render the impacts nearly irreversible. This would especially be the case if long-term use of the land for off-road vehicle maneuvers resulted in change in landform due to erosion and/or change in the vegetative community and habitat."

The Department has identified Chihuahuan Semi-desert Grasslands as a key habitat type of primary importance for conservation in New Mexico in our 2006 Comprehensive Wildlife Conservation Strategy, which seeks to work with private, military and other federal and state land management agencies to protect habitats critical for the perpetuation of Species of Greatest Conservation Need in New Mexico. Because of the relatively pristine Chihuahuan Desert grasslands of TAs 24, 26 and 27 in the McGregor Range Southeast Training Areas, the Department supports the implementation of Alternative 2. Alternative 2 enables off-road vehicle maneuvers in the north Tularosa Basin portion of McGregor Range (north of New Mexico Highway 506), which would provide the capability to perform battalion-level movement-to-contact, force-on-force training not otherwise available on the Fort Bliss Training Complex, in addition to increasing maneuver capacity. Selection of Alternative 2 adds approximately 280,000 acres (1,135 sq. km) of area designated for Off-Road Vehicle Maneuvers to land in the Fort Bliss Training Complex currently approved for that use, for a total of over 615,000 acres (2,491 sq. km.). This alternative would not authorize overland maneuvers in TAs 24, 26 and 27 in McGregor Range Southeast Training Areas, but still allows current military activities to continue in these TAs (SPEIS p. 3.5-1).

We provide the following discussion in support of our position.

December 12, 2006

Mr. John F. Barrera  
IMSW-BLS-Z  
Fort Bliss, TX 79916-6812

Re: Fort Bliss Mission and Master Plan Supplemental Programmatic EIS  
NMGF Doc. No. 11107

Dear Mr. Barrera:

The New Mexico Department of Game and Fish (Department) has reviewed the Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement (SPEIS).

As a result of BRAC (Base Realignment and Closure) and Army Transformation, Fort Bliss will receive a Heavy Armor Division comprised of four Heavy Brigade Combat Teams (BCTs), a Combat Aviation Brigade, an Artillery Brigade, and various other supporting units. The net effect of these changes will be an increase of approximately 20,000 military personnel assigned to Fort Bliss by 2011. The stationing of an Armor Division and Heavy BCTs at Fort Bliss will change training requirements to more off-road vehicle maneuvers, involving both tracked and wheeled vehicles such as M1A tanks, Bradley fighting vehicles, and High Mobility Multipurpose Wheeled Vehicles (HMMWVs).

With the relocation of Heavy BCTs to Fort Bliss, the number of tracked vehicles will increase substantially. Typically, a Heavy BCT includes approximately 360 tracked vehicles (e.g., M1 tanks, Bradley fighting vehicles) and 900 wheeled vehicles, (such as HMMWVs). The Air Defense Artillery (ADA) training that has dominated range use in the recent past primarily involved wheeled ADA units driving on existing roads to set locations, setting up equipment, and performing their training in a largely static position. There was relatively little movement of personnel or equipment. The heavy BCTs will train in a vastly more dynamic fashion, moving relatively constantly cross-country in tanks and other tracked vehicles.

The Army is considering four action alternatives for meeting the additional infrastructure and training needs of the new units. Each action alternative involves expanding the Main Cantonment Area and providing the capability to conduct off-road vehicle maneuver training on portions of McGregor Range in the Tularosa Basin. Off-road vehicle maneuvers are already conducted on

ORIGINAL

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**

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Mr. John Barrera 3 December 12, 2006

Grassland plant communities account for over 32 percent of the land on Fort Bliss (SPEIS p. 4.8-7). McGregor Range Southeast TAs 24, 26, and 27 have the highest percentage of grasslands on Fort Bliss (15% of Piedmont; 24% of Mesa, and 23% of Foothill Desert grasslands) relative to any other TAs proposed for overland maneuvers (SPEIS Table 4.8-2). The October 2001 Fort Bliss Integrated Natural Resources Management Plan (INRMP) (page 8-12, figures 6-10 and 7-2) identifies high quality grama grasslands in McGregor Range Southeast TAs 24, 26, and 27, which are part of the Southeast portions of the Foothill Bajada Ecosystem Management Unit. These TAs are dominated by grasslands with the highest total plant and animal species richness relative to other TAs proposed for off-road maneuvers, and include black grama grasslands which are rated as globally important by The Nature Conservancy. The "Mesa" and "Foothill" grasslands in TAs 24, 26 and 27 are identified in the INRMP as having the highest density of arroyo riparian habitat, which provide a framework of habitat corridors for wildlife, including mule deer, pronghorn and neotropical migrant songbirds. The littleleaf sumac (*Rhus microphylla*) shrubs that line these corridors provide important winter browse food and cover for mule deer and pronghorn, and these areas also provide excellent game bird habitat. These grasslands areas have not been grazed by livestock for as many as 86 years, resulting in large areas of grasslands that are approaching pre-settlement conditions. These areas are characterized by high grass cover with a low incidence of shrubs and weedy species and a general absence of exposed and eroded soil. The black grama grasslands in these areas are particularly important because they have been greatly reduced since the 19<sup>th</sup> century (INRMP p. 6-31) and serve as a baseline for study of ungrazed black grama grassland systems. Intensive off-road vehicle maneuver training could ultimately change the vegetative cover and ecological state of these TAs (24, 26, 27) (SPEIS Table S-2).

The INRMP (p. 6-26) describes how shrub-dominated plant communities have replaced grassland plant communities (including black grama grasslands) over large areas in southern New Mexico in the last century. More than 86,000 acres of a 144,500-acre study area on the Jornada Experimental Range were grasslands with no shrubs in 1858; no such habitat remained by 1963. During the same time period, mesquite-dominated habitat increased from 6,266 acres in 1858 to 66,151 acres in 1963, and creosote-dominated areas increased from 640 acres to about 12,000 acres during the same period. Mesquite-dominated areas have continued to expand even after livestock have been removed from the range for many years. Long-term studies in permanent enclosures at the Jornada Experiment station from 1935 to 1980 showed that black grama grass had totally disappeared by 1980, even in areas where it was the dominant species in 1935; the greatest decline in black grama took place between 1950 and 1955 during a severe drought. The transition to this essentially irreversible ecological state is believed to have been created by disturbance to vegetation and soils from livestock overgrazing and drought.

Page 4.5-1 of the SPEIS states that McGregor Range contains soils that are highly susceptible to both water and wind erosion. Page 5.5-2 states cross-country travel by vehicles has been shown to compact soils, crush vegetation and biotic crusts, and accelerate soil erosion. Page 5.5-3 states that if vegetation and soil crusts are damaged or destroyed by surface disturbance and not allowed adequate recovery periods, wind erosion will cause the bare ground to expand downwind until slowed by terrain.

Page 5.5-4 states that the soils on McGregor Range are the most susceptible to water erosion of all segments of the Fort Bliss Training Complex, especially if vegetation and biological crusts are

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Mr. John Barrera 4 December 12, 2006

damaged. Southeast TAs 24, 26 and 27 of McGregor Range are identified as having the highest probability of accelerated soil erosion caused by rainfall and runoff. Page 5.5-5 states that in the south Tularosa Basin portion of McGregor Range (different TAs from the Southeast TAs), 11% of the area would likely become more bare with repeated tracking and 13% might convert to mesquite coppice dunes if the vegetation is not allowed to recover. Without adequate periods of rest to allow for recovery of soil cover, off-road vehicle maneuvers in these portions of the Fort Bliss Training Complex are likely to cause a change in vegetation and accelerated erosion. Page S-10 states "Expansion of off-road vehicle maneuver training into the Tularosa Basin portion of McGregor Range, along with increased maneuvers in the North and South Training Areas, is expected to increase wind and water erosion significantly and will likely result in long-term changes in vegetation communities in the more intensely used areas

Page 5.5-6 states that typical soil erosion control measures that may be implemented to reduce soil movement by air and water include 1) establishment of earth cover such as vegetation or aggregate; 2) installation of artificial or vegetative wind breaks; 3) adding soil binding materials to the ground surface; or 4) avoiding areas where vegetation and biological crusts have been damaged by multiple vehicle passes in order to allow recovery to occur. However, chapter 5.18 *Summary of Probable Adverse Impacts That Cannot Be Avoided* states "Although erosion control measures are available, it is not feasible to implement these measures on a scale needed to prevent erosion and fugitive dust generation in the training areas used for off-road vehicle maneuvers". The Department therefore believes that mitigation for impacted areas over time from overland maneuvers is unlikely to be successful, particularly given the climatic and soil conditions of McGregor Range in New Mexico.

The SPEIS describes potential long-term damage to soils and vegetation on Fort Bliss; primarily from overland maneuvers, but differentiates these potential impacts based on ecological site differences, with the presumption that the grasslands of the Southeastern McGregor Range Training Areas (24, 26, 27) will be more resilient to overland maneuver damage, and suggests that limiting the number of passages of tracked vehicles will avoid the type of habitat type conversion that has occurred elsewhere in southern New Mexico grasslands. However, it is not clear to the Department that the magnitude of overland training maneuvers (i.e., tracked and wheeled vehicles) planned for Fort Bliss, in conjunction with uncontrollable climatic factors, can ultimately be mitigated or manipulated by these measures to protect the more ecologically valuable grasslands in TAs 24, 26 and 27. We believe that opening up these grassland TAs to overland maneuvers would in essence be an experiment in disturbance to desert grasslands, with monitoring proposed in the SPEIS to document effects. However, current research in the southern New Mexico region, in relatively similar habitat types, has documented that once grassland sites reach a critical point of disturbance, a preexisting grassland ecological state can be lost permanently and modified to a woodier and/or less vegetated state.

Because of the documented history of loss of grasslands and conversion to shrublands and mesquite dunes in the southern New Mexico from drought and human-induced disturbance, we believe taking a more cautious approach of protecting the grasslands of TAs 24, 26 and 27 is warranted by protecting these training areas from overland maneuvers.

The Fort Bliss INRMP (p. 6-31) states that exotic plant species have become established on some areas of Fort Bliss. African rue has become established on Otero Mesa. It invades disturbed

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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Mr. John Barrera


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December 12, 2006

sites and once successfully established, it can spread and out-compete native grasses. Russian thistle is another species that becomes established on disturbed ground and this species can be found throughout Fort Bliss. Salt cedar has become established at some stock tanks and at other widely scattered locations on Fort Bliss. Another potential problem plant is Malta thistle, which is currently known to grow along U.S. Highway 54 and may occur along other roadways on Fort Bliss. Another exotic species of concern is Johnson grass, which occurs in some drainages on Fort Bliss. Bermuda is found on some abandoned farmland that is no longer irrigated. The Department strongly recommends that a Standard Operating Procedure/Best Management Practices be developed to reduce or prohibit the spread of existing State listed noxious weeds. These practices might include treatment of known stands of noxious weeds and/or creating protected zones where no off-road travel will occur until invasive, exotic and noxious weeds are controlled. Best management practices should also be adopted that will prohibit the introduction of new exotic species from other regions of the U.S. or from other countries. These practices might include washing off all foreign material from vehicles that will enter McGregor Range to control the invasive spread of exotic and noxious plants onto the Range.

We appreciate the opportunity to comment on this project. Should you have any questions regarding our comments, please contact Mark Watson, Habitat Specialist, of my staff at (505) 476-8115, or <mark.watson@state.nm.us>.

Sincerely,



Lisa Kirkpatrick, Chief  
Conservation Services

LK/MLW

CC: Ecological Services Field Supervisor, USFWS)  
Tod Stevenson (Deputy Director, NMGF)  
Luke Shelby (Assistant Director, NMGF)  
Pat Mathis (Southwest Area Habitat Specialist, NMGF)  
George Farmer (Southeast Area Habitat Specialist, NMGF)  
Brian Novosak (Southeast Area Game Manager, NMGF)

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**



**DEPARTMENT OF THE ARMY**  
HEADQUARTERS, U. S. ARMY GARRISON COMMAND  
1733 PLEASANTON ROAD  
FORT BLISS, TEXAS 79916-6812

October 2006

079428

REF: TO  
ATTENTION:

IMSW-BLS-Z

Dear Interested Party:

The enclosed Draft Supplemental Environmental Impact Statement (DSEIS) and separate cover sheet and signature page are provided for your review and comment. Please retain the cover sheet and signature page as a part of your DSFIS. This DSEIS supplements the *Final Fort Bliss, Texas and New Mexico, Mission and Master Plan Programmatic Environmental Impact Statement (PEIS)* dated December 2000 and associated Record of Decision signed in 2001. This DSEIS identifies environmental effects that would result from modifying land and airspace use at Fort Bliss to continue supporting evolving changes in missions and units, associated facilities and infrastructure, and training activities and support Army Transformation, Integrated Global Presence and Basing Strategy, Base Closure And Realignment (BRAC), the Army Campaign Plan and other Army initiatives.

The Proposed Action would change land use in the Main Cantonment to support units assigned to Fort Bliss under BRAC and other initiatives, and in the Fort Bliss Training Complex to support construction of live-fire ranges and off-road maneuver space needed to train soldiers to doctrinal standards. In addition to the Proposed Action, the DSEIS analyzes the environmental affects of three other action alternatives and a no action alternative.

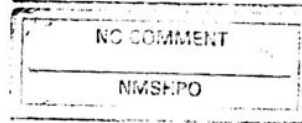
The action alternatives differ in the amount (216,000-352,000 acres) and location of land in the Tularosa Basin portion of McGregor Range proposed for off road maneuver, resulting in varied abilities to meet the defined need for maneuver training, accommodate units and missions in addition to the BRAC package, and flexibility to meet future requirements. Those portions of McGregor Range outside the Tularosa basin, specifically Otero Mesa and the Sacramento Mountain foothills, will not experience changes in land use.

Changes in land use in the Main Cantonment are necessary to accommodate the increase in military personnel associated with BRAC decisions and other initiatives.

The public comment period for this Draft SEIS will end December 12, 2006. Public meetings for the purpose of receiving comments on this Draft SEIS will be in Alamogordo and Las Cruces, New Mexico and El Paso, Texas. Additional details will follow in the media or you may contact the Fort Bliss Public Affairs Office at (915) 568-4505. Public Comments received on the Draft SEIS will be addressed in the Final SEIS and considered by the Army in its Record of Decision.

Your written comments may be sent by mail to Mr. John F. Barrera; IMSW-BLS-Z; Fort Bliss, Texas, 79916-6812; or via fax: (915) 568-3548; or email: [SEIS@bliss.army.mil](mailto:SEIS@bliss.army.mil).

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Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Draft SEIS

**COVER SHEET**

**Lead Agency:** U.S. Army, Installation Management Agency

**Title of Proposed Action:** Changes to the Fort Bliss, Texas and New Mexico, Mission and Master Plan

**Location:** Fort Bliss is located in El Paso County, Texas and Doña Ana and Otero Counties, New Mexico

**For Further Information Contact:**

Mr. John Barrera, NEPA Manager  
Directorate of Environment  
Bldg. 624, Pleasonton Road  
Fort Bliss, TX 79916-6812  
Telephone: (915) 568-3908

**Designation:** Draft Supplemental Environmental Impact Statement (DSEIS)

**Abstract:** This Draft Supplemental Programmatic Environmental Impact Statement (DSEIS), prepared in accordance with the National Environmental Policy Act (NEPA), addresses the potential environmental impacts associated with proposed land use changes on the Fort Bliss Training Complex and Main Cantonment Area to determine how Fort Bliss can accommodate U.S. Army initiatives such as Base Realignment and Closure (BRAC) and the Integrated Global Presence and Basing Strategy (IGPBS). The initiatives seek to locate a Heavy Armor Division Headquarters comprised of four Heavy Brigade Combat Teams (BCTs), a Combat Aviation Brigade, an Artillery Brigade and various other supporting units at Fort Bliss. To support these units, additional infrastructure and facilities including live-fire and qualification ranges will need to be constructed. The changes will also result in an increase of approximately 20,000 to 30,300 military personnel assigned to Fort Bliss. Five alternatives have been identified four of which involve expanding the Main Cantonment Area and providing off-road vehicle maneuver training on portions of McGregor Range in the Tularosa Basin. None of the alternatives permit off-road vehicle maneuver on Otero Mesa or in the Sacramento Mountains foothills on McGregor Range. The fifth alternative, the No Action Alternative, is not considered feasible because it would not adequately support the requirements of BRAC. Significant environmental impacts resulting from expanding off-road vehicle maneuver training into the Tularosa Basin portion of McGregor Range and increasing maneuvers in the North and South Training Areas would likely include increased wind and water erosion and long-term changes in vegetation communities especially in the more intensely used training areas. Training related noise is also expected to increase in areas adjacent to Doña Ana Range and portions of McGregor Range. Additional impacts that could prove significant to the overall El Paso area include an increase in population growth and development which will affect air quality, increased traffic congestion, and increase in the demand for utilities and other public services.

**Comments can be submitted to the above contact address postmarked through:**

**12 December 2006**

OCTOBER 2006

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**

This Draft SEIS, the PEIS and other environmental documents are available on the Fort Bliss web site <https://www.bliss.army.mil>. A CD with the PEIS is included in the mailing. This SEIS is also available upon request to the Fort Bliss Public Affairs Office or Mr. Barrera at the above addresses.

In addition, archeology and natural resources reports are available in Alamogordo, NM at the Alamogordo Public Library, 920 Oregon Avenue, in Las Cruces, NM, the New Mexico State University Zuhl Library at 2999 McFie Circle, and in El Paso, TX at the Clardy Fox Branch Library., 5515 Robert Alva.

Fort Bliss will host a field trip to the areas in the Tularosa Basin proposed for off-road maneuver. Details of times and locations will also follow in the media or you can contact the Fort Bliss Public Affairs Office at (915) 568-4505.

The Army appreciates your participation in the development of this Draft SEIS through the scoping and consultation process and looks forward to your continued participation in the development of the Final SEIS.

Sincerely,




Keith Landreth  
Director  
Directorate of Environment  
Fort Bliss Garrison Command

Enclosures


**Fort Bliss, Texas and New Mexico  
Mission and Master Plan  
Draft Supplemental Environmental Impact Statement**

PREPARED FOR:

  
Robert T. Burns  
Colonel, U.S. Army  
Garrison Commander  
Fort Bliss, Texas

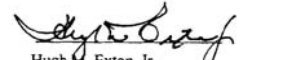
SEP 22 2006  
Date

REVIEWED BY:

  
Keith Landreth  
Director of Environment  
Fort Bliss, Texas


Sept 22 2006  
Date

APPROVED BY:

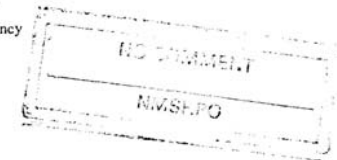
  
Hugh M. Exton, Jr.  
Director  
SWRO, Installation Management Agency

9/29/06  
Date

APPROVED BY:

  
John A. Macdonald  
Brigadier General, U.S. Army  
Director  
Installation Management Agency

5 Oct 06  
Date



**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**



**TEXAS  
HISTORICAL  
COMMISSION**

*The State Agency for Historic Preservation*

RICK PERRY, GOVERNOR  
JOHN L. SAU, III, CHAIRMAN  
F. LAWRENCE OAKS, EXECUTIVE DIRECTOR

November 13, 2006

John Barrera, NEPA Manager  
Directorate of Environment  
Fort Bliss Military Installation  
Building 624, Pleasonton Road  
Fort Bliss, TX 79916-6812

Re: Project review under Section 106 of the National Historic Preservation Act of 1966, *Draft Supplemental Programmatic Environmental Impact Statement (DEIS) Fort Bliss Mission and Master Plan*, Fort Bliss, El Paso County, Texas (Army)

Dear Mr. Barrera:

Thank you for your correspondence describing the above referenced project. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Debra L. Beene, has conducted its review. The proposed cultural resource impacts are related to increased ground disturbance, increased exposure to vandalism with population growth, increased off-road vehicle maneuvers, and increased development. We believe that Alternative 1 will have the least potential to damage significant cultural resources.

Regarding historic properties, Fort Bliss has exercised the option to execute a Programmatic Agreement (PA) to guide their compliance with Section 106. We agree that this PA will ensure that historic properties are managed to first avoid, then reduce or mitigate adverse effects. In the attached PA (Appendix B), please remember that the Significance Standards are under current revision. Upon completion, the Significance Standards will provide historic contexts and guidelines for NR eligibility of cultural resources; we look forward to reviewing the draft Significance Standards upon completion.

17.1

We look forward to further consultation with your office, and we hope to maintain a partnership that will foster effective historic preservation. Thank you for your participation in this federal review process. **If you have any questions concerning this review or if we can be of further assistance, please contact Debra L. Beene at 512/463-5865.**

Sincerely,

F. Lawrence Oaks  
Executive Director  
Texas Historical Commission

FLO/db

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**17.1.** The comment is correct that the Significance Standards are under revision, and Fort Bliss will provide these to the State Historic Preservation Officers of both Texas and New Mexico for review.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
Las Cruces District Office  
1800 Marquess  
Las Cruces, New Mexico 88005  
www.nm.blm.gov



IN REPLY REFER TO:  
1793 (03100)

DEC 12 2006

07-22-07 P04:29 IN JFB

ORIGINAL

Mr. John F. Barrera  
IMSW-BLS-Z  
Fort Bliss, TX 79916-6812

Dear Mr. Barrera:

We appreciate the opportunity to review the Draft Supplemental Environmental Impact Statement (DEIS) which supplements the Final Fort Bliss, Texas and New Mexico, Mission and Master Plan Programmatic Environmental Impact Statement (PEIS).

We commend you on a very thorough description of the alternatives and analysis of potential impacts. As a Cooperating Agency for this DEIS, the Bureau of Land Management (BLM) has provided previous input and suggestions, which have been incorporated to a large degree in the DEIS. Fort Bliss was also a Cooperating Agency for the development of BLM's 2005 Resource Management Plan Amendment (RMPA) for McGregor Range, which addressed lands we jointly manage. This relationship has been useful to both parties to provide a better understanding of the issues, resources, and impacts associated with the various uses of withdrawn public land in McGregor Range.

We have a few concerns that we would like to describe, and ask that you address them in the Final Supplemental EIS.

The BLM is greatly concerned about Alternative 4 as presented in the SEIS. At the November 6, 2006 public hearing, which BLM attended, Fort Bliss stated they need a minimum of 539,000 acres of off-road vehicle maneuver area to support Fort Bliss operations. It appears Alternatives 1, 2, and 3, provide ample off-road maneuver capability to support these operations. We are seriously concerned about the expansion of off-road maneuvers north of State Road 506. Alternative 4 allows off-road vehicle maneuvers north of Highway 506 and provides a total of 687,000 acres of off-road vehicle maneuver area. This amount significantly exceeds Fort Bliss needs by over 148,000 acres. Therefore, the need to move off-road vehicle use north of Highway 506 is not well justified.

The addition of off-road maneuvers in this area is also not consistent with the just completed RMPA for McGregor Range. Fort Bliss was a Cooperating Agency on this planning effort where the decision was made that off-highway vehicle (OHV) use on the withdrawn public lands would be limited to designated roads and trails, including the area north of State Road 506. This

18.1

**18.1.** Military activities are inherently different from public land uses. Congress withdrew land on McGregor Range from the public domain for military use in recognition of this difference. The Army is committed to working with BLM to permit compatible public use of the withdrawn lands, including appropriate recreation and grazing activities that do not interfere with military training or pose a danger to the public. It is not practical, and should not be expected, that military and public uses of this land would be the same.

Section 5.1.3.2 of the Final SEIS acknowledges that the McGregor RMPA does not permit non-military off-road vehicle use.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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creates a challenge for BLM, when the public and BLM administrators are required to stay on roads, but military missions are not held to that same constraint. The SEIS should address the impacts associated from the two different management philosophies. In summary, BLM requests Fort Bliss select an alternative that limits off-road vehicle use to that area south of State Road 506.

We also have a few more specific comments:

- Page 4.1-9, Line 170 indicates that camping is permitted during some hunts. We request that the SEIS reflect that camping is permitted yearlong, except when a military mission would preclude it.

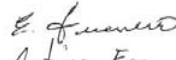
- Page 5.1-8, Lines 319-323 Most portions of the document indicate that the Otero Mesa would not be affected by the missions of the basin but in this section it states that dismantled training may increase, affecting access to the Otero Mesa area. This would affect public use and the Grazing Program, and the impacts of that should be reflected in more detail in the SEIS.

- Page 5.1-6, Lines 245-250 This section describes impacts from interruptions to access along Grapevine Canyon in Grazing Unit 1 and State Road 506. This would close off access to the U.S. Forest Service areas which are used by livestock operators as well as hunters or other users and would have a greater impact to those users, which should be reflected in the analysis.

- We did not find in the SEIS, any mention of mitigation or protection of existing range improvements in Grazing Units 1, 2, and 3. The range improvements located in this area are wells equipped with windmills, corrals, fences, pipelines, water storages, water troughs, and earthen reservoirs. BLM would like to see some description of possible mitigations from vehicle damage, such as briefings for trainees regarding their existence or methods for flagging or otherwise marking them on the ground for avoidance by trainees.

Thank you for the opportunity to provide these comments. If you have any questions about these comments, please contact me at (505) 525-4311.

Sincerely,

  
Acting For  
Edwin L. Roberson  
District Manager

18.1

18.2

18.3

18.4

18.5

**18.2.** The text has been corrected in the Final SEIS.

**18.3.** There are numerous factors that could affect the amount of dismantled training conducted on Otero Mesa. Some, such as the volume of off-road vehicle maneuvers conducted in other part of the Fort Bliss Training Complex, could force more dismantled and on-road vehicle training onto the mesa, while other factors such as the departure of the Air Defense Artillery units, the decrease in Roving Sands exercises, and the Air Force's projected decrease in operations on Centennial Range could reduce the amount of such training conducted. These countervailing factors make it impossible to predict the net change in military training that might be conducted on Otero Mesa. However, if use of training areas on Otero Mesa does increase, it is not expected to exceed the intensity experienced in the past during Roving Sands exercises or in areas affected by the Air Force's activities on Centennial Range. Therefore, considering the amount of public use this area experiences, it is not expected that public use or the Grazing Program on Otero Mesa would be significantly affected.

**18.4.** As described in Section 5.3.4, NM Highway 506 and access roads to Grapevine could be closed during military crossing. However, these crossings would occur in company-size "march units" taking 15 minutes or less to cross, between which public traffic would be allowed to pass. Road closures will also continue to occur during missile firings. Access to the Forest Service lands will be provided in generally the same way as in the past.

**18.5.** The Range Standard Operating Procedures will address protection of range improvements identified by BLM as supporting grazing, if Alternative 2 or 4 is selected, and may include briefings, markings, and other measures.



**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**

December 12, 2006

John Barrera  
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Fort Bliss, TX 79916  
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Fax: 915-568-3548



*Reviewed by [unclear]  
12/12/06 [unclear]*

VIA EMAIL & FAX

**Re: Comments on Draft Supplemental Programmatic Environmental Impact Statement**

Dear Mr. Barrera,

These comments are submitted on behalf of Kevin von Finger (retired Senior Ecologist at Fort Bliss), Glen de Garmo (retired Senior Archaeologist at Fort Bliss), Forest Guardians, Rio Grande Chapter (Southern Group) and El Paso Regional Group of the Sierra Club, the Center for Biological Diversity, Southwest Environmental Center, and the New Mexico Wilderness Alliance. Fort Bliss seeks under its preferred alternative to open up 352,000 additional acres to off-road maneuvering. But this acreage includes some of the least disturbed areas on Fort Bliss, with important ecological and archeological values. We believe these values must be safeguarded, but the proposed action would greatly compromise them unnecessarily and without sufficient mitigation.

Furthermore, the Department of Defense (DoD) reported to BRAC that Fort Bliss has 992,303 acres of maneuver area (DoD 2005: Table 30, page A-30)), which was a principal basis for DOD's recommended conversion of Fort Bliss into a major mounted maneuver post, BRAC's subsequent approval of stationing four Heavy Brigade Combat Teams (HBCTs) at Fort Bliss, and Fort Bliss' development of this SEIS. However, the representation that Fort Bliss has 992,303 acres of maneuver area is inaccurate: it currently has 335,000 acres open to maneuvers. The basis for this proposal is therefore fraudulent.

In response to the U.S. Army's Draft Supplemental Programmatic Environmental Impact Statement (SEIS), we support the No Action Alternative. We recommend no expansion of off-road maneuver sites on Fort Bliss. In particular, we oppose opening any additional areas on the McGregor Range to maneuvers given the ecological and archeological importance of this area. As we show below, the existing off-road maneuver areas are adequate to handle Fort Bliss's needs through at least 2010 and likely beyond.

This draft SEIS is, for the reasons discussed below, sufficiently inadequate that it precludes meaningful disclosure and analysis of impacts. We request that it be revised and recirculated as a draft in accordance with 40 CFR § 1502.9 (a).

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Among the deficiencies is the SEIS' failure to provide a "hard look" at impacts. Impacts are often not disclosed, stated as obvious generalities without attempt at quantification or discussion, understated, or stated in a manner intended to mislead the public into believing they will be less significant than they will be. In fact, disclosure and discussion of the significance of the action's impacts on many resources are absent.

In addition, there is no stated life for the action, and there is therefore no basis for the analysis and discussion of impacts as they accumulate and intensify over time.

19.1

The SEIS does not disclose and make use of the best available scientific information to analyze impacts. Information relevant to reasonably foreseeable adverse impacts that is critical to the decision makers arriving at a reasoned choice among alternatives is not included in the SEIS. This includes data relative to ecological sustainability of maneuver activity. There is therefore no disclosure of how and why the decision makers will make a decision, i.e. no clear basis for choice among alternatives based upon impacts and their significance. In addition, mitigation is not discussed for many resources and the Army has therefore failed to adopt mitigations adequate to reduce the impacts. Finally, the SEIS does not rigorously explore and objectively evaluate all reasonable alternatives.

19.2

The public cannot be expected to assess the significance of the impacts of the proposed action when the reasonably expected life of the action is not even stated. The SEIS contractor representative assigned to accompany the McGregor field trip indicated it would be for at least 40 years (Robin Brandin, pers. comm.). Nowhere are the impacts discussed or disclosed relative to the continuous activities over this length of time.

19.3

In general, this NEPA process appears to have been undertaken to justify a decision already made, in violation of NEPA.

19.4

Important biological values on Fort Bliss & threats from expanded off-road maneuver areas

The SEIS fails to disclose the significance of the biological resources within the areas proposed for maneuver, even though their own contractor reports and conservation organizations do so. The Chihuahuan Desert is perhaps the most biodiverse desert ecoregion in the world, and it is also highly imperiled. See Southwest Environmental Center 2006; World Wildlife Fund.<sup>1</sup> Degradation threats include increasing off-road vehicle use in some areas, invasions of non-native species, and increasing dominance of native shrub species in areas historically characterized by open grasslands. These are precisely the threats the Army will increase through its proposed action.

19.5

Fort Bliss itself contains important biological values:

<sup>1</sup>View January 2006 Southwest Environmental Center Report on biological value of Otero Mesa at: [www.wildernessinstitute.org](http://www.wildernessinstitute.org) and World Wildlife Fund report at: <http://www.worldwildlife.org/wildworld/profiles/terrestrial/na/na1303.pdf>

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**19.1.** The duration of the proposed land use changes is indefinite. There is no defined end date when the activities described in the SEIS are expected to cease. It is not possible to predict how long the Army will need this capability, which depends on many undefinable factors, including future stationing decisions, training doctrine, lessons learned in combat, etc. The analysis in the SEIS is based on the assumption that there would be no end date and reflects accumulating impacts over time, to the extent they are reasonably foreseeable.

**19.2.** The choice provided to the decision maker is among land use alternatives that involve different geographic areas of Fort Bliss and associated differences in ecological and other effects.

**19.3.** This is an incomplete account of Ms. Brandin's response to this question. As Ms. Brandin indicated on the field trip, the duration of the Proposed Action is indefinite. It is not possible to predict what future changes will be made to Army organization, stationing, or training requirements that affect Fort Bliss. The analysis in the SEIS assumes no time limit for the proposed land use changes. Army long-range land use plans generally consider a 20-year horizon, and some of the analysis in the SEIS incorporates specific timeframes. The water resources analysis, for example, incorporates El Paso Water Utilities planning and modeling that extends out approximately 50 years. These timeframes generally reflect limits in what is reasonably foreseeable and therefore can be meaningfully analyzed. There is no intention to place a time limit on the life of the proposed land use changes at Fort Bliss. The land use changes and their attendant effects can for all intents and purposes be considered permanent.

Therefore, the analysis in the SEIS assumes that areas of Fort Bliss where off-road vehicle maneuver training is conducted would be subject to repeated use for an indefinite period. The impacts reported cover a timeframe of at least 20 years.

**19.4.** The SEIS is being prepared to assist in land use decisions at Fort Bliss. Those decisions have not been made, although the Army did disclose its preferred alternative in the Draft SEIS.

**19.5.** The SEIS describes the context and intensity of impacts, which are the components comprising significance. For example, it discloses that sandy areas may have more coppice dune formation and heavily used areas (e.g., live-fire ranges, Combined Arms Collective Training Facility, tactical approaches to Doña Ana Range) will be highly disturbed. It further discloses the percentage of various vegetation communities and specifically grasslands that would be affected under each alternative. Otero Mesa, the portion of Fort Bliss with the highest density of grasslands (92 percent), is not proposed for off-road vehicle maneuvers under any alternative.

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From a regional perspective, Fort Bliss supports some of the most important occurrences of Southwestern ecosystem types. The areas described here are relatively large and there are few known counterparts that are comparable in terms of composition and condition. In addition, Fort Bliss has become increasingly important to animals that are displaced onto the reservation due to habitat destruction or deterioration elsewhere (SEIS, Ref. #30).

One of the most significant high quality areas on Fort Bliss is on and below southern Otero Mesa (Southern Otero Mesa, Castner Draw and Campbell Tank sites). This large area of approximately 50,000 hectares contains extensive highly productive black grama-bluegrama grasslands as well as large stands of New Mexico needgrass and sideoats grama. This is one of the largest occurrences of high quality Chihuahuan Desert Grasslands known in the United States (*Id.*).

Fort Bliss must acknowledge and address these important biological values. However, as we show below, the draft SEIS fails to acknowledge the environmental consequences of its proposed action on these resources and provides insufficient mitigations to reduce these impacts, all in violation of federal law.

19.6

Also not disclosed or used in significance analysis is the fact and that grama grasslands are considered globally imperiled. Pigeon et al. (2001) have described the rarity of grama grasslands in the Chihuahuan Desert and need for their conservation,<sup>2</sup> and brush encroachment into grasslands is one of the suspected causes of the northern aplomado falcon's historic decline.<sup>3</sup> Off-road maneuvering and other disturbances in this rare ecosystem type can cause irreparable harm. For example, tracks from the only maneuver event that, to our knowledge, has ever occurred on McGregor Range (Gallant Shield '75 Joint Training Exercise) were still visible on the ground within these grasslands 20 years later.

The differences between inside a tank track and outside in the undisturbed areas are obvious at this site: inside the tracks dropseed grasses replaced grama grass, grass cover appeared lower, and track imprints were still visible in places. These impacts were from a single tank pass. Impacts from repetitive passes occurring over decades would be significantly greater, but the SEIS fails to disclose, quantify, or mitigate this impact despite data being available. It is likely that grasslands will be irreversibly degraded by this action, even if synergistic effects of drought and global warming are not factored into the analysis.

19.7

Violations of National Environmental Policy Act

In general, there is no evidence that the Army has actually performed the appropriate level and types of environmental analysis. For example, beginning in the mid 1980s and continuing through at least the late 1990s, Fort Bliss staff and contractors conducted research studies to evaluate impacts of maneuver training on soils and vegetation on McGregor Range. The specific

19.8

<sup>2</sup>See Pidgeon, A.M., N.E. Mathews, R. Benoit, and E.V. Nordheim. 2001. "Response of avian communities to historic habitat change in the Northern Chihuahuan Desert." *Conservation Biology* 15(6):1772-1788.

<sup>3</sup>See U.S. Fish and Wildlife Service. 1990. "Northern Aplomado Falcon Recovery Plan." U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 56 pp.

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The Chihuahuan Desert encompasses more than 200,000 square miles in the U.S. and Mexico. Fort Bliss is 1,746 square miles or 0.8 percent of the area of the Chihuahuan Desert. The Proposed Action would affect 534 square miles or 0.3 percent of the Chihuahuan Desert. These actions are insignificant in the context of the Chihuahuan Desert as a whole.

**19.6.** The Draft SEIS was prepared in compliance with the National Environmental Policy Act and associated regulations. It reported reasonably foreseeable direct, indirect, and cumulative impacts from projected activities in 14 resource areas. To the extent foreseeable, it estimated effects quantitatively and described the context and intensity of the impacts, considering the factors listed in Council on Environmental Quality Regulations at 40 CFR 1508.27. Numerous mitigation measures were identified throughout the document.

The Draft SEIS was distributed for public review and comment. Several comments received included suggestions for additional mitigation measures, appropriate ones of which have been incorporated in the Final SEIS. As required by CEQ Regulations (40 CFR 1505.2(c)), the Record of Decision will identify mitigation measures that will be implemented by the Army and summarize monitoring and enforcement measures that will be adopted.

**19.7.** The Army made a concerted effort to minimize impacts to grasslands in identifying the alternatives considered in the SEIS. With the exception of the southeast training areas of McGregor Range incorporated in Alternatives 3 and 4, the overwhelming majority (approximately 90 percent) of the area proposed for off-road vehicle maneuvers contains 12 percent or less grasslands. The southeast training areas represent 18 percent of the grasslands on Fort Bliss. The majority of grasslands on the installation that provide suitable habitat for aplomado falcon are not proposed for off-road vehicle maneuvers.

While tracks from past maneuver may still be visible at the site mentioned in the comment, vegetation is also present. Note, however, that it is blue grama grass, not dropseed grass, that has filled in where black grama grass previously occurred.

**19.8.** Limited results from the studies mentioned in the comment have been published. Section 5.5.1 of the Draft SEIS discussed the findings published in an article by Fuchs et al (2003). In general, the studies do not provide data that assist in making the decisions currently facing the Army decision-maker. They were not designed to evaluate the effects of off-road vehicle maneuver training at the level and to the extent contemplated. The results of the studies do not lend themselves to extrapolation to the Proposed Action. The discussion in Section 5.5.1 has been expanded in the Final SEIS.

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purpose of these studies was to provide the basis for NEPA analysis of impacts and an understanding of what frequencies and intensities of maneuver McGregor Range ecosystems could sustain without significant impact or irreversible degradation in the event maneuver training was proposed for McGregor Range. The studies were supposed to provide decisionmakers the ability to choose among management alternatives and to prescribe mitigation to minimize or avoid impacts. However, there is no disclosure of this data, research, and analysis in the SEIS. This information should be integrated into a revised draft SEIS.

*Failure to Meet Purpose & Need for Action*

The Army has failed to justify the need for additional off-road maneuver areas for training needs on Fort Bliss by 216,000-352,000 acres (Alternatives 1-4). While five Army posts have been scheduled for four or more HBCTs, Fort Bliss and one other post stationing four HBCTs have similar acreage allotted for off-road maneuvering, while the other three posts have far less area for these activities. Current allotted maneuvering is as follows:

- Fort Bliss, TX, 4 HBCTs, 335,000 acres;
- Fort Bragg, NC, 4 HBCTs, 105,733 acres;
- Fort Campbell, KY, 4 HBCTs, 66,424 acres;
- Fort Carson, CO, 4 HBCTs, 351,124 acres; and
- Fort Hood TX, 5 HBCTs, 136,912 acres.<sup>4</sup>

Only three of the four HBCTs stationed at Fort Bliss will require off-road maneuver space. One of the four brigades stationed there will be continuously located at another U.S. or overseas installation.<sup>5</sup>

In addition, the SEIS fails to specify the data used to estimate what additional off-road maneuver areas may be needed at Fort Bliss (SEIS, page S-4, lines 121-137). The SEIS instead calculates the number of km<sup>2</sup>days required for a HBCT to conduct two battalion level exercises annually. It then provides a total of annual km<sup>2</sup>days for four HBCTs (despite one of the four being permanently stationed off of Fort Bliss), and includes a vague requirement for other users and uses that are not further defined. This lack of transparency impedes public understanding of the amount of off-road maneuver area actually required at Fort Bliss.

Fort Bliss has 335,000 acres (1,356 km<sup>2</sup>) of existing off-road maneuver area. Based upon 365 training days annually, there are 494,940 km<sup>2</sup>d available on Fort Bliss. Until FY2009, there will be an excess of 178,690 km<sup>2</sup>d available annually on Fort Bliss. Three HBCTs annually require 474,375 km<sup>2</sup>days, so even when Fort Bliss has all three HBCTs in residence sometime in FY2010, there will be an excess of 20,565 annual km<sup>2</sup>days more than necessary.

<sup>4</sup>See Army News, 2005. BRAC, 28 June Brief. DoD May 2005, Table 7-5, Page 57. SEIS, Page S-6, lines 203-208; page S-3, Figure S-1.

<sup>5</sup>See the Army's planned rotational cycle for HBCTs (DoD, May 2005, Page A-37; SEIS, Page S-5, lines 169-172).

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19.8

19.9

19.10

19.11

**19.9.** This document uses in its analysis doctrinal requirements for off-road vehicle maneuver space. The Army's planned rotational cycle has been taken into account. Note that the BCTs at Fort Bragg and Fort Campbell are not Heavy BCTs.

**19.10.** The battalion-level exercises described on page S-4, lines 121-137 of the Draft SEIS are clearly identified as an example to assist the reader in understanding the term "square kilometer days" and how they are calculated. Section 1.3.5 of the Draft SEIS provided more detail about the training requirement, including describing platoon-, company-, battalion-, and BCT-level exercises. It also indicated that other units in addition to the Heavy BCTs, including the Artillery Brigade, Sustainment Brigade, Combat Aviation Brigade, and Echelons Above Brigade, will also need to conduct training.

The requirement for 528,000 km<sup>2</sup>d/year of off-road maneuver capability includes approximately 327,000 km<sup>2</sup>d/year for three Heavy BCTs stationed at Fort Bliss, assuming one of the four assigned to Fort Bliss is deployed at any given time. This reflects the Forces Command Sustained Engagement Strategy, described in Section 3.2 of the Draft SEIS, which provides for a 36-month rotation cycle during which each Heavy BCT is expected to be temporarily, not permanently, deployed for approximately 12 months. The remaining 201,000 km<sup>2</sup>d reflect requirements of the above-mentioned units and Fort Bliss' mobilization mission.

In response to public comments, Section 1.3.5 of the Final SEIS has been expanded to provide more detailed explanation of how these requirements were calculated.

**19.11.** As noted above, the three Heavy BCTs represent only a portion of the training requirement. Other requirements are described in Section 1.3.5 of the SEIS.

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*Failure to Take a "Hard Look" at the Consequences of the Proposed Action*

**Impacts on natural values.** The SEIS fails to disclose adequately the impacts of the proposed action on the native flora, fauna, and ecosystems in the planning area. The SEIS does not provide for fair and full disclosure of impacts to biological resources and fails to address the significance of the impacts from the proposed action. There is no disclosure of baseline data and supporting research that would provide the public with a basis for assessing and understanding how and why decisions will be made with regard to consideration of environmental impacts.

The SEIS states that "The Organ Mountains...Hueco Mountains, and Otero Mesa are not discussed...because land use will not change..." (P 4.8-1 L 9-11). However, the Huecos are proposed as maneuver areas. In fact, virtually the entire range in New Mexico save Cerro Alto is in the proposed new maneuver area. The SEIS Notice of Intent published in the Federal Register ([www.bliss.army.mil/About%20Fort%20Bliss%20NEW-EIS/Documents-EIS.htm](http://www.bliss.army.mil/About%20Fort%20Bliss%20NEW-EIS/Documents-EIS.htm)) stated that the proposed alternatives include "increased... training on Otero Mesa", yet no disclosure of this fact is presented in the document. While not a "new" land use, an increase is certainly a change from current training. During the McGregor field trip, Ms. Robin Brandin, Ft Bliss SEIS contractor POC, was asked whether training will increase in intensity and replied "yes, but we haven't quantified it". This quantification must be done and analyzed with regards to environmental consequences of the proposed action, including cumulative impacts to grasslands and wildlife.

19.12

**Fire.** The SEIS mentions occurrence of fire in the Organ Mountains (P 5.8-1 L 18-19), and mentions wildfires as an impact (P 5.8-5 L 196-197), yet there is no further disclosure of wildfire impacts or where these would occur. While fire is a natural disturbance in the area, nowhere is there any discussion of altered fire regimes, including the potential for increase in fire frequency in the Organ Mountains, associated impacts to the sensitive species noted in Table 4.8-3 and to unique ecosystems in these mountains, or of the possibility of wildfire threatening homes and residents living adjacent to these mountains. This is of special concern given the expected increase resulting from global warming of both frequencies and intensities of storms and concomitant increase in fuel loads, and more frequent and intense droughts creating significantly greater number and intensities of wildfire. Clear evidence for this correlation for the western U.S. has been recently published in the scientific literature.<sup>6</sup>

19.13

**Invasives.** The SEIS does not disclose potential impacts of invasive species, despite its acknowledgement of the presence of such species on the installation such that they require the INRMP's "invasive weed monitoring and control." In addition, the SEIS states that "Opportunistic ... vegetation" would colonize areas, and discusses these species in Appendix A by ranking as a "potentially significant impact" any "activity that will create conditions conducive to proliferation of non-native, invasive species" (P 5.8-5, L 217-218; A-37).

19.14

**Aplomado falcon.** The SEIS not only fails to disclose impacts to the aplomado falcon and its habitat, but cites research out of context and through entirely erroneous statements, which is deceptive to the public, as it presents the perspective that the areas proposed for maneuver

<sup>6</sup>See A.L. Westerling, H. G. Hidalgo, D. R. Cayan, and T. W. Swetnam.2006. "Warming and earlier spring increase western U.S. forest wildfire activity." *Science*, V313: 940-943.

Submitted December 12, 2006

**19.12.** The term "maneuver" includes on-road vehicle and dismounted (on-foot) training, in addition to off-road vehicle maneuvers. As Figure 3.1-2 of the Draft SEIS shows, dismounted maneuvers were authorized in all training areas on Fort Bliss, and on-road vehicle maneuvers were authorized in all training areas except Culp Canyon Wilderness Study Area in the Record of Decision for the 2000 Mission and Master Plan PEIS.

There are numerous factors that could affect the amount of dismounted training conducted on Otero Mesa. Some, such as the volume of off-road vehicle maneuvers conducted in other parts of the Fort Bliss Training Complex, could force more dismounted and on-road vehicle training onto the mesa, while other factors such as the departure of the Air Defense Artillery units, the decrease in Roving Sands exercises, and the Air Force's projected decrease in operations on Centennial Range could reduce the amount of such training conducted. These countervailing factors make it impossible to predict the net change in military training that might be conducted on Otero Mesa. However, if use of training areas on Otero Mesa does increase, it is not expected to exceed the intensity experienced in the past during Roving Sands exercises or in areas affected by the Air Force's activities on Centennial Range.

During the field trip, Ms. Brandin indicated that the potential increase in training on Otero Mesa could not be quantified for the reasons noted above. While there may be fluctuations in the level of use of training areas on Otero Mesa, including possible increases in those activities, they are not expected to vary measurably from the levels assumed for the 2000 PEIS analysis. That analysis anticipated variations in use that have already been experienced, such as differences between years when Roving Sands exercises have been conducted and years with no Roving Sands exercises. The analyses in the PEIS and the SEIS provide for that variability.

**19.13.** Additional information on fire hazard has been added to Sections 4.11 and 5.11 of the Final SEIS. The effects of fire on biological resources were described in the 2000 Mission and Master Plan PEIS, which has been incorporated by reference, and are not repeated in the SEIS.

The Organ Mountains on Fort Bliss have functioned as a live-fire impact area for many years, but there have been few fires in this area of the installation. The projected increase in use of the Doña Ana Range is not expected to significantly increase fire risk in the Organ Mountains.

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19.15

contain unsuitable or insufficient suitable habitat to be of value to the species, while omitting data from the same research that clearly documents habitat potential exists on Fort Bliss. The SEIS, for example, states that areas proposed for opening to maneuver have limited favorable habitat (P 4.8-15, L 315-318), contradicting the SEIS's own maps (P 4.8-17 fig 4.8-5), that show considerable habitat as defined by three different assessment protocols, and much of this is considered good to excellent habitat. In fact, one of the referenced aplomado researchers stated, "if anybody has habitat, it's Bliss" (Kendal Young, pers. comm). Statements to the contrary can only be construed as a deliberate attempt to mislead the public.

Examples of misleading statements include the reference to 40% or greater basal grass cover in occupied habitat in Chihuahua (P 4.8-15 L 298-299). The 40% figure includes areas with tobosa grass swales, well known for their extremely dense basal cover. In actuality, aplomado researchers report that cover near nests in the Chihuahuan grasslands varies widely, from near 10% on up to 26%. One researcher stated that the grass cover is no different on Fort Bliss compared to Chihuahua falcon territories. A further misleading statement in the SEIS states that "...certain grassland species, such as the northern aplomado falcon, may not find the majority of grassland present (i.e. foothills and mesa grassland) suitable..." (P 4.8-7 L 183-185). This implies that the majority of mesa and foothill grasslands may not be suitable for aplomado. But the SEIS fails to explain what it means by suitable habitat (e.g., suitable for nesting? Foraging/prey capture? How much would not be suitable, and by what criteria?).

Another example of misleading science and failure to disclose accurately the impacts of the proposed action include the statement implying that Fort Bliss contains poorer habitat than Chihuahua since prey biomass is supposedly lower than in occupied habitat in Chihuahua (P 4.8-15, L 310-312). The citation in the SEIS is from a PEIS, not a research article. The SEIS should assess and disclose whether the prey biomass on Fort Bliss is unsuitable for this species and state the basis for that conclusion.

The SEIS states that no nesting or resident populations are known for Bliss (Page 4.8-14 L 275-276), but nowhere is impact of habitat loss discussed. Clearly, if falcon habitat continues to be degraded and lost, it will greatly impede the ability for falcons to inhabit and breed in the area, and will be a setback to falcon recovery. In fact the SEIS states the disturbing conclusion that sensitive habitats in the Chihuahuan Desert may be limited only to specific, protected areas (P 5.15-12, L 481-483). The impacts of the proposed action and the cumulative impact of the proposed action will be significant, especially when considered in the context of regional land use activities and actions adverse to falcons. The SEIS fails to disclose this issue and these impacts.

The impacts to aplomados and their habitat about which we are concerned, and which the SEIS failed to disclose, are as follows:

- *Impact to nesting structures.* Expanded off-road maneuver areas will increase destruction and loss of vertical nest structures, such as tall yucca and mesquite, required by the aplomado falcon. The SEIS states that the most likely occurrence of potential habitat for aplomado is in the basin lowland desert grassland vegetation types [sic], and refers to this as two vegetation types (P 5.8-3 L 199-120). Is this not one? Where is this habitat type?

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**19.14.** The Draft SEIS did disclose the potential for invasive species in disturbed areas, as noted in the comment. In the sentence on page 5.8-5 following the one quoted in the comment, the Draft SEIS went on to provide a quantitative estimate of the percentage of the area affected that would be vulnerable to this impact (11 percent of the south Tularosa Basin portion of McGregor Range). Section 2.1.4 of the Draft SEIS also described that the INRMP includes management actions to monitor for and control invasive species.

**19.15.** On the contrary, the Draft SEIS went to considerable lengths to incorporate multiple data sources and credible opposing views regarding aplomado falcon habitat on Fort Bliss. Fort Bliss professional biologists believe that Figure 4.8-4 provides the most accurate representation of suitable aplomado falcon habitat on the installation, based on research and their extensive knowledge of the ecological conditions at the installation. The SEIS also includes three other assessments of potential habitat. As Figure 4.8-5 shows, all three indicate little to no potential habitat in the great majority of area proposed for off-road vehicle maneuvers. All four maps in Figures 4.8-4 and 4.8-5 show that the best potential habitat is on Otero Mesa, which is not proposed for off-road vehicle maneuvers. All four maps, including the one generated by Fort Bliss scientists, show some potential habitat in the southeast training areas. There is in fact substantial agreement on habitat suitability among all the sources.

The reference to 40 percent basal cover came directly from a study of actual occupied habitat, specifically nesting and detection sites as reported in Table 5-6 of Kendal et al. 2002, (Ref# 511). Areas sampled in Mexico that had conditions comparable to the Tularosa Basin portion of Fort Bliss, which comprises 90 percent of the area under consideration for off-road vehicle maneuver, were unoccupied.

The sentence on page 4.8-7, lines 83-85 of the Draft SEIS has been modified in the Final SEIS. Further explanation of the characteristics that reduce the suitability of grassland for aplomado falcon was provided on pages 4.8-14 and 15 of the Draft SEIS.

The reference to the 2000 Mission and Master Plan PEIS indicates where more information about biomass is provided. The PEIS used and referenced several scientific studies. As noted throughout the SEIS, the information in the PEIS was incorporated by reference and not repeated. Those data point out that there is a difference in prey biomass when compared to occupied habitat in Mexico. The study is comparative and does not allow definitive determination of suitability on that factor alone.

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<ul style="list-style-type: none"> <li>▪ <i>Area of habitat impacted.</i> The SEIS fails to disclose how many acres of potential aplomado habitat are involved in the proposed maneuver areas. This information is important because, as the SEIS states (P 4.8-15, L 306-308), birds require "substantial areas for year-round habitation," estimated at 4300 hectares. However, we note that the researchers contacted consider the study which referenced the 240 hectare minimum size (P 4.8-15, L 303-305) to be based on a limited study including a small sample size obtained during a limited time period. At present there is no good estimate for the size of grassland needed to sustain aplomado falcons and more research is needed in this area. Until more data is acquired, we should err on the conservative side by protecting smaller grassland tracts as well. In fact smaller but adjacent grassland parcels may be just as important as a single one of 240 hectares, especially if the shrubland boundaries increase prey diversities and densities. As the Army's activities destroy the habitat, it will become more and more difficult for the aplomado to survive.</li> <li>▪ <i>Discounting potentially suitable falcon habitat.</i> The SEIS implies that sandy plains grassland (P 4.8-14 L 283-284) is unsuitable habitat. Researchers have however noted that the sample size of existing occupied habitats is too small to know unequivocally what is and is not suitable, or to discount all grassland habitat on Fort Bliss. Some habitat may not be of high preference for nesting, but may be excellent or required for prey capture and survival, dispersal, and overall species survival.</li> <li>▪ <i>Discounting high quality habitat on Fort Bliss.</i> All aplomado researchers queried agree that, despite bliss statements to the contrary in the SEIS, good to excellent habitat exists on and below Otero Mesa.</li> </ul>	19.15
<p><u>Climate Change &amp; Drought.</u> The SEIS contains but a single mention of climate change (P 5-15-2), but discusses it as a result of, rather than a cause of impact. There is no disclosure of effects of climatically induced increases in drought severity and intensity on ecosystems, especially imperiled desert grasslands. If the State of New Mexico can evaluate future impacts of global warming on its natural resources, then the DOD can do likewise.</p>	19.16
<p>The SEIS should discuss the synergistic effects of drought and climate change and the proposed maneuver activities. This can be done at several levels but must be done at least in terms of loss of productivity, cover, mortality, and recovery. Data required for such an analysis should be available both in the literature and from Fort Bliss' research on simulated maneuver and carrying capacity on McGregor Range ecosystems.</p>	19.17
<p>The SEIS should evaluate and disclose possible cumulative impacts on our water supply resulting from the alternatives and extended droughts that are likely to occur as a result of global warming, using for example scenarios and data from the 1950's drought and other, major prehistoric droughts as identified in the Bliss-funded study "A 1373 year reconstruction of annual precipitation for the southern Rio Grande Basin," modeled over 5 and 10 year periods.</p>	19.18
<p><u>Ecological Sustainability.</u> Nowhere is the ecosystems' ability to sustain various levels of maneuver training disclosed or discussed.</p>	19.19
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Contrary to the comment, the analysis performed for the SEIS does not lead to a conclusion that the impacts of the Proposed Action on aplomado falcon habitat would be significant. At most, 29 percent of potential habitat on Fort Bliss, much of which is marginally suitable at best, would be affected. Young et al (2005) estimate there are over 2 million acres of suitable aplomado falcon habitat in New Mexico alone. At most, 82,000 acres of suitable habitat on Fort Bliss lies in areas proposed for off-road vehicle maneuver. This equates to about 4 percent of the potential habitat just in New Mexico and does not include other Chihuahuan Desert habitat in Mexico.

The cited sentence on page 5.8-3, lines 119-120 of the Draft SEIS was a typographical error and has been corrected in the Final SEIS. The mesa grassland and basin lowland desert grassland vegetation types have the most habitat potential. Sandy plans grasslands comprise 3 percent of the grasslands on Fort Bliss and only 1 percent of the area potentially affected by off-road vehicle maneuvers under the Proposed Action.

The comment is not accurate in implying that the SEIS contains statements suggesting there is not suitable habitat on and below Otero Mesa. Page 4.8-14, lines 293-294 of the Draft SEIS states: "Both Figures 4.8-4 and 4.8-5 show that the vast majority of habitat **is on Otero Mesa and portions of the southeast TAs on McGregor Range**" [emphasis added].

Finally, it should be noted that there are no nesting aplomado falcons in the area so there will be no impact to aplomado falcons.

**19.16.** The objective of evaluating cumulative impacts in an environmental impact statement is to assess "the incremental impact of the action **when added to** other past, present, and reasonably foreseeable future actions" [emphasis added] (40 CFR 1508.7). The geographic scope of global warming is so vast and all encompassing that virtually every action undertaken could have some synergistic effect, and almost all individual actions will contribute only marginally and to an unmeasurable degree to its impacts.

Quantifying the specific contribution of the Proposed Action at Fort Bliss would require knowing what climate changes will occur in the El Paso region, when they will occur, what other actions may be taken in the region, and how they may influence local impacts from global warming, including whether they would contribute to the impact or counteract it. Even if this were possible to any degree of confidence, it would not help the public or the decision-maker distinguish between the alternatives contemplated in the SEIS, including the No Action Alternative.

The U.S. Environmental Protection Agency estimates that the volume of greenhouse gases emitted in the U.S. alone is in the billions of tons per year. While greenhouse gases and criteria pollutants are not directly correlatable, it is noteworthy that the projected emissions of criteria pollutants under any of the alternatives analyzed in the SEIS are on the order of thousands of tons per year at most. Therefore, Fort Bliss-related air pollutant emissions are about six orders of magnitude less than the U.S. total and even less of the worldwide total. At these levels, the contribution of Fort Bliss to global warming is substantially smaller than the margin of error associated with any attempt to quantify the impact with the information available.

Section 5.15 of the SEIS acknowledges that the activities associated with the Proposed Action may combine with other actions to contribute to global warming, but the magnitude of Fort Bliss' contribution to this global issue is not commensurate with the requested analysis of the effects of global warming on the region.

**19.17.** As indicated in Section 5.15.2.8 of the Draft SEIS, the synergistic effects of past grazing and drought are reflected in the current ecological conditions on Fort Bliss. That section also acknowledges the likely contributions of drought and other cumulative future actions to decreased habitat, transitions in ecological states, and increased desertification.

The synergistic effects of climate change are more difficult to predict. El Paso recently experienced several years of drought, while 2006 was a very wet year with increased productivity, cover, and recovery.

The research on carrying capacity performed on Fort Bliss was not designed in a way that addresses the synergistic effects of climate change and military maneuvers.

**19.18.** The cited study does not specifically correlate drought and measurable water supply. It also does not provide any data that can be used to predict the impact of future drought. A discussion of the study has been added to Section 5.15.2.7 of the Final SEIS.

**19.19.** This comment is not specific about what is meant by "ecosystems," nor does it provide a measure of sustainability. The SEIS discusses impacts on vegetation, habitat types, and ecosites, which represent ecosystems. Based on these analyses, the document discusses potential changes in vegetation communities, habitat types, and ecosites transition states.



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Generalized discussion of impacts. In addition to the SEIS failure to disclose significant environmental impacts, many impacts are not provided with adequate quantification or discussion that pertain to the resource values at stake. This occurs throughout the SEIS:

- The SEIS states, "Continued disturbance can be expected to increase the amount of bare ground, and uncovered soils are susceptible to wind and water erosion" (P 5.15-9 L 368-369), but fails to provide quantification of the amount of bare ground and how much erosion.

19.20
- The SEIS states that "impact would result in less shrub cover" (P 5.8-8 L 329-330), but fails to quantify or further elaborate on impacts from this decrease in vegetative cover. For example, the SEIS fails to discuss the implications for erosion, gulleying, sheet wash, and loss of ecosystem integrity.

19.21
- On p. 5.8-5, L 194-195, the SEIS states that recovery from disturbance would be "low"; L 209 states that "impacts to vegetation communities would be low". There is no further explanation or clarification of what the term "low" means, nor an attempt at quantification of impacts. The SEIS fails to describe the differences between the coppice dune community in the existing maneuver areas and that same community right across U.S. Highway 54 on the McGregor Range. The latter has not been open to maneuvers, which therefore provides a baseline for assessing the ecological impacts of maneuvering. After more than twenty years of biological survey and studies on Fort Bliss there should be data relevant to describing with specificity the impacts from off-road maneuvers. On both public field trips the comment was made by Fort Bliss staff as we drove across the highway 54 boundary from the maneuver area to McGregor Range that "see, not any differences between the maneuver area and no maneuver." Yet, it was remarked by participating members of the public that there were more kinds of plants, plants were taller, and the ground had more cover in the McGregor Range portion. Surely if non-professionals can visually denote the differences then some degree of impact assessment for this and other cover types/ecosystems can be made.

19.22
- P 5.8-7 L250-251 states that several species listed under the Migratory Bird Treaty Act (MBTA) would be among those "impacted the greatest". The SEIS fails to disclose the specific impacts and which MBTA-listed birds and which habitats will be affected.

19.23
- P 5.8-9 L 343-344 states that "wildlife populations would... become less dense." The SEIS fails to provide further detail on this point, despite the existence of Fort Bliss survey data that can be used to quantify impacts. This is especially true for impacts to avifauna resulting from impacts to arroyo riparian habitat, since studies of nesting use, densities, and species composition have been conducted.

19.24
- P 5.8-9 L 384-385, P 5.8-10 L 428, state that Alternative 3 and 4 are expected to have "moderate impacts" to vegetation communities, despite the noted potential for the action to cause an irreversible ecological transition of grasslands to a shrub dominated state.

19.25

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**19.20.** These cumulative effects cannot be quantified. That would require detailed information about the size, timing, and location of all future disturbance relative to different soil types and their specific erodibility. This information is not available and cannot be estimated with any degree of confidence.

**19.21.** On the contrary, Section 5.5 of the SEIS contains substantial quantitative estimates of projected changes in ecosite transitions states, for example quantifying the percent of area that is likely to become bare and the percent that might convert to mesquite coppice dunes. That section also discusses erosion in detail.

**19.22.** The paragraph following page 5.8-5, lines 194-195 of the Draft SEIS explained the basis for the conclusion that recovery from disturbance would be low, and the sentences following line 209 explained that mesquite coppice dunes are not expected to change (i.e., impacts would be low) because they have stabilized in an altered ecological state and further change is unlikely.

The anecdotal observations in this comment do not reflect the complexity of either the Forty Bliss environment or ecosystem integrity. McGregor Range contains more diverse terrain and vegetation than the North Training Areas and any comparisons must be made with care. For example, the North Training Areas on the west side of US 54 are over 80 percent mesquite coppice dunes, while only 20 percent of the south Tularosa Basin portion of McGregor Range on east side of the highway is mesquite coppice dunes.

The comment also reflects a misunderstanding of the ecology of coppice dunes. The integrity of this ecosystem lies in its dunes, not in the amount of vegetation between them.

Off-road vehicle maneuvers can be expected to reduce vegetation in some areas, but as the SEIS indicates, military vehicles typically drive around, not through the dunes, so the integrity of the ecosystem is not expected to be affected. The areas that are currently dominated by coppice dunes will remain so, as evidenced by the North Training Areas, South Training Areas, and TA 8 that are already used for off-road vehicle maneuvers (see Figures 4.8-1, 4.8-2, and 4.8-3).

**19.23.** More information has been added to the Final SEIS to address this issue.

**19.24.** The cited sentence refers to the north Tularosa Basin portion of McGregor Range proposed for off-road vehicle maneuver under Alternative 2. This area contains approximately 6 percent of the miles of arroyos on Fort Bliss. While these arroyos may be affected, usable habitat value will remain. Note there will likely be an increase in species that utilize less shrubby, earlier succession stages, such as horned larks.

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The SEIS also underrepresents the environmental impacts of the proposed action or portrays them in a manner which misleads the public into believing they will be less significant than they will be. This occurs throughout the SEIS:

▪ P 5.8-6, L 230-232, states that the magnitude of impact to arroyos would be low except at crossings; note that since arroyos run generally east-west and maneuver boxes appear to direct maneuver north-south, crossings will be anywhere a vehicle can get down the bank, and up and down the arroyo itself, as decades of maneuver have shown. In fact, tanks use arroyos for concealment and often drive up and down arroyos, crushing the very vegetation that provides the noted important wildlife habitat. 19.26

▪ P 5.8-7 L 252-253 and L 271, implies that wildlife will not be affected by habitat loss, since they would simply "move to adjacent locations" and "utilize adjacent lands", statements which completely ignore habitat loss as the major cause for population declines among native fauna. 19.27

▪ P 5.15-9 L 363 states, "Much of the undeveloped land is already partially degraded." However, no percentage for this degraded land is provided, nor is the fact mentioned anywhere that much of the land is not degraded. In fact, one of the Army's own contractors, New Mexico Heritage Program (NMHP), stated in a report provided to Ft Bliss that "The withdrawal of much of Fort Bliss from public use over the last 86 years has allowed, in some areas, the recovery or protection of ecosystems from the impacts of heavy grazing, development and other human uses. There are now large areas where species composition and structure approach pre-settlement and early settlement conditions where grazing was limited or absent, and fires went unnoticed or were not suppressed." 19.28

▪ P 5.15-9 L 365 states, "Much of the land is characterized by degraded shrub communities," which ignores the fact that such communities, including mesquite coppice dunes, that have transitioned from one state to another, are still functioning ecosystems that provide excellent habitat for significant numbers of species of wildlife. In fact the mesquite coppice dune ecosystem on McGregor Range may not be described as degraded, since there are intact A horizons in interdune areas, whereas in the existing maneuver area, interdunes have only blow sand (torripsamments) or are eroded down to the calcic paleo horizons. 19.29

Additional concerns include: P 5.8-9 L 372-373 mentions construction of roads, but fails to describe where road construction will occur and impacts from road construction. There is no mention of impacts to the native antelope herd, which at least used to occupy in relatively large numbers the grasslands and draws in the proposed maneuver areas. 19.30

Water Impacts. There is uncertainty as to how much water is available in the Hueco Bolson aquifer; P 4.7-5 L 87-92 provides various estimates for amount of usable fresh and (unusable?) saline groundwater. The SEIS should state which acre-feet estimate was used to analyze impacts of this action in section 5.7. It does not appear that stated impacts in section 5.7 were based on both the high and low estimates stated in this paragraph. If based on only upon EPWU's stated (high) estimates (e.g. 9.4 million af, L 90-92), then a worst case analysis should be provided for 19.31

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**19.25.** The cited sentence is merely a conclusion summing up the specific analysis provided in the preceding paragraph, which quantifies the magnitude of the expected impacts. It indicates that an estimated 18 percent of the mesa grasslands could transition to a shrub-succulent dominant state. These grasslands comprise 40 percent of the southeast training areas; 18 percent of 40 percent is 7.2 percent of the area that might undergo this transition. Further, the southeast training areas contain approximately 15 percent of the mesa grasslands and 29 percent of the piedmont grasslands on Fort Bliss. Council on Environmental Quality Regulations indicate that significance of impact incorporates the impact's context and intensity. The conclusion presented in the SEIS is based on consideration of both the context and the intensity of the impact as described above.

**19.26.** It is accurate that arroyos are important to providing realistic training and can be expected to be driven on. The heaviest use, however, will be at crossing points.

**19.27.** The cited sentences have been taken out of context. They do not imply that wildlife will not be affected. In fact, the preceding and intervening sentences indicated that there will be impacts, and lines 268-269 indicated that wildlife species density is likely to decrease.

**19.28.** The cited sentence, which is in the section on cumulative impacts, refers to the entire region of influence. The exact percentage of the entire region that is degraded is not known. However, the vegetation map provided by NMHP shows approximately 73 percent of the proposed off-road vehicle maneuver space is currently vegetated by shrublands where the potential vegetation is grasslands, and thus "degraded" from its potential vegetation condition (see page 4.8-2 of the Draft SEIS).

As indicated in Section 5.15.2.8 of the Draft SEIS, the synergistic effects of past grazing and drought are reflected in the current ecological conditions on Fort Bliss. Approximately 31 percent of Fort Bliss is dominated by mesquite coppice dunes, which are recognized as a lower transition state of grasslands, and another 26 percent of Fort Bliss is currently in shrub-dominated vegetation types.

The NMHP quote, which points out that the lands were withdrawn for military use, is noteworthy as a reflection of Fort Bliss' stewardship of natural resources.

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all alternatives using the low estimate of 3 million af as well so that all possible ranges of impacts are disclosed (in the event that EPWU is wrong).	19.31
Nowhere in Section 5.7 is significance disclosed, despite the significant increase in demand for our most significant resource that this action will create.	19.32
P 4.7-7 L 126-128, the same metric for desal plant (acre-feet) should be employed as was used for the preceding discussion of water availability so the reviewer can draw meaningful comparisons.	19.33
P 5.7-1 L 29-34 notes that "purple pipe" recycled water is part of the EPWU plan to meet increased demand, yet not stated is the fact that Fort Bliss refused to use this water to water its golf courses and parade grounds. Instead Bliss is using fresh water from the aquifer. The SEIS should disclose the impacts of not using purple pipe recycled water.	19.34
P 5.7-1 L 36; define term "nearly sustainable." This makes little sense: either something is or is not sustainable.	19.35
P5.7-2 L 40; clarify if 10,000 afy is without the increased demand of Fort Bliss proposed actions.	19.36
P 5.7-3 L 121 states that impact of increased pumping has not been quantified. The impact should be quantified, as EPWU has quantified theirs (L122-123). This information is necessary not only to comply with the impact disclosure requirements of NEPA, but critical in order to enable the decision makers to make a reasoned choice among alternatives (40 CFR § 1502.22 (a)). Certainly, Fort Bliss should obtain these data.	19.37
P 5.7-4 L 130-132 states that EPWU anticipates rate increases of approximately 5% per year. The SEIS should discuss whether this rate includes the cost of meeting the increased demand resulting from Alternative 1, as well as the other alternatives, including the preferred alternative. Rate information should be provided for all alternatives.	19.38
P 5.7-4 L 128-129 indicates that increased demand may require EPWU to develop projects more rapidly than anticipated. In fact, Section 5.7 states that for every alternative, increased consumption/demand may force EPWU to develop additional sources or develop them more rapidly. The SEIS should disclose these requirements/projects/sources, and describe the associated timelines and estimated costs and increases in rates for water users. We find it difficult to believe (as should the public) that Bliss and EPWU cannot estimate requirements, timelines, costs, and rates to meet the needs set forth in this SEIS for the proposed alternative.	19.39
El Paso Water Utilities (EPWU) is in fact a large corporation which has been estimating demand and planning to meet those demands for decades. Certainly Fort Bliss doesn't have to wait for EPWU to monitor for increases in water consumption when they have models and clearly defined population increases predicted by this SEIS. P 5.7-4 L162-164 states that the "magnitude [read impacts] of additional pumpage...is not known." However, the magnitude can be estimated and the SEIS should provide a worst case analysis.	19.40
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**19.29.** The Draft SEIS recognizes that mesquite coppice dunes are functioning ecosystems but notes that species variety and density is less than in other communities. Mesquite coppice dunes are widely recognized in the scientific community as lower transition states of historic grasslands. The areas that are currently mesquite coppice dune dominated are expected to remain so; therefore their habitat value would continue.

According to the Soil Survey, the torripsamments are the taxonomic classification for the Copia soil series and the Aguenta soil series. Copia soils are well-represented on the North Training Areas and McGregor Range, but Aguenta soils are minor soils within Fort Bliss, representing approximately 0.1 percent of the entire installation. Copia soils have a buried horizon with an accumulation of carbonates that could be identified as calcic that is typically at a depth of 71 to 80 inches from the surface. It is unlikely that the interdunes on Copia soils dominant on coppice dunes at Fort Bliss are eroded down to this layer as it is so deep.

The state-transition model for ecological sites identifies the mesquite coppice dune state in all locations as degraded from its historic climax plant community and ecosystem. The Soil Survey and ecological site descriptions support the characterization of the mesquite coppice dune ecosystem as degraded. Both the North Training Areas and McGregor Range have "blow sand" and some interdune erosion on the Copia soils where they occur on mesquite coppice dunes.

**19.30.** The exact location of new road construction has not yet been determined, but Section 3.4.2.3 estimates that approximately 22 miles of roads could be constructed on McGregor Range. None of the new road construction is expected to occur on Otero Mesa, where most of the pronghorn occur. Large numbers of pronghorn are not found in the Tularosa Basin below Otero Mesa, though some are regularly found in the mesa grasslands below the mesa. Off-road vehicle maneuvers may reduce the number of pronghorn in the area below Otero Mesa, but antelope are expected to continue to use this area. Road construction is not expected to significantly affect pronghorn.

**19.31.** The volume of groundwater in the Hueco Bolson is difficult to estimate and the percentage of usable freshwater is even more difficult to determine. Part of the difficulty in recovering fresh groundwater is the potential for brackish groundwater intrusion.

The range of estimates provided in the Draft SEIS was made over a 26 year period and is based on varying levels of data availability. The most recent estimates include the referenced 9.4 million acre feet by EPWU in 2004 and an estimate of 3 million acre feet included in the Far West Texas Water Plan in 2001, which was also provided by EPWU.

The 2004 estimates were based on updated data, including data from monitoring wells and test holes that were drilled in 2002 and 2003. Prior to those test holes, no significant drilling had been completed in the Hueco Bolson for about 15 years. Thus, the 2001 estimates were based on outdated and, in some cases, incomplete data.

In addition, the two measures are not precisely comparable. For one reason, the 3 million acre feet figure is of water with less than 1,000 mg/L of total dissolved solids, while the 9.4 million acre feet figure is of water with less than 250 mg/L chloride, which is only one component of total dissolved solids. Second, the 9.4 million acre feet estimate represents total storage, not necessarily recoverable freshwater. In its analysis, EPWU assumed that only 25 percent of the total available fresh water would be recoverable, or about 2.4 million acre feet. This is more comparable to the 3 million acre feet cited in the Far West Texas Water Plan. Thus, the SEIS analysis does provide an analysis consistent with the “low estimate.”

**19.32.** Section 5.7 provides quantitative estimates of the magnitude, intensity, and context of impacts. These are the attributes that determine significance (40 CFR 1508.27).

**19.33.** The Draft SEIS used both metrics in several places, including page 4.7-6 and the Glossary. The referenced paragraph has been expanded in the Final SEIS to also provide both units of measure.

**19.34.** Fort Bliss is investigating cooperative plans with EPWU for the provision of reclaimed wastewater for use on the installation. The impacts of not using “purple pipe” recycled water are already incorporated in the SEIS analysis of water resources, as it did not assume that reclaimed water would be used on landscaping.

**19.35.** This statement in the Draft SEIS was simply a quotation from the Far West Texas Water Plan. A comment on the draft plan also requested a definition of the term. The Far West Texas Water Planning Group response to the comment was: “These terms differ from one water source to another. Therefore, it is difficult to provide a single definition that can include all sources equitably.”

**19.36.** Yes, the additional 10,000 afy is without the increased demand connected with Fort Bliss. As the Draft SEIS indicated, this was projected baseline growth.

**19.37.** Nearly all of the additional water required to meet the increased demand at Fort Bliss would be provided by EPWU. The Final SEIS has been modified to clarify this point. Therefore, the Fort Bliss wells would not increase pumpage. The Draft SEIS surmised that EPWU might have to increase its pumping, and the effects of that increase had not been modeled.

However, EPWU has indicated that it has no plans to increase groundwater withdrawals from the Hueco Bolson above current levels through 2060. Instead, increased demands identified in the Region E water plan would be met through increased surface water diversions (resulting from retirement of irrigation lands) and importation from Hudspeth and Culberson Counties. Current EPWU plans are to increase surface water diversions in 2020 and begin importation in 2030.

A key assumption in the Region E plan is that per capita use would remain at current levels (140 gallons per capita per day). The per capita assumption is conservative in that, since 1989, the per capita demand in El Paso has been declining due to a number of demand management initiatives. EPWU has indicated that current per capita demand is 137 gallons per day. Total EPWU demand in 2006 was about the same as the demand in 1989 despite the addition of 120,000 people in the service area.

The Draft SEIS was more conservative and assumed on-post water consumption would be 203 gallons per capita per day. Several factors suggest that number will be significantly lower. New construction will incorporate water conservation measures. The increase in population, both on and off post, will result in the construction of new housing. The Army's Residential Communities Initiative is incorporating xeriscaping and other water conservation measures.

EPWU is actively engaged in land planning in various parts of the city to deal with the demand for new housing off post. Water use in new houses is significantly lower than older houses. Most new houses include xeriscape landscaping and a growing number have refrigerated air conditioning. Therefore, EPWU expects that overall per capita demand will continue to decrease as new houses are constructed and occupied.

EPWU expects to be able to meet increased water demands with surface water facilities, whether it is in 2020, 2015, or sooner as conditions warrant. If any additional pumping from the Hueco Bolson were needed, it would be a temporary measure as surface water diversion and treatment facilities are being constructed. Typically, the lead time for bidding and constructing these facilities is three years. Under a worst case scenario, therefore, groundwater pumping might need to increase over a three year period.

This increase could be in the range of 1,000 afy to about 7,000 afy. A temporary increase in pumping of this magnitude for three years would have no significant impact on the Hueco Bolson.

**19.38.** Yes, the rate increases projected by EPWU do include the expected costs associated with increased demands generated by Fort Bliss. These estimated rate increases are based on a number of factors, including replacing aging infrastructure, meeting new regulatory requirements, and developing new infrastructure to meet new demands. EPWU plans identify new sources and the cost of developing them to meet expected increased demands in the future.

It is not expected that water rates would differ appreciably among the alternatives, as the population increase does not vary substantially, especially among Alternatives 1, 2, and 3. The projected population increase in Alternative 4 was generated for analysis purposes only and is not based on any announced stationing decisions. As such, it is extremely conservative. Given the conservative assumptions incorporated in the analysis, including higher than anticipated per capita water consumption rates, the potential for further decreases in per capita consumption, and the fact that there are no plans at this time for additional increases in personnel at Fort Bliss, there is too much uncertainty to more precisely determine the effect of Alternative 4 on water rate increases. EPWU's 5 percent per year remains the best credible estimate of potential rate increases for any alternative.

**19.39.** EPWU currently has the capacity to supply 305 million gallons of water per day, of which 100 million gallons per day is from surface water and 205 million gallons from groundwater resources. With a peak day demand of 162 million gallons in the past couple of years, EPWU has sufficient capacity to meet the expected accelerated growth. As noted above, the costs of developing additional projects has already been factored into EPWU's budget and the estimated rate increases.

**19.40.** As noted above, EPWU does not anticipate a need to increase groundwater pumping to meet the increased demand for water. It feels it can successfully accelerate its projects for developing other sources. However, for analysis purposes, EPWU has estimated that groundwater withdrawals might need to increase by up to 7,000 afy, about 5 percent, for three years. This would have no significant impact on the Hueco Bolson.

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Section 5.7 notes repeatedly (e.g. P 5.7-1 L 11, L 32-33) that EPWU will meet partial demand by purchasing agricultural water rights/Rio Grande water rights. This will increase the cost of purchasing water rights. The SEIS should state if this will impact yearly rates for current water users, and by how much. It should also analyze the impacts of purchasing water rights on the ability by government agencies and conservation groups to acquire water to restore locally the Rio Grande wetland and bosque ecosystems. This is both proposed and currently underway. As an example, the city's Rio Bosque nature park only receives water at the discretion of the EPWU, despite the fact that water rights are attached to a portion of the acreage. Rio Bosque has an estimated need of 5000 acre feet per year. The only water Rio Bosque receives is reclaimed water from the Bustamonte sewage treatment plant, and then only when irrigators no longer need it. This has resulted in the lack of water for and resulting death of restored native trees.

19.41

The SEIS should describe in Sections 4.7 and 5.7 whether Fort Bliss meters all its water use, including golf courses, or whether figures for annual water uses are only estimates.

19.42

Much of the lacking information described above should be disclosed in a revised SEIS not only to comply with the impact disclosure requirements of NEPA but to enable the decision makers to make a reasoned choice among alternatives (40 CFR 1502.22 (a)).

Air quality impacts and associated health effects. The SEIS should disclose the health effects of increased emissions and resulting non-attainment of the National Ambient Air Quality Standards to both the general public and to minority and low income populations. El Paso has serious pollution during frequent periods of atmospheric inversion and "ozone action days" all of which create significant negative health effects, not only for asthmatics but many others in the general population.

19.43

The SEIS fails to disclose the impact of PM 2.5 emissions and effects on public health. P 5.6-12 L 382-387 discusses only the impacts of the increase in Fort Bliss personnel, not the preferred actions' direct impact of approximately 150,000 other area residents. The SEIS obliquely refers to this additional population as a reference in Table 5.6-6. This table estimates the incredible daily increases that will result from the preferred alternative, including over one million three hundred thousand more miles driven per day under the proposed alternatives. This is eight times the current miles driven. The SEIS must disclose the consequent impacts to air quality and public health from this increase.

19.44

19.45

Results of a Fort Bliss study conducted in the mid 1980s showed maneuver training increased soil particle transport by a factor of 10 times over areas that did not receive maneuver use. Fort Bliss collected additional dust transport data in the 1990s. Other researchers have done studies in coppice dune ecosystems (e.g. reference 82). It is not clear whether these data were used in the PNNL model. If they were omitted, the Army should revise the modeling with data included.

19.46

Effects of dust on visibility and aesthetic qualities of Otero Mesa should be further discussed in the SEIS. Alarming, the discussion in the current SEIS states that the action will contribute to increasing haze all the way at Guadalupe National Park (P15.5-10 L 403-405).

19.47

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**19.41.** EPWU is a customer of El Paso County Water Improvement District (EPCWID) No. 1. EPCWID manages surface water from the Rio Grande Project. EPWU is obligated to return effluent flows to the surface water system and has no discretion to supply water directly to Rio Bosque. The Region E Plan calls for an increase in surface water diversions in the future to meet some of the expected increased demands. This would be accomplished by purchasing or leasing water rights, retiring the irrigated land, and converting the irrigation water to municipal use. This is how all of EPWU's surface water is obtained. The rate impact has already been factored into EPWU's estimates.

**19.42.** Fort Bliss meters all of its groundwater pumping and its use of EPWU water. The projected water use reported in the Draft SEIS was estimated based on historic use and other factors such as conservation measures being incorporated in new construction.

**19.43.** The Proposed Action and other alternatives are not expected to result in non-attainment of National Ambient Air Quality Standards (NAAQS). The Proposed Action would result in incremental increases in emissions, but this is not expected to hinder progress toward meeting the NAAQS in the El Paso region. Therefore, an analysis of the health effects of nonattainment of the NAAQS is not required for the SEIS. Fort Bliss will continue working with the El Paso Metropolitan Planning Organization to ensure that growth and development on the installation will be captured in the region's transportation plans.

**19.44.** The overwhelmingly greatest amount of particulate emissions from the Proposed Action is expected to be in the PM<sub>10</sub> size range, in particular the fugitive dust emissions produced during training exercises. Consequently, the focus of the analysis is on PM<sub>10</sub> emissions. PM<sub>2.5</sub> emission factors were not available for all sources. However, PM<sub>2.5</sub> emissions from the Proposed Action are expected to be relatively modest and not sufficient to exceed standards set by USEPA to ensure public health.

**19.45.** Table 5.6-6 of the Draft SEIS also provided estimated emissions of criteria pollutants associated with the additional vehicle traffic generated by the induced population increase for each alternative, including the preferred alternative.

Although the changes at Fort Bliss are expected to result in a substantial increase in vehicle miles traveled by the Fort Bliss-related population, understanding the potential impact on local air quality requires placing that increase in the context of total vehicle miles traveled in the region. The El Paso Metropolitan Planning Organization has projected approximately 17,800,000 vehicles miles for 2010 in the most recent Transportation Conformity Report. Therefore, an increase of 1,303,000 vehicle miles traveled by Fort Bliss-induced population under Alternative 4 would

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P 5.6-3 L 104-108 states that neither the proposed action (nor related cumulative effects) will have any impact on other PSD Class I areas, such as Big Bend National Park. This appears to be only an assumption. The SEIS should state how this conclusion was arrived at and what analysis was performed to confirm accuracy. Fort Bliss should contact the National Park Service and discuss this issue and its ramifications. The visibility of Big Bend National Park is significantly and severely impacted by emissions that are produced a long distance from the park's boundary. Satellite imagery reveals entrained dust moving from bare soils of the Mojave far to the east of its source.

19.48

19.49

*Failure to Adequately Disclose Cumulative Impacts of Proposed Action*

The SEIS fails to adequately disclose how the intersecting threats of oil and gas, livestock grazing, off-road vehicle use and other activities are resulting in harm to ecological and archaeological values in the region. One example is the oil and gas drilling plan approved by the U.S. Bureau of Land Management in 2005. This should be discussed in the context of greatly impeding Aplomado falcon recovery, the impacts of which will be greatly exacerbated by the proposed action on Fort Bliss.

*SEIS Aims to Justify a Pre-determined Outcome*

This NEPA process appears to have been undertaken to justify a decision already made, in violation of NEPA. For example, in response to a request for several Fort Bliss documents pertaining to transforming the Fort Bliss's mission, the Army wrote, prior to May 2005:

The text below was included talking points included with Slide Number 35 in the slide presentation to the BRAC Commission Staff. We have no way of confirming that these issues were actually presented to the staff.

G3/AEC determined that 4-1 BCT can train to standard using existing maneuver areas. Also defined potential for two infantry BCTs using Otero Mesa and Sacramento Mountains north of Highway 506. Supplemental EIS will develop changes in land use from no off road maneuver on McGregor to an additional 243,000 acre maneuver area to determine carrying capacity on how many additional BCTs can train to standard on Fort Bliss.

(We already know that we can train 4 BCTs w/logistics and Command BCTs added plus two Infantry BCTs). The EIS will determine how many more we can take in.)

In addition, the draft SEIS states that the No Action Alternative does not provide sufficient area designated for Off-Road Vehicle Maneuver to accommodate the units identified by BRAC to be relocated to Fort Bliss and continue to support other users of the Fort Bliss Training Complex. This suggests the predetermined nature of this public process. In addition, as we discuss elsewhere in these comments, it is clear that the only ecologically protective alternative is the No Action Alternative, yet it is not feasible for the Army to choose this, due to congressional mandate. It is therefore vital that Fort Bliss revise the draft SEIS to include more alternatives.

19.50

19.51

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represent only a 7 percent increase in total vehicle miles traveled in El Paso County.

**19.46.** The analysis conducted for the Fort Bliss SEIS used the most current and relevant emission factors available, as well as an air dispersion model specifically designed for application at Fort Bliss. The emission factors for training exercises were developed from recent research conducted at Fort Bliss in 2004-2005 by the Desert Research Institute (DRI) specifically for that purpose. DRI researchers are experts in this area, and the decision was made to use these results rather than to rely on older studies not specifically designed to calculate fugitive dust emissions.

**19.47.** Visibility protection is only mandated for Class I areas, which include designated National Parks and U.S. Forest Service Wilderness Areas. Otero Mesa is not a Class I area.

The referenced section of the Draft SEIS states "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..." [emphasis added]. The sentence goes on to note that other emissions in the region of influence may do so.

**19.48.** The majority of emissions from the Proposed Action at Fort Bliss would be from mobile sources, which are typically not included when identifying the potential for visibility impairment at distant Class I areas. In addition, much of the emissions would be generated during exercises conducted over the vast 2,780 km<sup>2</sup> Fort Bliss training areas, and these emissions would be widely dispersed even before they leave Fort Bliss property. Finally, fugitive dust would be the largest category of emissions, and these relatively coarse particles quickly settle out of the atmosphere before moving significant distances downwind. Consequently, it is extremely unlikely that there will be visibility impacts at distant Class I areas like Big Bend National Park due to activities at Fort Bliss.

**19.49.** The Draft SEIS was distributed to Department of the Interior agencies for review. No comments were received from the National Park Service.

**19.50.** The No Action Alternative is included in the SEIS because it is required by Council on Environmental Quality Regulations (40 CFR 1502.14(d)). It provides a baseline for comparison with the other alternatives. It does not meet the Army's needs, which is the reason for the proposed land use changes. The SEIS considers four alternatives that would meet the Army's needs, and the selection of any of those alternatives has not been predetermined.



Section 3.3.2 of the Draft SEIS indicated that if the No Action Alternative were selected, impacts would include using available maneuver areas 365 days a year, resulting in insufficient time for road maintenance and environmental activities; inability to support off-post users and the mobilization mission; and degraded training.

**19.51.** As described in Chapter 3 of the Draft SEIS, the Army undertook an extensive study to identify and consider alternatives. This resulted in identification of four alternatives that are analyzed in detail and four other alternatives that were considered but not carried forward. No other alternatives have been identified that meet the Army's training needs.

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**Impacts on archaeological values.** The Army has similarly failed in its SEIS to disclose the archaeological values on Fort Bliss and the impacts to those values from expanded off-road maneuvering.

The SEIS fails to disclose information required for the public to understand the value of archaeological resources on Fort Bliss, as well as the likely impacts from the proposed action. The SEIS has failed to note that Fort Bliss is an archaeological hotspot of irreplaceable value, containing thousands of archaeological resources which document several thousand years of human prehistory. Indeed, the scientific data related to these resources can provide understanding of the human prehistory of the Tularosa Basin and southcentral New Mexico more generally. In addition, the resources on McGregor Range, on which expanded off-range maneuvering is proposed, are some of the best preserved on Fort Bliss. Finally, the variety of habitat types and environmental features on Fort Bliss provides the means for assessing how prehistoric humans evolved different social, technological, and land use systems to adapt to environmental variations. The need for public disclosure of archaeological resources, data, and research conducted on Fort Bliss is particularly urgent, given the historic lack of public access to this area. The SEIS failed to meet this burden, in violation of NEPA.

19.52

The SEIS's discussion of likely adverse impacts to the multitude of archaeological and historic resources in the area proposed for off-road maneuvering is too generalized. In addition, the Army fails to identify off-road maneuver area expansion as a significant threat to these resources. There is consequently no disclosure of the impacts expanded off-road maneuvering will cause to sites of varying size, cultural phases, locations, and other traits.

19.53

In addition, the SEIS fails to adequately disclose criteria relied upon to evaluate archaeological resources. This is a significant omission, as determining the actual and potential eligibility of these resources for inclusion in the National Register of Historic Places determines whether adverse impacts will be mitigated.

19.54

**Socioeconomic impacts.** The SEIS should disclose and discuss what the estimated increases in individual homeowner's property taxes would be as a result of the increased housing demand increasing property valuations. Will affordable housing become an issue to minority and low income groups? The SEIS should disclose this clearly.

19.55

P 5.13-3 L 121 implies classroom population size of approximately 15 students per class. However, we believe this is an underestimate. Classroom size has a major effect on a student's ability to learn. The SEIS should discuss the mean classroom sizes for the different grades and school districts in the Region of Influence. Discuss impacts to minority and low income groups that could occur for each alternative relative to increase in class size (overcrowding, e.g. P 5.13-15 L 478), especially to low income and minority groups (section 5.14).

19.56

Estimates are provided for increases in tax revenues and other economic benefits resulting from each alternative, but the SEIS does not disclose the impacts of the costs to the public that will result from each alternative. The SEIS should estimate for each alternative all the associated costs required to meet the demand of providing the required services (using both Rau and

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19.57

**19.52.** The Draft SEIS disclosed the total number of sites on Fort Bliss. It is stated in the SEIS that cultural resources have the potential of being impacted by this action, but mitigation measures have been developed through the Programmatic Agreement.

The comment that the resources are the "best preserved" is not necessarily accurate. Alluvial fan contexts for sites on both Doña Ana and McGregor Ranges tend to have the highest degree of preservation due to the nature of the depositional environment. Aeolian dune settings on the basin floor tend to have less preservation due to wind erosion. Recently, an El Paso phase pueblo on Doña Ana Range was excavated in the contact zone between the basin floor and lower alluvial fans and may represent one of the most intact El Paso phase pueblos ever excavated.

Since 1995, Fort Bliss has provided a great deal of access to reports. Reports are sent to both the New Mexico and Texas SHPOs and are available in New Mexico through the ARMS program. In addition, when the Directorate of Environment is contacted directly, every effort is made to provide either digital or paper copies of reports that are available. Fort Bliss has a mailing list of interested parties that receive a copy of the project brochure generated for each project. If the recipient finds the brochure of interest and wants a copy of the full report, a digital or paper copy will be provided on request.

**19.53.** Section 5.9 of the Draft SEIS acknowledges that some loss of cultural resources is likely unavoidable, and a statement to that effect has been added in Section 5.18 of the Final SEIS. Any effects would only be adverse effects if they occur to NRHP-eligible properties per the National Historic Preservation Act. Mitigation measures will be put in place per the Programmatic Agreement to minimize or avoid those impacts. Fort Bliss does not at present have any data to suggest that off-road vehicle maneuvers will cause different levels of adverse effects to different cultural periods and phases. However, the potential to cause differing effects to different depositional characteristics, sizes, and locations will have to be studied over time through careful archaeological monitoring and continued site evaluations on McGregor Range. If the signatories of the PA determine the measures are not effective, new measures will be developed in consultation with all parties to the PA, and the PA will be amended as needed.

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Wooten demand factors) - new schools, teachers, fire and law enforcement protection, medical services (including but not limited to new facilities, physicians, emergency response, Thomason), infrastructure and facility maintenance, the cost to consumers of El Paso Electric Company's need to expand its capacity, and the additional water rate increases (a \$100 per month/ \$1200 per year water bill will increase in 20 years to ~\$270 per month/ \$2880 per year).	19.57
The SEIS should also estimate the potential increases in local tax rates for each alternative (El Paso should be able to assist Bliss with this). These estimates are necessary to comply with the impact disclosure requirements of NEPA (in particular to comply with environmental justice requirements). The cost of obtaining these estimates should not be exorbitant, nor should it be difficult, given that Bliss has already set a precedent by initiating several (P 5.13-1 L 4-5, 22) recent economic studies to document its beneficial impacts on the region. Disclose in section 5.14 the impacts of these costs on minorities and low income populations. The SEIS appears to assume that the public will be able to afford to meet all of these costs, possibly an incorrect assumption. The SEIS should discuss those impacts that would result if local governments were not being able to meet these costs, as a worst case analysis.	19.58
At P 5.13-14 L 469-471, the SEIS should define and quantify what is meant by "acceptable" and unacceptable" roadway Levels of Service (LOS) and apply those standards to all alternatives.	19.59
Section 5.13 notes alternatives have progressively greater impacts to quality of life via roadway LOS degradations, including traffic delays, longer commutes, gridlock, and increased highway congestion. Table 5.6-6 estimates the incredible daily increases in vehicle use of roads that will result from the preferred alternative. For example, regarding, vehicle miles traveled, the SEIS estimates over one million three hundred thousand more miles will be driven per day under the proposed action. This is eight times the current miles driven.	
Ultimately, the SEIS fails to quantify impacts to quality of life, traffic, and roadways for each alternative. The Army should determine options for eliminating these impacts and associated costs for each (include as cumulative impacts) so the public and local governments know what the quality of life and financial costs are. Increased highway congestion results in more air pollution; if not already disclosed and evaluated in air section, these effects must be addressed.	19.60 19.61 19.62
<i>Failure to Analyze a Range of Reasonable Alternatives</i>	
The SEIS fails to identify and analyze reasonable alternatives that could avoid or minimize adverse effects to biological resources. The alternatives of using other federally-owned or managed lands, resting and rotating maneuver use, permitting only those level of maneuver frequencies and intensities that a each ecosystem can sustain without degradation, and not conducting maneuvering during the rainy/growing season are not evaluated. However, given that the Army has failed to justify the need for expansion of off-road maneuver areas at all, any reasonable alternatives should not expand the extent of off-road maneuver areas, yet all of the alternatives (except for the no action alternative) propose expansion.	19.63
We are concerned that the No Action alternative is not feasible given the BRAC Commission decision, codified by Congress, which authorizes four HBCTs for Fort Bliss. The only alternative	
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**19.54.** The Fort Bliss Significance Standards (Abbott et al 1996) outline the current criteria for NRHP eligibility and are available in public libraries in El Paso, Alamogordo, and Las Cruces. These standards are currently being updated in the Revised Significance Standards and will be done in consultation with the appropriate SHPOs. Determining NRHP eligibility will establish whether or not any impacts have the potential to be "adverse." If the effects are determined adverse, then mitigation measures are implemented.

**19.55** Adequate information is not available to make these estimates. While housing costs might increase, the tax base will also increase with the construction of new housing. Therefore, it is not possible to predict future tax rates, but more information on revenues and costs for public services has been added to Section 5.13 of the Final SEIS. Similarly, employment can be expected to increase, which could result in higher family income and lower unemployment rates. Further, if there are housing shortages, they would likely not be uniform across all types of housing. Given all these factors, it is not a foregone conclusion that affordable housing will become an issue to minority and low-income groups.

**19.56.** This analysis is beyond the scope of the SEIS. The analysis in the SEIS has used the existing classroom sizes in the affected school districts as a reasonable measure for estimating impacts. Whether or not classroom sizes would change is not reasonably foreseeable, and if they did, how that might affect student learning is completely speculative. There is no evidence that impacts on low-income or minority populations would be disproportionately high and adverse.

Fort Bliss is working closely with local school districts to help them plan for the increase in school-aged children. The DoD's Office of Economic Adjustment is providing consulting assistance to the districts to obtain funding for additional facilities and to meet other increased requirements. Furthermore, local districts receive impact aid to mitigate the cost of educating military dependents.

**19.57.** Section 5.13 of the Final SEIS has been expanded to provide an estimate of the costs of accommodating increased community service demands, to the extent practicable using available information.

There is no evidence to suggest that there will be an increase in the cost of electricity. While additional infrastructure may be needed, there will also be an increase in customers and associated revenues to the utilities.

The estimated increase in water rates is already discussed in the SEIS. It should be noted that some cost of living increases will occur independent of any action at Fort Bliss.

**19.58.** Additional information on costs for public services has been added to Section 5.13 of the Final SEIS. It does not necessarily lead to a conclusion that local tax rates will increase. While additional demands will generate costs for public agencies, it is also true that the region's tax base will increase, both in the form of population increases (more tax payers) and in increased earnings, as reported in the SEIS. There is no evidence that local governments will be unable to meet these costs. The DoD's Office of Economic Adjustment is providing assistance to local governments in planning for and accommodating the increased demands due to BRAC actions at Fort Bliss.

**19.59.** This information is provided in Sections 4.2 and 5.2 of the Draft and Final SEIS.

**19.60.** Impacts to traffic and roadways were quantified and reported in Section 5.2 of the Draft SEIS. Elements that contribute to quality of life have been quantified to the extent practicable, but there is no quantitative measure of quality of life *per se* because it is based on personal values.

**19.61.** A precise estimate of the costs of mitigating traffic impacts cannot be developed because the costs of roadway improvements vary widely depending on location and design, and specific roadway improvement plans have not yet been developed by the El Paso Metropolitan Planning Organization. However, additional information has been added to Section 5.2 of the Final SEIS to provide a sense of the potential costs, based on available information.

As noted above, other quality of life impacts are related to personal values and cannot be reduced to financial terms.

**19.62.** The vehicle emission factors used in developing the traffic emissions were based on MOBILE6, USEPA's emissions model, using the model's default mix of vehicle types and speeds, which are characteristic of typical highway conditions.

Section 5.2 of the SEIS shows that, depending on the alternative, between one and four of the 25 roadway segments analyzed would degrade to an unacceptable level of service due to direct effects from the increase in population at Fort Bliss. This is not expected to result in a significant difference in air pollutant emissions from those estimated in the SEIS.

Because of the uncertainty associated with where development would occur in the region to accommodate the increased induced population, and the complexity of traffic patterns within the roadway network, the El Paso MPO will need to conduct Traffic Demand Modeling to ascertain whether there would be an increase in traffic congestion due to the induced population increase and to ensure conformance with the goals to meet the National Ambient Air Quality Standards. It is the agency

tasked with determining whether an increase in vehicle miles traveled will fit within its emission budget. The information in Table 5.6-6 of the SEIS has been provided to assist the MPO in making this assessment.

**19.63.** Some of the suggested alternatives are not reasonable because they do not meet the purpose for and need for action, while others are too vague to respond to. Specifically, the comment does not identify any other federally owned land that would result in less adverse impacts to biological resources, and the Army does not know of any less sensitive lands that could be used for training of units stationed at Fort Bliss. Furthermore, as described in Section 3.8.3 of the Draft SEIS, the length of time required to withdraw non-military federal lands for military use would not meet the Army's needs. Lands on McGregor Range have already been withdrawn for that purpose, so it is difficult to justify withdrawing additional land while not making more use of already available land.

The amount of off-road vehicle maneuver conducted on Fort Bliss lands will be based on training needs and cannot be artificially limited. To be reasonable, any alternative must meet the need as defined in Chapter 1 of the SEIS. Within that requirement, measures like rest and rotation will be employed to the extent practicable to minimize effects.

The Army's Integrated Training Area Management program's mission is to sustain training lands so they continue to be viable for training, including maintaining the variety of ecological conditions that Fort Bliss provides.

There is no reasonable alternative that does not expand the amount of off-road vehicle maneuver area. That is the reason for the proposed land use changes and the SEIS. If the area already approved for off-road vehicle maneuver were adequate to meet the Army's requirements, there would be no need for the SEIS.

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that adequately protects the values on Fort Bliss therefore cannot be chosen. Here are additional suggestions for reasonable alternatives which should be analyzed in a revised draft SEIS:

- One reasonable alternative that the Army should examine is one that would exclude all the grasslands from off-road maneuvers, including grassland acreage on McGregor Range and along the east flanks of the Organ Mountains. 19.64
- Another alternative we would support is a modified Alternative 1 which does not increase off-road maneuver areas. 19.65
- The Army should also consider alternatives which propose maneuvering on federal lands (including those not managed by Fort Bliss) that contain less valuable ecological and archaeological resources than does the relatively undisturbed McGregor Range. 19.66

*Failure to Mitigate Impacts of Proposed Action*

The mitigations provided in the SEIS are inadequate to reduce impacts of the proposed action. The Army fails to discuss mitigation measures that could reduce or eliminate impacts of the proposed action. The lack of mitigations is especially egregious given the high magnitude, wide extent, and certainty of severe, long-lived impacts. 19.67

Mitigation is not discussed for many resources. Where referenced, e.g. P.5.15-5, L.187-189, it is simply "mitigation is in our design and management plans". Mitigation, as defined in 40 CFR 1508.20, should be disclosed clearly and unequivocally described, even if mitigation is part of a plan (e.g. INRMP) and/or incorporated by design or reference. The revised draft SEIS must disclose what the mitigation specifically is, describe each mitigative action or activity, explain how each mitigation action is expected to result in the mitigation effects, enumerate the metrics of success, how the resource and mitigation action will be monitored, and specify these details in a revised draft SEIS to be circulated to the public and also in the Record of Decision to ensure mitigation is funded and carried out. 19.68

If Fort Bliss assumes that local governments will undertake actions or has been discussing actions that will mitigate impacts the SEIS should specifically state these actions, and what it could cost to implement them. 19.69

Participants on the McGregor field trip asked the Ft Bliss and contractor hosts why the very highly erosive loamy soil near Hackberry tank, which comprises a tiny 2% of the entire proposed maneuver area, could not be placed off-limits to concentrations of vehicles. Rather than answering the question the participants were told that anyone from the public can suggest mitigation in their comments. However, the burden is on the Army to propose mitigations, under NEPA requirements. Further, it is ludicrous to expect the non-professional members of the public who has never seen McGregor Range (as it has been closed to the public for several decades) to propose mitigation measures. The professionals employed by Bliss should have already identified potential mitigation actions. In those few instances where mitigation is implied, the Army has done so obliquely and without any explanation. Examples include: 19.71

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**19.64.** The Army has already minimized potential impacts to grasslands on Fort Bliss in the alternatives considered in the SEIS. As shown in Table 4.8-2 in the Draft SEIS, the area of Fort Bliss with the largest percentage of grasslands (92 percent) is Otero Mesa, which has been avoided in all the alternatives under consideration. By comparison, the areas in the north and south Tularosa Basin portions of McGregor Range under consideration for off-road vehicle maneuvers contain 12 percent or less grasslands. The southeast training areas considered in Alternatives 3 and 4 are approximately 67 percent grasslands. So the areas under consideration are those with the lowest density of grasslands.

Those areas also represent the smallest areal extent of grasslands. Otero Mesa and the Sacramento Mountains foothills, which the Army does not propose to use for off-road vehicle maneuvers, contain nearly 60 percent of the grasslands on Fort Bliss. The Tularosa Basin areas of Fort Bliss currently used or proposed for off-road vehicle maneuvers contain approximately 18 percent of Fort Bliss grasslands. The southeast training areas considered in Alternative 3 and 4 contain another 15 percent of the installation's grasslands.

The grasslands in the Assembly Area east of the Organ Mountain and the Tularosa Basin portion of McGregor Range are distributed among the coppice dunes, shrub, and other vegetation and cannot be completely avoided without severely constraining training.

The southeast training areas considered in Alternatives 3 and 4 can only be avoided if those alternatives are not selected. Impacts to grasslands in those areas would be unavoidable if they are opened to off-road vehicle maneuvers.

However, the benefit that those areas provide to training lies in the diversity they offer, so the Army's goal would be to maintain those grasslands and the variety they provide. That would be accomplished through the Integrated Training Area Management program, which will monitor the areas using satellite imagery and ground surveys and identify management actions to keep the area from degrading to unsustainable conditions.

**19.65.** It is not clear how this would differ from the No Action Alternative, which is already addressed in the SEIS.

**19.66.** This comment is too unspecific for a meaningful response. The comment does not identify any federal lands containing "less valuable" ecological and archaeological resources that the Army might consider, and the Army does not know of any in the vicinity of Fort Bliss that are known to be ecologically and archaeologically less valuable.

**19.67.** A number of mitigation measures were provided throughout the Draft SEIS. Chapter 6 of the Final SEIS consolidates the discussion of mitigation measures and adds additional measures identified through the public comment process.

**19.68.** Section 5.15 of the SEIS describes cumulative impacts. Mitigation measures are discussed in multiple other sections of the SEIS, including Chapters 2, 3, and 5. Taking one sentence out of context does not accurately reflect the document's contents.

The sentence following the one cited in this comment elaborates on the types of mitigation measures incorporated by design and through management processes. It reads: "They include such measures as siting and consolidating facilities and live-fire ranges to reduce the area affected; ensuring land use compatibility in the Real Property Master Plan; energy-efficient facility design; executing a Programmatic Agreement for historic properties; implementing projects in the Integrated Natural Resources Management Plan; promoting a sustainable range and training base through the Integrated Area Management program; and maintaining Solid Waste Management (including an aggressive recycling program), Storm Water Management, Spill Prevention, Control, and Countermeasures, Asbestos Management, Lead Hazard Management, and Pollution Prevention Plans.

Further, this section of the Draft SEIS refers back to Chapter 2, where more detail is provided about all these programs, including listing specific projects. In the Final SEIS, the discussion of mitigation measures has been consolidated in a single Chapter 6.

**19.69.** The Army does not assume that local governments will mitigate the impacts of the actions on Fort Bliss. The analysis in the SEIS identifies potential impacts on local government services with no presumption of mitigation. It is reasonable to assume that local governments will continue to provide the services that are in their charter – there is no basis for assuming otherwise. However, the SEIS analysis did not reduce its assessment of impacts based on any assumption of mitigation by local government.

Chapter 6 of the Final SEIS consolidates the discussion of mitigation measures and describes ongoing collaborative efforts between the federal government and local governments to mitigate the effects of the changes at Fort Bliss.

**19.70.** The Fort Bliss Range Standard Operating Procedures already limit vehicle maneuvers in grasslands. Limited-use areas are established where no bivouac or concentration of people or vehicles is permitted. Fort Bliss would establish a 3.5-kilometer limited-use area around Hackberry Tank if Alternative 3 or 4 is selected.

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19.72 P 5.15-12 L 491-492 states, "Section 7 consultation by the Army in combination with the Fort Bliss INRMP, will minimize the installation's contribution to impacts on species protected by the Endangered Species Act." These is no discussion of how impacts will be minimized, what specific actions in the INRMP will accomplish this (the INRMP appears to be a hollow document given it can not prevent the loss of apomado habitat or eliminate the significant impacts associated with this action), no commitment to funding specifics, or what the mechanisms of protection and metrics of success could possibly be. Rather, this appears to be a meaningless statement for public consumption.

19.73 P 4.8-10 L 250-252 simply states that continued monitoring and improved documentation "ensures that sensitive species receive adequate protection in the event a new population is discovered." There is no basis for expecting this to occur. This is a vague, meaningless assertion that fails to fulfill the Army's obligation to provide specific mitigations to reduce the impacts of the proposed action.

19.74 P 4.8-7 L 99-101 states that, regarding invasive species, Fort Bliss "completes" annual monitoring and "targeted mitigation" of exotics, and this information has been incorporated into the INRMP providing necessary "recommendations" to preserve biological diversity on post. The SEIS needs to define what specifically measures are being or will be taken to preserve biological diversity in the planning area. If this statement is intended as a mitigation, specific mitigation measures must be described and disclosed.

Possible mitigative actions to protect ecological resources in the planning area that are not discussed in the SEIS include, but are not limited to:

19.75 On P 4.8-1 L 29-31, the shinnery oak population within the proposed maneuver area is described as unique. We therefore urge the Army to place this area off limits to maneuver as a specific mitigation.

19.76 Training locations on Otero Mesa can be rested and rotated as a mitigation to reduce<sup>7</sup> impacts to the rare and valuable grassland communities. Rest and rotation would allow maneuvering to be limited to existing maneuver sites.

19.77 Grazing currently occurs north of highway 506 and has potential to significantly impact the vegetation communities when combined with expanded maneuver areas. A revised SEIS should provide the mitigation of eliminating grazing.

19.78 Prohibit concentrations of vehicles, bivouacs, command centers, staging areas, etc. in areas of erosive soils as a mitigation measure.

19.79 Place draws off limits to maneuver as a mitigation. These lands forms have deep, highly erosive soils and will become severely eroded and gulleys if maneuvered on.

<sup>7</sup>We use the word "reduce" and not eliminate or avoid, because recovery may take decades or not occur at all due to the fragile ecology of the area.

Submitted December 12, 2006

**19.71.** The Army recognizes its responsibility to identify mitigation measures and does not expect members of the public to propose mitigation measures. However, if members of the public did suggest mitigation measures, as was the case at the field trip, the Army encouraged them to submit them for consideration. Several mitigation measures have in fact been suggested through the public comment process, are consequently included in the Final SEIS, and will be considered by the Army.

**19.72.** The INRMP integrates management of natural resources. Cumulative impacts are reduced by integrating training needs with natural resource management. For example, requests for training land use are reviewed by the Fort Bliss Directorate of Environment to ensure that training does not occur on areas occupied by Sneed pincushion cactus habitat.

**19.73.** Section 2.1.4 of the Draft SEIS described Fort Bliss' Integrated Natural Resources Management Plan, which contains specific management goals and actions, including conducting surveys to identify sensitive species and implementing mitigation measures for a variety of resources (see Table 2-2).

Fort Bliss professional biologists regularly monitor the list of threatened and endangered species. If new species are identified that may occur on Fort Bliss, the INRMP will be modified as needed to provide for appropriate surveys and implement mitigation measures identified in consultation with the U.S. Fish and Wildlife Service.

Contrary to the comment, there is every basis for expecting Fort Bliss to continue its stewardship of natural resources in general and sensitive species in particular. Fort Bliss has an outstanding record of preservation and compliance with the Endangered Species Act.

**19.74.** Fort Bliss' targeted mitigation of exotic invasives is already in place. It is not specifically intended to mitigate impacts from the Proposed Action but is standard operating procedure for maintaining the ecosystem to support training. Allowing exotics to take over would reduce the capability of the land; Fort Bliss manages invasives to avoid that impact. The specific control measures used depend on the targeted species and have included and will continue to include both chemical and physical treatments. Adaptive management will be used to identify the most effective approach.



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- Place arroyos limits to maneuver as a mitigation, except at a limited number of specifically designated crossing points. | 19.80

Possible reasonable mitigations to address water issues include, but are not limited to:

- Use of purple pipe reclaimed water for their parade grounds and golf courses. | 19.81
- Elimination of turf on the majority of the parade ground to reduce water demand. El Pasoans are doing this, and DOD can as well. | 19.82
- Transfer of Fort Bliss fresh groundwater to EPWU to be used for Rio Bosque and other restoration initiatives in return for purple pipe water. | 19.83

Possible reasonable mitigative actions to address socioeconomic impacts include, but are not limited to:<sup>8</sup>

- Offset the anticipated housing demand by constructing housing on-post or funding off-post housing. | 19.84
- Fund construction and staffing of on-post schools for military dependents. | 19.85

The SEIS has failed to provide mitigations sufficient to ensure effective reduction of the adverse impacts to archaeological resources from the proposed action. The Army's disclosure of proposed mitigation measures for archaeological resources is primarily drawn from Standard Operating Procedures in a Programmatic Agreement (Table 3.9-2, page 3.9-5; Appendix B; cf. Footnote 6) without discussion of the efficacy of these procedures in the past. There is thus little basis for evaluating whether these mitigations whether these same procedures will be effective in the future. Examples of unclear or problematic mitigations include: 1) Failure to disclose efficacy of the red zones (Page 5.9-4, lines 180-181. Page 5.9-5, lines 218-220. cf. Footnote 8) which seem to be an important component of the mitigation strategy; 2) Failure to disclose (and therefore impeded evaluation of) the possible efficacy of mitigations proposed in a revised Programmatic Agreement being negotiated with the Advisory Council on Historic Preservation and the cognizant State historic Preservation Officers (SEIS, Page 5.13-12, lines 500-502); and 3) Failure to disclose planned revisions to the ICRMP (Page 4.9-4, lines 159-161). | 19.86

Most importantly, we are particularly concerned that the Army is insincere about adopting mitigations sufficient to redress environmental harms of the proposed action. Consider that a briefing slide produced by Team Bliss for a DoD briefing to BRAC states in regard to Fort Bliss: "Largest Maneuver Area in the Army - One Million acres of training space ---- *with no environmental limitations!*" (emphasis in the original). This is quite alarming, given the important ecological and archeological values we have discussed in these comments. In addition, the briefing slide contradicts the statement in the SEIS that Fort Bliss proposes to "Modify current land use on Fort Bliss ... without compromising the commitment to stewardship of

<sup>8</sup>These mitigations are described solely to underscore the deficiencies of the draft SEIS. The signatories to this letter are concerned by environmental impacts from the proposed action, and we do not suggested construction be integrated into a proposed action.

Submitted December 12, 2006

**19.75.** The word "unique" describes the occurrence of this vegetation community on Fort Bliss. Shinnery oak communities are very common in the southwest portion of the Great Plains of the U.S. However, the Army will identify a limited-use area around this area if Alternative 2 or 4 is selected. No bivouac or concentration of people or vehicles would be permitted in limited-use areas.

**19.76.** The Army does not propose to use Otero Mesa for off-road vehicle maneuvers, to alter the existing field training sites, or to change land use on Otero Mesa. Vehicle maneuvers are already and will continue to be limited to existing controlled-access field training exercise sites and roads.

**19.77.** The large majority of grazing on Fort Bliss is on Otero Mesa. There is no proposal to change land use on Otero Mesa. The Army will work with BLM to determine the future of grazing in Units 1, 2, and the western half of 3 if Alternative 2 or 4 is selected.

**19.78.** This mitigation is too vague to consider without a more precise definition of erosive soils. As Figure 4.5-3 shows, all of Fort Bliss contains soils that are highly susceptible to wind erosion, including areas already designated for these activities.

The installation's Integrated Training Area Management program implements management strategies to minimize soil loss as part of its charter to sustain training capabilities.

**19.79.** Placing draws completely off limits to maneuver is not practicable. Many of these areas are important to providing realistic training. Because of this importance, the Integrated Training Area Management program will implement measures to keep draws from eroding to the point that they are no longer usable for training.

**19.80.** This restriction would unacceptably degrade training realism.

**19.81.** Fort Bliss is investigating cooperative plans with EPWU for the provision of reclaimed wastewater for use on the installation.

**19.82.** Fort Bliss has been converting to xeriscaping and other landscaping measures that conserve water in family housing and other areas, similar to other residents of El Paso. The parade grounds, however, are a key contributing feature of the Main Post Historic District, which is listed on the National Register of Historic Places. Fort Bliss is working with the State Historic Preservation Officer and the Advisory Council on Historic Preservation in keeping with its Programmatic Agreement to identify ways to reduce freshwater consumption while maintaining the historic district's integrity.

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natural and cultural resources” (page S-1, lines 26-29). A revised draft SEIS should clearly represent sufficient, enforceable, specific mitigations to address the concern that the current mitigations are general and apparently disingenuous.	19.87
As we have stated previously, we request a revised draft SEIS be issued and circulated for public comment. If after that stage a final SEIS is issued, mitigation requirements must be specified in the Record Of Decision. The DOD went on record internally years ago and told installations that they will not fund mitigation unless it is specified in the Record Of Decision.	19.88
<u>Violation of Endangered Species Act</u>	
<i>Violation of Duty to Conserve</i>	
While a non-essential, experimental designation for the northern Aplomado falcon removed federal agencies’ duty to consult under Section 7(a)(2) of the Endangered Species Act (except on National Wildlife Refuges and National Parks), the Army still has a duty to conserve the falcon under Section 7(a)(1) of the ESA. This section requires that all federal agencies must utilize their authorities to carry out programs for the conservation of endangered and threatened species.	
ESA § 7(a)(1) requires BLM to “carry out programs for the conservation of endangered species and threatened species....” Courts have interpreted this mandate as “a specific, rather than a generalized duty to conserve species.” <sup>9</sup> And “conserve” is defined under the ESA as to “recover” (16 U.S.C. § 1532(3)). This means that BLM “must utilize all [of its] authorities to ‘conserve’ the endangered [species there].” <sup>10</sup> The Army must take active measures to encourage the propagation of healthy populations of listed species on the lands it administers. The Army is doing just the opposite with the proposed action, which will harm falcon habitat and therefore the falcon itself. A revised draft SEIS must consider this issue.	19.89
<u>General Comments</u>	
The SEIS needs to describe at P 4.8-6 Table 4.8-2 the dominant species that comprise these cover types. For example, the SEIS should state the differences between piedmont, mesa, and foothill desert grasslands. Relatedly, on P 4.8-7 L 83-85 the SEIS states that the distinction between piedmont, mesa, and foothill desert grasslands is important. The SEIS should disclose what different values are found on those habitat types. It is difficult for the public to understand what impacts will be otherwise.	19.90
Percentages are given for each cover type, which means close to nothing to the public, and acreages are not provided. The SEIS should provide the acreage breakdown for each cover type by: proposed maneuver areas; McGregor proposed area; and as a total of all maneuver areas per alternative. P 5.8-6 Table 5.8-1 does not provide acreage which therefore impedes comprehension of levels of impacts. Basin lowland desert grassland is listed in the table but not shown on maps PP 4.8-3 through -5. These areas should be disclosed on maps in a revised SEIS.	19.91
Submitted December 12, 2006	

<b>19.83.</b> Fort Bliss does not propose to increase pumping from its wells, in order to help preserve fresh water in the Hueco Bolson. As described in the response to comment 19.41, EPWU returns effluent flows to the surface water system and has no discretion to supply water directly to Rio Bosque.
<b>19.84.</b> As Chapter 3 of the Draft SEIS indicated, the Army Residential Communities Initiative is planning to construct additional housing.
<b>19.85.</b> Construction, operations and maintenance, and staffing of schools fall under the purview of El Paso Independent School District. However, their costs are mitigated with assistance from impact aid. Also, Fort Bliss provides land that schools are built on; four El Paso ISD schools are currently located on Fort Bliss property.
<b>19.86.</b> Restricted areas have provided significant protection of archaeological properties, and to date very few impacts have been identified in those areas. The signatories of the Programmatic Agreement have agreed that the mitigation strategies are adequate and will support the military mission. Archaeological monitoring by the Range Liaison staff will identify impacts, and if it is found that the measures are inadequate, the PA will be amended through consultation with the two SHPOs, ACHP, and Tribes that are parties to the PA. If standard mitigation identified in the PA is inadequate, the PA requires consultation with the SHPO, ACHP, and Tribes to identify appropriate mitigation measures. Appropriateness of proposed mitigation is reviewable by the signatories of the PA through the National Environmental Policy Act process or consultation procedures outlined in the PA. Planned revisions to the ICRMP will bring it in line with the Programmatic Agreement and will include standard operating procedures for NAGPRA, Native American consultations, and ARPA.
<b>19.87.</b> The Draft SEIS included numerous mitigations. Chapter 6 of the Final SEIS expands and consolidates the discussion of mitigation measures. As required by CEQ Regulations, the Record of Decision will specify what mitigation measures will be implemented by the Army and summarize monitoring and enforcement measures that will be adopted.
<b>19.88.</b> An analysis of the public comments received on the Draft SEIS does not indicate that the document was so inadequate as to preclude meaningful analysis or that there is significant new information relevant to environmental concerns (40 CFR 1502.9) warranting issuance of a revised Draft SEIS. The Record of Decision will specify mitigation measures to be implemented by the Army.

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P 4.8-7 L 83-85 states that "...certain grassland species... may not find the majority of grassland present (i.e. foothills and mesa grassland) suitable..." The SEIS should discuss what other grassland species would not find this habitat suitable and which species would find it suitable. The SEIS should disclose and discuss what areas/percentages are suitable so the public can ascertain the degree and significance of impacts. 19.92

At P4.8-9 L 185-187 the SEIS fails to list the species of concern noted. They should be named and impacts from the proposed action should be assessed for each. 19.93

References are made to major impact producing localized activities including, for example, bivouacs and staging areas (P 5.8-1, L 12-15), but the SEIS fails to describe where these will occur. It also fails to discuss training standards and scenarios that help predict locations. Fort Bliss should draw from its decades of maneuver training experience to help predict these locations, frequencies of repetitive use, impacts, and potential mitigations. 19.94

P 5.8-5 L 193-194 states that since not every vehicle will travel a unique route, impacts will be less. While we advocate limiting the geographic extent of off-road maneuvers, the greater the number of repetitive passes by vehicles, or "hits" a plant and patch of soil receives, the greater the impact. The Army should refer to Fort Bliss studies and revise its analysis on this point. Fort Bliss should be able to graphically model the tracking patterns to understand impact intensities and frequencies and disclose such in the SEIS, given known training doctrine and the aerial imagery already acquired or available for the installation that clearly shows track patterns on the ground. In fact, in the 1970s imagery was obtained for McGregor that shows tracks of one-time maneuver exercise Gallant Shield '75 and clearly reveals how these vehicles would maneuver and impact soil and vegetation. This area coincides with the areas being proposed for maneuver. Fort Bliss also has acquired coverage of the maneuver areas several different times over the past decades from Cooper Aerial Survey, Ikonos satellite imagery, and other sources. 19.95

Conclusion

There are numerous deficiencies in the draft SEIS enumerated above, which should be addressed through a revision and recirculation of draft SEIS for public comment. The draft SEIS violates multiple federal environmental laws by failing to consider a range of reasonable alternatives, failing to take a hard look at environmental impacts of the proposed action, failing to provide specific and effective mitigations to address those impacts, failing to conserve endangered species, as well as other violations.

Most fundamentally, however, Fort Bliss has failed to demonstrate a need for the proposed action, which doubles the off-road maneuver area on Fort Bliss and will cause severe and likely irreversible damage to significant ecological and archaeological values.

Sincerely,



Nicole J. Rosmarino, Ph.D.  
Conservation Director, Forest Guardians  
On behalf of:

Submitted December 12, 2006

**19.89.** As noted above in response to previous comments, the Proposed Action is not expected to significantly affect aplomado falcon habitat due to the small percentage of potential habitat that would be affected and the lack of aplomado falcons on Fort Bliss. Fort Bliss will continue to monitor, cooperate with the U.S. Fish and Wildlife Service, and comply with the Endangered Species Act.

**19.90.** This information is provided in Table 4.8-1 of the 2000 Mission and Master Plan PEIS, which was incorporated by reference.

**19.91.** Percentages were used because they assist in understanding context. In addition, the analysis was performed using geographic information system, which, due to variations in boundary definition, contains minor differences in acreages. If desired, a reader can obtain an estimate of the acreages involved by applying the percentages in Table 5.8-1 to the acreages in Table 3.2-1.

**19.92.** This paragraph of the SEIS has been modified for clarity. See also response to comments above concerning suitable aplomado falcon habitat.

**19.93.** Much of this detail was contained in the 2000 Mission and Master Plan PEIS and incorporated by reference. The alternatives addressed in the SEIS are not expected to affect most of these species. Section 5.8 of the SEIS identifies the habitats, and by extension the species who use those habitats, that are expected to be affected.

**19.94.** Bivouacs and staging areas could occur anywhere that off-road vehicle maneuvers are authorized, except in designated limited-use areas. The location of these activities is extremely variable and depends on evolving training doctrine. Training doctrine has changed and is expected to undergo further change under Army Transformation, so past history is no longer an accurate indicator of current and future training doctrine. That is the reason the Army employs the Integrated Training Area Management program and the Integrated Natural Resources Management Plan to adapt its management of training lands in response to changing requirements.

**19.95.** The Draft SEIS clearly disclosed that areas open to off-road vehicle maneuvers would be subject to repeated tracking, whether the repetition occurs during a single exercise, in the course of a year, or over multiple years. The impact analysis is based on the expectation that off-road vehicle maneuver areas would be driven over repeatedly. The experience of Gallant Shield, which this comment points out involved a one-time exercise, is not comparable to the regular training that will be conducted by the Heavy BCTs and other units coming to Fort Bliss.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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Kevin von Finger, retired Fort Bliss Senior Ecologist<sup>11</sup>  
Glen de Garmo, retired Fort Bliss Senior Archeologist

Margot Wilson, Southern Group of the Rio Grande Chapter of the Sierra Club

Laurence Gibson, Chair, El Paso Regional Group of the Sierra Club

Michael Robinson, Center for Biological Diversity

Michael Scialdone, New Mexico Wilderness Alliance

Glenn Landers, Southwest Environmental Center

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<sup>11</sup>Mr. von Finger retired as a senior ecologist after 28 years of doing ecological management and NEPA analysis and document writing at the Fort Bliss Directorate of Environment. Before the hiring of additional staff in 1994, Mr. Glen de Garmo and Mr. von Finger were responsible for the entire program area of their respective disciplines (archaeology and ecology) and were the program managers.

Submitted December 12, 2006

In addition, the Army's equipment and training doctrine have changed since 1975, and the patterns of Gallant Shield are no longer representative of current off-road vehicle maneuvers.

A representative sample of training events adapted from Training Circular 25-1 to provide an estimate of off-road vehicle traffic for the SEIS included 17 types of exercises involving a total of 55 discrete maneuver activities. Even if it were possible to accurately model them all, it is expected that the results would demonstrate that all areas where off-road vehicle maneuvers are authorized would eventually be tracked, as the SEIS concludes.

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**

-----Original Message-----

From: Roxlau, Kathy -- NUS [mailto:Kathy.Roxlau@ttnus.com]  
Sent: Wednesday, December 13, 2006 4:50 PM  
To: SEIS@bliss.army.mil  
Subject: Draft SEIS Comments

I realize that these comments are arriving a day after the end of the public comment period, but I am hoping you will include them in your Comment Response. My comments are aimed specifically at the analysis of impacts to cultural resources, Chapter 5.9.

Overall, the discussion presented does not provide any information by which the reader, and thus the Decision Maker, can make an informed comparison of the adverse impacts to cultural resources between the various alternatives. The analysis for every alternative basically says there will be impacts and they will be dealt with according to the Programmatic Agreement. Although impacts will be mitigated, this does not preclude the fact that resources will likely be destroyed under the various alternatives. There is no information presented that enables the reader to compare the extent of resource destruction between the alternatives. Chapter 4.9 demonstrates that a good deal is known about the cultural resources at Fort Bliss. A strategy is already in place to designate areas as red or yellow zones in regard to resource density. Also, the text states that resource density is reliably predictable across Fort Bliss based on completed surveys. I would expect that this information could be used to describe more "quantitatively" the potential impacts to cultural resources anticipated under each of the alternatives, and the sources of those impacts, so that an informed comparison can be made.

20.1

Thank you for your consideration of these comments.


Katherine Roxlau  
Albuquerque, NM

**20.1.** Section 5.9 of the Draft SEIS acknowledges that some loss of cultural resources is likely unavoidable, and a statement to that effect has been added in Section 5.18 of the Final SEIS.

The SEIS provides the decision maker a choice among different geographic areas of the installation, and Table 4.9-1 provides a summary of the number of archaeological sites in each geographic area. Quantitatively, this gives the decision maker information on how many sites could potentially be affected, based on current inventory data, for each alternative. Section 5.9 identifies the sources of potential impacts.

There are no areas designated as "yellow zones" on Fort Bliss for purposes of archaeological management.

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Final SEIS**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

December 1, 2006

John Barrera  
NEPA Manager  
Directorate of Environment  
Bldg. 624, Pleasonton Road  
Fort Bliss, TX 79916-6812

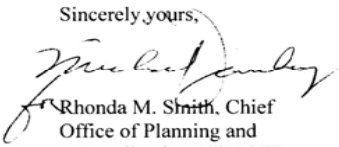
*10-13-06 Accepted  
Attached 12 Dec 2006*

Dear Mr. Barrera:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Environmental Impact Statement (DEIS) for the changes to the Fort Bliss, Texas and New Mexico, Mission and Master Plan, El Paso County, Texas and Dona Ana and Otero Counties, New Mexico.

EPA rates the DEIS as "**LO**," i.e., EPA has "**Lack of Objections**" to the proposed action as described in the DEIS. Our classification will be published in the Federal Register according to our responsibility under Section 309 of the Clean Air Act to inform the public of our views on proposed Federal actions. If you have any questions, please contact Michael Jansky of my staff at 214-665-7451 or by e-mail at [jansky.michael@epa.gov](mailto:jansky.michael@epa.gov).

EPA appreciates the opportunity to review the DEIS. Please send our office two copies of the FEIS when it is sent to the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20460.

Sincerely yours,  
  
Rhonda M. Smith, Chief  
Office of Planning and  
Coordination (6EN-XP)

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12-19-06  
ORIGINAL FAXED JFR

December 11, 2006

COL Robert Burns, Garrison Commander  
Department of the Army  
IMSW-BL-S-7A  
1 Pershing Rd  
Fort Bliss, TX 79916

Re: Draft Environmental Impact Statement for the Implementation of Base Realignment and Closure Recommendations at Fort Bliss, Texas

Dear COL Burns:

I have read the majority of the Environmental Impact Statement (EIS) for the BRAC relocation implementation. I have questions regarding the protection or relocation of historic sites on the range areas. The Comanche Nation is extremely concerned that no designated efforts are to be made to locate or protect any sites that exist on these ranges. It is very important to the Nation that the knowledge and insight that can be garnered for the future from the past is preserved. To destroy information that can be extracted by historic sites is a tragedy.

The Comanche Nation is vitally concerned with the preservation of historic sites because of what they can tell the present generation about the past and what this past can predict for the future. It is extremely important to the Nation to continue the fight to protect and to strive to glean all the knowledge and insight that these sites can provide.

If in the process of any of the construction for the BRAC project human remains or archaeological items are discovered, we request that you **immediately cease** the work and notify us so that we may discuss appropriate disposition with you and the other Tribal Nations that may be affected by such discoveries.

Sincerely,

Ruth Toahly, NAGPRA Coordinator

PO Box 908 • Lawton, Oklahoma 73502 • PHONE: (580) 492-3740 • FAX: (580) 492-3745

22.1

22.1. Mescalero Apache Tribe and the Ysleta del Sur Pueblo were invited to consult but chose not to. Consultation has been initiated with The Navajo Nation as well as reinitiated with the Mescalero Apache Tribe and the Ysleta del Sur Pueblo. The Comanche Tribe has also been contacted to initiate consultation. This contact has indicated a possible interest in Fort Bliss lands but not specific interests in the SEIS. The Hopi Tribal Council has indicated that they do not have interests in lands managed by Fort Bliss. They recognize the Mescalero Apache Tribe and the Ysleta del Sur Pueblo as the Tribes that have traditional interests and that Fort Bliss should be consulting with. Tribal concerns are addressed in the Programmatic Agreement for historic properties, which can be amended at any time during its life upon request by the Tribe(s).

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS**



December 14, 2006

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John F. Barrera  
IMSW-BLS-Z  
Bldg. 624, Pleasonton Road  
Fort Bliss, TX 79916-6812

RE: Proposed Changes to Fort Bliss Mission and Master Plan, El Paso  
County

Dear Mr. Barrera:

Texas Parks and Wildlife Department (TPWD) has received the draft Supplemental Environmental Impact Statement (SEIS) regarding the changes in land use referenced above in the Main Cantonment Area and Fort Bliss Training Complex in Texas and New Mexico. TPWD staff has reviewed the SEIS and offers the following comments concerning the portion of the project located in El Paso County, Texas.

Project Description

The portion of the proposed project in Texas entails the expansion of the main cantonment area and the development of facilities to accommodate additional personnel and their dependants as well as additional vehicles, other equipment, and associated operations. Including projects previously evaluated in the 2001 Mission and Master Plan Programmatic Environmental Impact Statement, development within the main cantonment area would disturb an estimated 4,300 acres of land. In addition to development within the main cantonment area, off road vehicle maneuvers would be increased in the remainder of the Fort Bliss area located in Texas referred to in the SEIS as the South Training Areas.

Vegetation

The SEIS states that the development within the main cantonment area would have negligible impacts to vegetation because of the highly disturbed condition of this area. The SEIS also states that vegetation disturbance would be mitigated by ornamental landscaping.



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hunting or fishing  
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**Recommendation:** TPWD recommends minimizing the extent of disturbance to native vegetation within the main cantonment area as much as possible. Existing native vegetation should be allowed to remain and be incorporated into landscaping as much as feasible. Where vegetation removal is unavoidable, disturbed areas should be revegetated with site-specific native plant species. Landscaping with native plants that are best adapted to the area would minimize the amount of water and fertilizers required for maintenance.

24.1

The SEIS states that the South Training Area contains 76% Mesquite (*Prosopis glandulosa*) coppice dunes, 7% Creosote (*Larrea tridentata*) piedmont shrublands, and 7% Sandscrub. The remaining 10% of the training area in Texas consists primarily of grasslands. Off road vehicle maneuvers would be concentrated within the shrub communities. These areas historically consisted of grassland species but due to disturbance such as grazing and trampling they have stabilized in this altered ecological state.

**Recommendation:** TPWD recommends that access to the remaining grassland communities be restricted to the extent feasible to minimize adverse impacts to this habitat type. If disturbed areas of the shrub communities will not be used for training activities for an extended period, these areas should be revegetated with site-specific native species as soon as possible after disturbance. The replacement of native plants would help control erosion, would provide habitat for wildlife, and would ensure that native plant species are provided an opportunity to compete with undesirable, non-native, invasive plant species.

24.2

The SEIS states that a large number of additional wheeled and tracked vehicles, as well as other equipment, would be transferred to Fort Bliss after the relocation of personnel.

**Recommendation:** In an effort to prevent the introduction and spread of introduced and/or invasive species, tire treads and tracks of equipment transferred from other military installations should be free of mud and vegetation that could potentially carry seeds of non-native plant species.

24.3

Water Resources

Impervious cover in the main cantonment area would be increased by approximately 1,600 acres. The SEIS states that storm water conveyances

**24.1.** Fort Bliss does landscape with native plants and plants adapted to arid landscapes. Natural areas not specifically landscaped as part of buildings are managed in native species as much as possible to minimize water and other maintenance costs and to suppress dust. Disturbance is minimized in areas outside of construction footprints. However, some areas of turf are maintained as part of the Main Post Historic District and on recreational playing fields.

**24.2.** The majority of grasslands on Fort Bliss (67 percent) will not be utilized for off-road vehicle maneuver. The Fort Bliss Integrated Training Area Management program has a goal to sustain grasslands in areas that would be open to off-road vehicle maneuver.

**24.3.** Vehicles are cleaned before being transported. This standard procedure minimizes the introduction of exotic weeds.

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would need to be constructed in the area between El Paso International Airport and the main cantonment area to handle the additional runoff from the increase in impervious cover. Storm water management facilities would likely need to be built to minimize the discharge of storm water during rainfall events.

**Recommendation:** TPWD recommends that alternatives to concrete or asphalt be considered for parking areas. Incorporating pavers in parking area design will allow rainwater to reach the groundwater system. Any runoff from the developed areas should be treated before discharging into nearby aquatic and wetland habitats. Storm water management facilities should include vegetated swales, retention/detention ponds, or similar pretreatment areas into which runoff may be directed.

24.4

Rare and Protected Species

Based on the project description and when suitable habitat is present, the following species could potentially be impacted by the proposed project:

**State Listed Threatened**

Mountain short-horned lizard (*Phrynosoma hernandesi*)  
Texas horned lizard (*Phrynosoma cornutum*)

**Species of Concern**

Western Burrowing Owl (*Athene cunicularia hypugaea*)  
Comal snakewood (*Colubrina stricta*)  
\*Desert night-blooming cereus (*Peniocereus greggii* var. *greggii*)  
Hueco rock-daisy (*Perityle huecoensis*)  
\*Resin leaf brickellbush (*Brickellia baccharidea*)  
\*Sand prickly-pear (*Opuntia arenaria*)  
\*Wheeler's spurge (*Chamaesyce geyeri* var. *wheeleriana*)

Records in the TPWD Natural Diversity Database (NDD) indicate that occurrences of the species marked with asterisks (\*) above and the species of concern Pecos River muskrat (*Ondatra zibethicus ripensis*) have been documented possibly within 1.5 miles of the project area. An occurrence of the federal and state listed endangered Sneed's pincushion cactus (*Escobaria sneedii* var. *sneedii*) has been documented in the Franklin Mountains possibly within 1.5 miles of the William Beaumont Army Medical Center and Logan Heights. Printouts for these occurrence records are included for your planning

24.5

**24.4.** Depth to groundwater under many parts of Fort Bliss exceeds 200 feet. Use of permeable pavements is unlikely to significantly enhance groundwater recharge. The majority of new construction is in areas of open desert, considerable distance from any existing storm water drainage infrastructure or aquatic or wetland habitat. For those reasons, on-site storm water retention is planned. Concentrating runoff in this manner simplifies West Nile Virus vector management efforts and creates temporary intermittent wetland habitat.

Much of the Main Cantonment Area of Fort Bliss is already served by existing storm water drainage infrastructure designed to drain the developed and redeveloped areas.

The Fort Bliss Directorate of Environment recommends the use of storm water treatment devices for runoff originating from new construction of vehicle maintenance or fueling areas. In addition, the Directorate of Environment conducts frequent pollution prevention training for soldiers and workers and regularly conducts internal inspections to ensure pollution prevention best management practices are implemented.

**24.5.** Fort Bliss has conducted Pecos River muskrat surveys and found no suitable habitat on the installation due to the absence of perennial wetlands.

The portions of the Franklin Mountains within Fort Bliss have been surveyed for Sneed pincushion cactus. The only populations found on Fort Bliss are in New Mexico.

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reference. **Please do not include these species occurrence printouts in your draft or final documents.** Because some species are especially sensitive to collection or harassment, these records are for your reference only.

The SEIS states that Texas horned lizards are widespread across the grassland and shrubland communities on Fort Bliss and project activities may impact local populations but are not expected to jeopardize regional populations. Western burrowing owls are also known to occur in the grassland, shrubland, Mesquite coppice dune, and sand scrub habitats on Fort Bliss.

**Recommendation:** TPWD recommends monitoring project areas for Mountain short-horned lizards and Texas horned lizards during construction activities in the main cantonment area to minimize adverse impacts to individuals of these species. Please note that if individuals of these species are found on the project sites they may only be handled by persons with a scientific collection permit obtained through this Department. For more information on this permit, please contact Karen Pianka at (512) 389-8212. Management guidelines for the Texas horned lizard are included for your planning reference.

24.6

In accordance with the Migratory Bird Treaty Act, TPWD recommends impacts to the Western Burrowing Owl be avoided during construction and training activities. TPWD recommends contacting the U.S. Fish and Wildlife's Migratory Bird Office at (505) 248-7882 if adverse impacts to the Western Burrowing Owl or other migratory birds are anticipated.

24.7

The SEIS states that the Hueco Mountains rock daisy is known to or has the potential to occur in the Hueco Mountains in the South Training Areas and the Sand prickly pear has low potential to occur on Fort Bliss. The SEIS also states that continued monitoring and improved documentation of Fort Bliss' natural environment ensures that sensitive species receive adequate protection in the event a new population is discovered.

TPWD recommends that continued monitoring include surveys for all rare plant species listed above and adverse impacts to these species be avoided during construction projects in the main cantonment area. Adverse impacts to known populations of rare species should also be avoided during training activities. The attached El Paso County list provides a brief description of the habitat requirements of these species. Please review this list, as other rare species could also be present depending upon

24.8

**24.6.** Surveys have demonstrated that Mountain short-horned lizards do not exist in the Main Cantonment Area or the South Training Areas of Fort Bliss, but they do occur in grassland habitats on Otero Mesa. No construction is planned on Otero Mesa.

Texas horned lizards do exist in areas proposed for construction, and there will be impacts to individuals within the construction area as well as loss of habitat in built-up areas. Planned construction will affect approximately 4,000 acres, with the potential for another 900 acres of construction in the future. By comparison, there are approximately 95,000 acres of Texas horned lizard habitat in the Texas portion of Fort Bliss alone. Texas horned lizards are common throughout most of Fort Bliss, as well as the northern Chihuahuan Desert.

**24.7.** Proposed construction and training activities will likely impact birds protected under the Migratory Bird Treaty Act and will be handled in accordance with the Memorandum of Agreement between the Department of Defense and the U.S. Fish and Wildlife Service.

The majority of burrowing owl dens on Fort Bliss are located in the mesquite coppice dune areas and in the black-tailed prairie dog colonies on Otero Mesa. Coppice dune areas are already used for off-road vehicle maneuvers and the dunes have continued to support owls and their burrows. No changes in military land use are proposed for the Otero Mesa portion of Fort Bliss.

**24.8.** The plant species on the referenced list do not occur in areas of Fort Bliss proposed for construction. Fort Bliss does monitor the Hueco Mountains rock daisy and desert night blooming cereus populations on the installation, and impacts to these populations are avoided.

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habitat availability. The most current TPWD county lists are now available on-line at [http://www.tpwd.state.tx.us/landwater/land/maps/gis/ris/endangered\\_species.phtml](http://www.tpwd.state.tx.us/landwater/land/maps/gis/ris/endangered_species.phtml). If during construction, the project area is found to contain rare species, natural plant communities, or special features, TPWD recommends that precautions be taken to avoid impacts to them.

24.8

I appreciate the opportunity to review and comment on this project. TPWD strives to respond to requests for project review within the specified 30 day public review and comment period. Responses may be delayed due to workload and lack of staff. Failure to meet the 30 day review timeframe does not constitute concurrence from TPWD that the proposed project will not adversely impact fish and wildlife resources.

Please contact me at (512) 389-4579 if we may be of further assistance.

Sincerely,



Julie C. Wicker  
Wildlife Habitat Assessment Program  
Wildlife Division

JCW:hb.12062

Attachments

**Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
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Texas Parks & Wildlife Dept.  
Annotated County Lists of Rare Species

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Last Revision: 7/6/2006 2:16:00 PM

**EL PASO COUNTY**

**AMPHIBIANS**

	Federal Status	State Status
<b>Northern leopard frog</b> <i>Rana pipiens</i> streams, ponds, lakes, wet prairies, and other bodies of water; will range into grassy, herbaceous areas some distance from water; eggs laid March-May and tadpoles transform late June-August; may have disappeared from El Paso County due to habitat alteration		

**BIRDS**

	Federal Status	State Status
<b>American Peregrine Falcon</b> <i>Falco peregrinus anatum</i> resident in west Texas	DL	E
<b>Arctic Peregrine Falcon</b> <i>Falco peregrinus tundrius</i> currently potential migrant through most of state, winters along gulf coast	DL	T
<b>Baird's Sparrow</b> <i>Ammodramus bairdii</i> shortgrass prairie with scattered low bushes and matted vegetation; mostly migratory in western half of State, though winters in Mexico and just across Rio Grande into Texas from Brewster through Hudspeth counties		
<b>Ferruginous Hawk</b> <i>Buteo regalis</i> open country, primarily prairies, plains, and badlands; nests in tall trees along streams or on steep slopes, cliff ledges, river-cut banks, hillsides, power line towers; year-round resident in northwestern high plains, wintering elsewhere throughout western 2/3 of Texas		
<b>Interior Least Tern</b> <i>Sterna antillarum athalassos</i> subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony	LE	E
<b>Mexican Spotted Owl</b> <i>Strix occidentalis lucida</i> remote, shaded canyons of coniferous mountain woodlands (pine and fir); nocturnal predator of mostly small rodents and insects; day roosts in densely vegetated trees, rocky areas, or caves	LT	T
<b>Montezuma Quail</b> <i>Cyrtonyx montezumae</i> open pine-oak or juniper-oak with ground cover of bunch grass on flats and slopes of semi-desert mountains and hills; travels in pairs or small groups; eats succulents, acorns, nuts, and weed seeds, as well as various invertebrates		
<b>Peregrine Falcon</b> <i>Falco peregrinus</i> subspecies (F p tundrius) potential migrant through most of state, winters along coast; subspecies (F p anatum) resident, nests in west Texas	DL	E T
<b>Prairie Falcon</b> <i>Falco mexicanus</i> open, mountainous areas, plains and prairie; nests on cliffs		

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**EL PASO COUNTY**

**BIRDS**

	Federal Status	State Status
<b>Snowy Plover</b> <i>Charadrius alexandrinus</i> formerly an uncommon breeder in the Panhandle; potential migrant		
<b>Southwestern Willow Flycatcher</b> <i>Empidonax traillii extimus</i> thickets of willow, cottonwood, mesquite, and other species along desert streams	LE	E
<b>Western Burrowing Owl</b> <i>Athene cunicularia hypugaea</i> open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows		
<b>Western Snowy Plover</b> <i>Charadrius alexandrinus nivosus</i> uncommon breeder in the Panhandle; potential migrant; winter along coast		
<b>Western Yellow-billed Cuckoo</b> <i>Coccyzus americanus occidentalis</i> status applies only to western population beyond the Pecos River Drainage; breeds in riparian habitat and associated drainages; springs, developed wells, and earthen ponds supporting mesic vegetation; deciduous woodlands with cottonwoods and willows; dense understory foliage is important for nest site selection; nests in willow, mesquite, cottonwood, and hackberry; forages in similar riparian woodlands; breeding season mid-May-late Sept	C;NL	

**FISHES**

	Federal Status	State Status
<b>Bluntnose shiner</b> <i>Notropis simus</i> extirpated; Rio Grande; main river channel, often below obstructions over substrate of sand, gravel, and silt; damming and irrigation practices presumed major factors contributing to decline		T
<b>Rio Grande silvery minnow</b> <i>Hybognathus amarus</i> extirpated; historically Rio Grande and Pecos River systems and canals; pools and backwaters of medium to large streams with low or moderate gradient in mud, sand, or gravel bottom; ingests mud and bottom ooze for algae and other organic matter; probably spawns on silt substrates of quiet coves	LE	E

**INSECTS**

	Federal Status	State Status
<b>A Royal moth</b> <i>Sphingicampa raspa</i> woodland - hardwood; with oaks, junipers, legumes and other woody trees and shrubs; good density of legume caterpillar foodplants must be present; Prairie acacia ( <i>Acacia augustissima</i> ) is the documented caterpillar foodplant, but there could be a few other woody legumes used		
<b>A tiger beetle</b> <i>Cicindela hornii</i> grassland/herbaceous; burrowing in or using soil; dry areas on hillside or mesas where soil is rocky or loamy and covered with grasses, invertivore; diurnal, hibernates/aestivates, active mostly for several days after heavy rains. the life cycle probably takes two years so larvae would always be present in burrows in the soil		
<b>Barbara Ann's tiger beetle</b> <i>Cicindela politula barbarannae</i>		

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**EL PASO COUNTY**

**INSECTS**                      Federal Status    State Status

limestone outcrops in arid treeless environments or in openings within less arid pine-juniper-oak communities; open limestone substrate itself is almost certainly an essential feature; roads and trails

**Poling's hairstreak**                      *Fixsenia polingi*

oak woodland with *Quercus grisea* as substantial component, probably also uses *Q. emoryi*; larvae feed on new growth of *Q. grisea*, adults utilize nectar from a variety of flowers including milkweed and catslaw acacia; adults fly mid May - Jun, again mid Aug - early Sept

**MAMMALS**                      Federal Status    State Status

**Big free-tailed bat**                      *Nyctinomops macrotis*

habitat data sparse but records indicate that species prefers to roost in crevices and cracks in high canyon walls, but will use buildings, as well; reproduction data sparse, gives birth to single offspring late June-early July; females gather in nursery colonies; winter habits undetermined, but may hibernate in the Trans-Pecos; opportunistic insectivore

**Black bear**                      *Ursus americanus*                      T/SA;NL                      T

bottomland hardwoods and large tracts of inaccessible forested areas; due to field characteristics similar to Louisiana Black Bear (LT, T), treat all east Texas black bears as federal and state listed Threatened

**Black-footed ferret**                      *Mustela nigripes*                      LE                      E

extirpated; inhabited prairie dog towns in the general area

**Black-tailed prairie dog**                      *Cynomys ludovicianus*

dry, flat, short grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle; live in large family groups

**Cave myotis bat**                      *Myotis velifer*

colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (*Hirundo pyrrhonota*) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore

**Desert pocket gopher**                      *Geomys arenarius*

cottonwood-willow association along the Rio Grande in El Paso and Hudspeth counties; live underground, but build large and conspicuous mounds; life history not well documented, but presumed to eat mostly vegetation, be active year round, and bear more than one litter per year

**Fringed bat**                      *Myotis thysanodes*

habitat variable, ranging from mountainous pine, oak, and pinyon-juniper to desert-scrub, but prefers grasslands at intermediate elevations; highly migratory species that arrives in Trans-Pecos by May to form nursery colonies; single offspring born June-July; roosts colonially in caves, mine tunnels, rock crevices, and old buildings

**Gray wolf**                      *Canis lupus*                      LE                      E

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**EL PASO COUNTY**

**MAMMALS**                      Federal Status    State Status

extirpated; formerly known throughout the western two-thirds of the state in forests, brushlands, or grasslands

**Long-legged bat**                      *Myotis volans*

in Texas, Trans-Pecos region; high, open woods and mountainous terrain; nursery colonies (which may contain several hundred individuals) form in summer in buildings, crevices, and hollow trees; apparently do not use caves as day roosts, but may use such sites at night; single offspring born June-July

**Pale Townsend's big-eared bat**                      *Corynorhinus townsendii pallascens*

roosts in caves, abandoned mine tunnels, and occasionally old buildings; hibernates in groups during winter; in summer months, males and females separate into solitary roosts and maternity colonies, respectively; single offspring born May-June; opportunistic insectivore

**Pecos River muskrat**                      *Ondatra zibethicus ripensis*

creeks, rivers, lakes, drainage ditches, and canals; prefer shallow, fresh water with clumps of marshy vegetation, such as cattails, bulrushes, and sedges; live in dome-shaped lodges constructed of vegetation; diet is mainly vegetation; breed year round

**Western red bat**                      *Lasiurus blossevillei*

roosts in tree foliage in riparian areas, also inhabits xeric thorn scrub and pine-oak forests; likely winter migrant to Mexico; multiple pups born mid-May - late Jun

**Western small-footed bat**                      *Myotis ciliolabrum*

mountainous regions of the Trans-Pecos, usually in wooded areas, also found in grassland and desert scrub habitats; roosts beneath slabs of rock, behind loose tree bark, and in buildings; maternity colonies often small and located in abandoned houses, barns, and other similar structures; apparently occurs in Texas only during spring and summer months; insectivorous

**Yuma myotis bat**                      *Myotis yumanensis*

desert regions; most commonly found in lowland habitats near open water, where forages; roosts in caves, abandoned mine tunnels, and buildings; season of partus is May to early July; usually only one young born to each female

**MOLLUSKS**                      Federal Status    State Status

**Franklin Mountain talus snail**                      *Sonorella metcalfi*

terrestrial; bare rock, talus, scree; inhabits igneous talus most commonly of rhyolitic origin

**Franklin Mountain wood snail**                      *Ashmunella pasonis*

terrestrial; bare rock, talus, scree; talus slopes, usually of limestone, but also of rhyolite, sandstone, and siltstone, in arid mountain ranges

**REPTILES**                      Federal Status    State Status

**Big Bend slider**                      *Trachemys gaigeae*

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**REPTILES**

Federal Status    State Status

almost exclusively aquatic, sliders (*Trachemys* spp.) prefer quiet bodies of fresh water with muddy bottoms and abundant aquatic vegetation, which is their main food source; will bask on logs, rocks or banks of water bodies; breeding March-July

**Chihuahuan Desert lyre snake**      *Trimorphodon wilkinsonii*      T

mostly crevice-dwelling in predominantly limestone-surfaced desert northwest of the Rio Grande from Big Bend to the Franklin Mountains, especially in areas with jumbled boulders and rock faults/fissures; secretive; egg-bearing; eats mostly lizards

**Mountain short-horned lizard**      *Phrynosoma hernandesi*      T

diurnal, usually in open, shrubby, or openly wooded areas with sparse vegetation at ground level; soil may vary from rocky to sandy; burrows into soil or occupies rodent burrow when inactive; eats ants, spiders, snails, sowbugs, and other invertebrates; inactive during cold weather; breeds March-September

**New Mexico garter snake**      *Thamnophis sirtalis dorsalis*

nearly any type of wet or moist habitat; irrigation ditches, and riparian-corridor farmlands, less often in running water; home range about 2 acres; active year round in warm weather, both diurnal and nocturnal, more nocturnal during hot weather; bears litter July-August

**Texas horned lizard**      *Phrynosoma cornutum*      T

open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September

**PLANTS**

Federal Status    State Status

**Comal snakewood**      *Colubrina stricta*

only known Texas population lies at the base of an igneous rock outcrop in the Chihuahuan Desert east of El Paso; flowering late spring or early summer

**Desert night-blooming cereus**      *Peniocereus greggii* var *greggii*

shrublands in lower elevation desert flats and washes; flowering concentrated during a few nights in late May to late June

**Hueco rock-daisy**      *Perityle huecoensis*

dry limestone rock outcrops only known location is in the Hueco Mountains

**Resin-leaf brickellbush**      *Brickellia baccharidea*

mixed desert shrublands on gravelly soils derived from limestone and perhaps also from igneous rocks, on bajada slopes and in arroyos; flowering summer-fall

**Sand prickly-pear**      *Opuntia arenaria*

deep, loose sands in sparsely vegetated dune or sandhill areas; flowering May-June

**Sneed's pincushion cactus**      *Escobaria sneedii* var *sneedii*      LE      E

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**EL PASO COUNTY**

**PLANTS**

Federal Status    State Status

dry limestone outcrops on rocky slopes in desert mountains of the Chihuahuan Desert; flowering April-September (peak season in April?)

**Texas false saltgrass**      *Allolepis texana*

sandy to silty soils of valley bottoms and river floodplains; flowering (June-) July-October

**Wheeler's spurge**      *Chamaesyce geyeri* var *wheeleriana*

sparsely vegetated loose sand in reddish sand dunes or coppice mounds; flowering and fruiting August-September?

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**Notes for  
County Lists of Texas' Special Species**

The Texas Parks and Wildlife (TPWD) county lists **include:**

**Vertebrates, Invertebrates, and Vascular Plants** identified as being of conservation concern by TPWD within Texas. These special species lists are comprised of species, subspecies, and varieties that are federally listed; proposed to be federally listed; have federal candidate status; are state listed; or carry a global conservation status indicating a species is critically imperiled, very rare, vulnerable to extirpation, or uncommon.

The TPWD county lists **do not include:**

**Natural Plant Communities** such as Little Bluestem-Indiangrass Series (native prairie remnant), Water Oak-Willow Oak Series (bottomland hardwood community), Saltgrass-Cordgrass Series (salt or brackish marsh), Sphagnum-Beakrush Series (seepage bog).

**Other Significant Features** such as bird rookeries, migratory songbird fallout areas, comprehensive migratory bird information, bat roosts, bat caves, invertebrate caves, and prairie dog towns.

**These lists are not all inclusive for all rare species distributions.** The lists were compiled, developed, and are updated based on field guides, staff expertise, scientific publications, and the TPWD Natural Diversity Database (NDD) (formerly the Biological and Conservation Data System) occurrence data. Historic ranges for some state extirpated species, full historic distributions for some extant species, accidentals and irregularly appearing species, and portions of migratory routes for particular species are not necessarily included. Species that appear on county lists do not all share the same probability of occurrence within a county. Some species are migrants or wintering residents only. Additionally, a few species may be historic or considered extirpated within a county.

TPWD includes the Federal listing status for your convenience and makes every attempt to keep the information current and correct. However, the US Fish and Wildlife Service (FWS) is the responsible authority for Federal listing status. The TPWD lists do not substitute for contact with the FWS and federally listed species county ranges may vary from the FWS county level species lists because of the inexact nature of range map development and use.

Status Key:

- LE, LT - Federally Listed Endangered/Threatened
- PE, PT - Federally Proposed Endangered/Threatened
- E-SA, T-SA - Federally Listed Endangered/Threatened by Similarity of Appearance
- C - Federal Candidate for Listing; formerly Category 1 Candidate
- DL, PDL - Federally Delisted/Proposed for Delisting
- NL - Not Federally Listed
- E, T - State Listed Endangered/Threatened
- NT - Not tracked or no longer tracked by the State
- "blank" - Rare, but with no regulatory listing status

This information is specifically for your assistance only; due to continuing data updates, **please do not redistribute the lists**, instead refer all requesters to the web site at: [http://www.tpwd.state.tx.us/landwater/land/maps/gis/ris/endangered\\_species.html](http://www.tpwd.state.tx.us/landwater/land/maps/gis/ris/endangered_species.html) or to our office for the most current information available. For questions regarding county lists, please call (512) 912-7011.

Please use the following citation to credit the source for this county level information:

Texas Parks and Wildlife Department, Wildlife Division, Diversity and Habitat Assessment Programs. County Lists of Texas' Special Species. [county name(s) and revised date(s)].

Last Revision: 30 May 2006



Fort Bliss Mission and Master Plan Supplemental Programmatic Environmental Impact Statement  
Final SEIS

MANAGEMENT OF TEXAS HORNED LIZARDS

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**Abstract:** Texas horned lizards are declining in abundance and distribution in Texas. There are no obvious causes for their decline; however, multiple factors such as widespread pesticide use, habitat loss, over-collection, and fire ants have been suggested as possible reasons. Texas horned lizards are a threatened species in Texas and are listed as a Federal Species of Concern. The ecology and habitat requirements of Texas horned lizards are outlined in this paper and management practices are suggested that should benefit this species.

INTRODUCTION

The Texas horned lizard is a part of the history and culture of Texas. In fact, most Texans have fond memories of growing up with Texas horned lizards. Horned lizards are as much of Texas folklore as cowboys, longhorns, the Alamo, and listening to coyotes howl at the moon. Unfortunately, many young Texans have not experienced the thrill of seeing a horned lizard in their backyard. This is because the Texas horned lizard population has declined in Texas over the past couple of decades.

Many Texans have an intense interest in stopping the population decline of horned lizards. The purpose of this management bulletin is to inform Texans of the current status, life history, and habitat requirements of Texas horned lizards, and to offer management tips that possibly could slow the decline of Texas horned lizards in Texas.



Wyman Metzger

Texas horned lizards are easily identified by the 2 large spines behind their head.

TAXONOMY AND DESCRIPTION

Much like the bandits of western folklore, Texas horned lizards have used many aliases. Two of the most commonly-used misnomers are horned toads and horned frogs. However, Texas horned lizards are, as their true name implies, lizards! Toads are tailless amphibians with rough, warty skin and live on moist land or in water (i.e., during breeding). Frogs also are tailless amphibians but have smooth skin and are equally adapted to land and water. Horned lizards are reptiles and belong to the Iguanid genus *Phrynosoma*. They have tails and a scaled body. In fact, many of the body scales of horned lizards are enlarged into spine-like structures. Bodies of horned lizards are strongly dorsoventrally flattened, generally contain sharp spines on the back of their head, and have relatively short legs (Pianka and Parker 1975). There are 13 species of horned lizards (Sherbrooke 1981). Seven species occur in the United States and 3 of these species occur in Texas; these include the Texas horned lizard, Roundtail horned lizard, and Mountain short-horned lizard (Fig. 1).

Texas horned lizards can be distinguished from other species of horned lizards in Texas by their 2 very sharp spines that protrude from the back of their head (called occipital spines), 2 rows of fringed scales on their sides (other species of horned lizards have only 1 row of fringed scales), dark brown to sooty-colored dorsal spots edged with lighter colors, and a light-colored stripe down the middle of their back (Stebbins 1954). Adult Texas horned lizards range in length from 3 to 5 inches, excluding their tail (Ballinger 1974). The largest Texas horned lizard on record measured just over 7 inches from tip of snout to tip of tail (Brown and Lucchino 1972). Weights of mature Texas horned lizards range from 0.9 to 3.5 ounces (Munger 1984a).

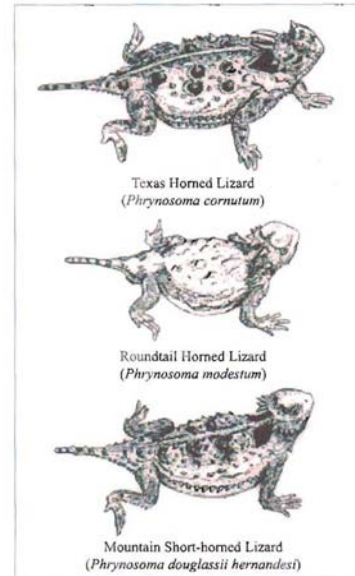


Figure 1. The 3 species of horned lizards occurring in Texas (illustrated by Diane Thompson).

DISTRIBUTION AND CURRENT STATUS

Historically within the United States, Texas horned lizards ranged throughout the south-central United States, from southern Arizona to northwestern Louisiana and from southern Texas to central Kansas (Sherbrooke 1981). Today, Texas horned lizards are found in the southeastern tip of Arizona and Colorado, southern and eastern New Mexico, most of Kansas and Texas, and all of Oklahoma.

They apparently are doing well throughout most of their range except in Texas. The current range of Texas horned lizards in Texas (Fig. 2) appears to be decreasing; they no longer occur in Texas east of an imaginary line from Fort Worth to Corpus Christi (Donaldson et al. 1994), except for small, isolated populations. Because of this decline, they are listed as a threatened species in Texas. The Texas horned lizard was one of the first species listed by Texas as

threatened on 18 July 1977 (Texas Parks and Wildlife Code 1987).

Unfortunately, there is no one obvious reason for the declining populations of Texas horned lizards in Texas. However, several ideas have been proposed (Price 1990). The first reason is a cause-and-effect relationship with red imported fire ants. The ants were first detected in Texas in 1953 (Summerlin and Green 1977) and have since spread throughout much of the state. Fire ants are thought to out-compete native harvester ants for food and space. Harvester ants are the preferred food of Texas horned lizards and if the food resource declines, Texas horned lizard numbers also will decline.

Another reason thought to cause the decline in Texas horned lizards is the widespread use of broadcast insecticides. These insecticides could be detrimental to Texas horned lizards directly by causing illness and death, or indirectly by severely reducing or eliminating their food source (i.e., insects).

A third reason attributed to their decline is over-collection. In the past, Texas horned lizards have been collected for the pet industry, by boy scout troops for trading at jamborees, for the curious trade, and by tourists to take home and show friends (Donaldson et al. 1994).

Some researchers have suggested that Texas horned lizards have declined because of the loss of habitat from urbanization, suburban sprawl, and an increasing trend to convert native rangelands to agricultural crops. The above reasons for the declining population have not been substantiated and are only speculative. Although the Texas horned lizard population appears to be declining over most of Texas, no single reason for their decline occurs statewide (such as fire ants, broadcast insecticide use, and urbanization; and, collection or possession is illegal). Most likely, a combination of factors is causing the decline of Texas horned lizards.

LIFE HISTORY

Texas horned lizards are active from March until October (Potter and Glass 1931, Fair 1995). Cessation of activity occurs with onset of cold weather during autumn (Wright 1949). They exhibit 2 types of activity patterns (Potter and Glass 1931). Activity patterns in the early spring and late fall are unimodal, with the greatest activity occurring during midday. During summer, activity patterns are bimodal, with greatest activity occurring during mid-morning and again during late afternoon. These patterns occur because the lizards are ectotherms and need the proper temperature range to function. The mean critical minimum and maximum temperatures for the species are 49°F and 119°F, respectively, with



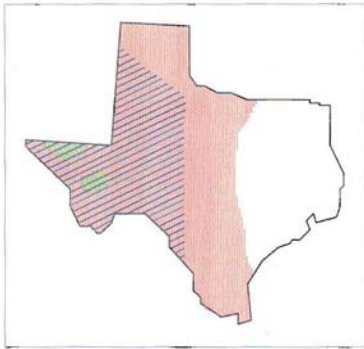


Figure 2. Approximate current range of the Texas horned lizard, roundtail horned lizard, and mountain short-horned lizard in Texas. Abundance of horned lizards varies within their respective ranges.

a mean preferred temperature of 101°F (Prieto and Whitford 1971).

Winter time inactive periods are spent buried 6 to 12 inches under the soil surface, in sheltered areas such as under rocks, stacks of wood, and abandoned animal burrows (Peslak 1985). Also, they seek covered areas under leaf litter near the base of bunch grass or a tree (Fair 1995).

Texas horned lizards breed from shortly after spring emergence until mid-July (Milne and Milne 1950). The gravid female excavates a slanted hole 4 to 6 inches in vertical depth and about 3 inches in diameter (Reeve 1952, Ramsey 1956, Peslak 1985). Eggs are deposited in 2 to 3 layers; each layer is covered with soil (Reeve 1952, Sherbrooke 1981). Once laying is completed, the female refills the hole with excavated soil, rakes the surrounding surface to disguise the nest (Ramsey 1956), and leaves the site (Sherbrooke 1981).

Clutch sizes for Texas horned lizards range from 13 to 45 eggs (Milne and Milne 1950, Ballinger 1974, Pianka and Parker 1975, Sherbrooke 1981); however, Henke (unpubl. data) recently has noted that Texas horned lizards in southern Texas appear to have clutches of <12 eggs. Eggs are elliptical and measure up to 0.75 by 0.5 inches (Sherbrooke 1981). Eggs hatch in 5 to 9 weeks, depending upon cloud cover, soil moisture, and temperature (Ramsey 1956, Sherbrooke 1981, Peslak 1985). The hatchlings emerge as fully functional and independent individuals measuring about 0.75 inch (Blaney and Kimmich 1973, Sherbrooke 1981).

Texas horned lizards are considered dietary specialists (Whitford and Bryant 1979) with 69% of their diet consisting of harvester ants (Pianka and Parker 1975). Feeding may occur at nest entrances or on ant foraging trails (Whitford and Bryant 1979) and mature lizards are capable of eating 70 to 100 ants per day (Sherbrooke 1981). Although ants comprise a majority of the diet, Texas horned lizards are opportunistic predators and will consume crickets, grasshoppers, beetles, centipedes, bees, and caterpillars (Milstead and Tinkle 1969, Munger 1984b). Texas horned lizards do not actively eat fire ants. This may be due to their inability to effectively neutralize fire ant venom; whereas, horned lizards are resistant to the venom of harvester ants (Schmidt et al. 1989). Very little is known about the diet of hatchling and juvenile horned lizards.

Anatomical and physiological adaptations allow horned lizards to live in areas where little free water is available (Milne and Milne 1950). Water requirements are met by licking morning dew from plants, rain harvesting, ingesting food, and metabolic processes (Sherbrooke 1981, 1990; Montanucci 1989).

Mortality factors of Texas horned lizards include predation, traffic accidents, exposure, starvation, and disease. The effect each mortality factor has on the population of Texas horned lizards is unknown. Munger (1986) and Fair and Henke (unpubl. data) found yearly survival rates of 35-86% and 9-54%, respectively; predation was considered to be the leading cause of death in both studies. Predators include bobcats, striped skunks, raccoons, domestic dogs and cats, hawks, owls, roadrunners, shrikes, and snakes (Miller 1948, Anderson and Ogilvie 1957, Sherbrooke 1981, Munger 1986). Young lizards are more vulnerable to predation than adults due to their small size and undeveloped spines (Sherbrooke 1981). However, little is known about mortality factors of hatchling and juvenile horned lizards.

The Texas horned lizard has several defensive behaviors to protect itself from predators. Its rough, irregular appearance combined with cryptic coloration allows them to escape detection (Reeve 1952, Peslak 1985). Other non-aggressive tactics include burrowing into the soil to avoid detection, retreating from predators, inflating its body with air, and various defensive stances (Reeve 1952, Sherbrooke 1981, Peslak 1985). Aggressive actions include hissing and lunging at the predator, biting, jabbing with the occipital horns, or ejecting blood from the conjunctival sac located near the eye (Lambert and Ferguson 1985).

Few studies have determined the longevity of Texas horned lizards. Results from mark-recapture efforts suggest that Texas horned lizards can live to be at least 5 years old. However, scientists believe

that the typical Texas horned lizard survives only 2 to 3 years.

#### HABITAT

Texas horned lizards occur in a variety of habitats (Donaldson et al. 1994). They inhabit areas from open desert to grasslands and shrublands, from sea level to nearly 6,000 feet in elevation, and on soils varying from pure sands and sandy loams to coarse gravels, conglomerates, and desert pavements (Price 1990). They are typically found in arid and semi-arid habitats that contain bunch grasses, cacti, yucca, mesquite, and acacias. Some reports suggest that Texas horned lizards can be found only in areas of scant vegetation (Whiting et al. 1993). Although Texas horned lizards are easier to see in areas with little or no vegetation, they often use areas with a dense vegetative canopy (Fair 1995).

Texas horned lizards prefer sandy loam and loamy sand soils (>67% sand, <15% silt, and <15% clay) that allow for easy digging of bedding, nesting, and hibernation sites and avoid areas of predominantly clay soils (Fair 1995). Also, soils that contain >2.5% soil moisture content are avoided as bedding and nesting sites (Fair 1995). Perhaps wet soils require greater expenditure of energy in which to dig or wet soils may make it more difficult for horned lizards to meet their thermoregulatory needs. Soils that are slightly alkaline (i.e., >7.4 pH) appear to be preferred by Texas horned lizards (Fair 1995). Texas horned lizards select areas with a soil surface temperature between 74 to 88°F for thermoregulation (Fair 1995) and areas with minimal ground litter for ease of movement (Whiting et al. 1993, Fair and Henke 1997a).

A 'patchy' environment consisting of open areas interspersed with >60% vegetative canopy cover and <100 stems/yard<sup>2</sup> provides Texas horned lizards with areas needed for escape cover from predators and aids thermoregulation. Habitats containing bare ground also entice newly-fertilized harvester ant queens to colonize the area (DeMers 1993). Texas horned lizard habitat must include active harvester ant mounds, because harvester ants comprise a large portion of the Texas horned lizard diet. Without this feature, few if any Texas horned lizards can be expected to occur in the area.

Texas horned lizards use about 6 acres of habitat (Fair 1995). Because they appear to avoid each other, possibly to reduce competition for food resources (Fair and Henke, unpubl. data), large tracts of contiguous habitat may be required to maintain a sustainable population. Unfortunately, it is unknown what the minimum viable population size is for Texas horned lizards and, consequently, the amount of area needed to sustain a given population.

#### MANAGEMENT RECOMMENDATIONS

Since the Texas horned lizard is a threatened species, it is illegal to pick up, touch, or possess them in Texas. Handling horned lizards is illegal even if your intentions are good. For example, if you help a Texas horned lizard cross the street or move it to what you believe is better habitat, you are in violation of the law and could be ticketed for your actions. Scientists are required to obtain collecting and handling permits from the Texas Parks and Wildlife Department prior to conducting research on horned lizards.

If you have habitat characteristics consistent with those previously described for Texas horned lizards and you wish to help their population recover in Texas or wish to improve existing habitat to make it more suitable for horned lizards, then the following management recommendations are offered.

##### 1. Survey your property for Texas horned lizards.

The distribution and abundance of Texas horned lizards in Texas is unknown. To answer this question, a program called "Texas Horned Lizard Watch" was developed. The program recommends either a transect survey or a fixed-area survey, depending on the size of the property you wish to assess. Transect surveys are recommended for properties greater than 10 acres and fixed-area surveys are recommended for smaller properties. Surveys should be conducted between May 1 and September 1 during the mid-morning hours on clear days when temperatures are >75°F.

Transect surveys should be straight lines about 200 yards long. One survey route is recom-



Alan Fedynich

Harvester ants are the major food item eaten by Texas horned lizards.



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Scott Henke

Presence of horned lizards on a tract of land can be determined by finding their seats (fecal pellets), which contain ant heads and a white uric acid tip.

mended per 100 acres. Multiple routes should be parallel and at least 100 yards apart. Routes should be marked so that they can be used in subsequent surveys. At least 3 counts should be conducted during summer; however, more counts would improve the reliability of the data collected. Slowly walk the survey route and count all Texas horned lizards, harvester ant mounds, and fire ant beds seen within 3 feet of either side of the transect line. Record the time elapsed to conduct the survey.

For fixed area surveys, first determine the size of the area to be sampled. This is needed to calculate the number of observations per unit area. Slowly walk the plot in parallel lines; lines should be about 6 feet apart. Record all Texas horned lizards, harvester ant mounds, and fire ant beds observed, taking care not to double-count lizards or ant beds. Record the time elapsed to conduct the survey.

Additional survey instructions and data sheets can be obtained by writing to:

Texas Horned Lizard Watch  
Texas Parks and Wildlife Department  
4200 Smith School Road  
Austin, Texas 78744 U.S.A.

Surveys are important, even if you believe that your property is not optimal horned lizard habitat. Not finding horned lizards may shed light on why they are not found in that particular area. Also, if your property is being managed for horned lizards, it is important to conduct sur-

veys to determine the success of the management practices.

**2. Use prescribed fires to remove ground litter.**

Texas horned lizards avoid areas with substantial ground litter because ground litter can impede their movements. Burning is a useful tool to decrease ground litter; however, it could be directly harmful to lizards. Therefore, allow the property to build up ground litter (i.e., resting the pasture from livestock grazing, etc.). By doing so, Texas horned lizards will avoid the area. Then, divide your property into several blocks and burn the blocks on a rotational time schedule (i.e., burn 1 block each year during winter or early spring). For example, a 200-acre property could be divided into 10, 20-acre blocks. At the end of a 10-year period, each block would have been burned once and the first block that was burned should contain enough ground litter to start the burning cycle again.

**3. Avoid overgrazing by livestock.**

Texas horned lizards do not appear to be negatively affected by low to moderate grazing of livestock (Fair and Henke 1997a). However, overgrazing by livestock on rangelands may substantially reduce cover needed by horned lizards for thermoregulation or to escape from predators. Thus, if grazing is practiced, try to avoid overgrazing.

**4. Avoid disking or grading roads during the active period of horned lizards.**

Texas horned lizards are active from mid-March through mid-October (Fair 1995) and often cross secondary roads and use the roadsides as resting and bedding sites. Disking or grading roads during this period could kill the lizards directly. Also, road maintenance could uncover them if they are using secondary roads for resting, nesting, or bedding sites, thereby exposing them to predators. This may be particularly critical when the ambient temperature is too cool for the lizards to seek protective cover after being disturbed.

**5. Avoid the use of broadcast pesticides.**

Pesticides could kill horned lizards directly by accumulating toxins within their body or indirectly by killing harvester ants, the main food source of adult Texas horned lizards. Without a stable food supply, horned lizards must emigrate from the area or die. If pesticides are needed, (i.e., to combat fire ants), then spot treatment is recommended rather than broadcast pesticide application.

**6. Create 1 yd<sup>2</sup> areas devoid of vegetation and ground litter.**

Being an ectotherm, horned lizards use the sun to regulate their body temperature. Small cleared areas provide horned lizards access to direct sunlight, which is needed to help them maintain optimal body temperature. When their body temperature rises above the preferred level, horned lizards seek shelter. Also, newly-fertilized harvester ant queens seek open areas to establish new colonies. Therefore, the creation of several small open areas per acre of land will serve 2 beneficial purposes for aiding horned lizards.

**7. Create a mosaic habitat of open areas intermixed within dense cover.**

Such a patchy environment will give horned lizards the proper thermoregulatory mix of habitat and offer sufficient escape cover from predators. Areas where vegetation canopy cover may be up to 100% (i.e., no sunlight reaching the ground) are suitable, as long as the individual stems of plants are not too close together to impede the movement of horned lizards.

**8. Remove feral domesticated predators.**

Keep in mind that avian predators (i.e., hawks, owls, roadrunners, etc.) are protected by federal law and cannot be killed or trapped. However, feral cats and dogs also are predators of horned lizards and can be removed from an area. Contact the local Humane Society for assistance in removing these domestic predators.

**9. Develop a habitat that contains a diversity of native plant species.**

A diverse community of native plants will attract a diverse community of insects. Although Texas horned lizards prefer a diet of harvester ants, a number of other insect species are consumed. Also, juvenile Texas horned lizards appear to eat a greater variety of insects than their adult counterparts. By increasing the amount of prey available for horned lizards to consume, you reduce the chances that lack of food will be the limiting factor governing their abundance.

**10. Limit driving on secondary roads during peak times of horned lizard activity.**

Fair and Henke (1997b) noted that vehicular accidents were a significant mortality factor of horned lizards. Henke and Montemayor (1998) found that April through July resulted in the greatest number of encounters with Texas horned lizards on secondary roads in southern Texas. During these months, more horned lizards were encountered on secondary roads from late after-

noon to sunset in April and May, while morning hours resulted in a greater number of lizard encounters in June and July.

**11. Plant native bunch grasses.**

If your interests include reclaiming a previous agricultural area or planting a lawn, plant native bunch grass such as buffalo grass. Bunch grass forms clumps that allows horned lizards to easily move among the grass clumps; whereas carpet grasses form a thick mat that can impede horned lizard movement.

**12. Become a member of the Horned Lizard Conservation Society.**

The Horned Lizard Conservation Society is a nonprofit organization dedicated to the conservation and recovery of declining horned lizard populations. They publish a quarterly newsletter that discusses current events concerning horned lizards, are active in research and recovery of horned lizards, and educate the public concerning horned lizard issues. To become a member, write to:

Horned Lizard Conservation Society  
P.O. Box 122  
Austin, Texas 78767 U.S.A.

**LITERATURE CITED**

Anderson, S., and P. W. Ogilvie. 1957. Vertebrates found in owl pellets from northeastern Chihuahua. *Southwestern Naturalist* 2:33-37.  
Ballinger, R. E. 1974. Reproduction of the Texas horned lizard, *Phrynosoma cornutum*. *Herpetologica* 30:321-327.  
Blaney, R. M., and P. J. Kimmich. 1973. Notes on the young of the Texas horned lizard, *Phrynosoma cornutum*. *IHSS News Journal* 1:120.



Scott Henke

Prescribed burning to remove thick vegetation litter can improve Texas horned lizard habitat.

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- Brown, T. L., and R. V. Lucchino. 1972. A record-sized specimen of the Texas horned lizard (*Phrynosoma cornutum*). Texas Journal of Science 24:353-354.
- DeMers, M. N. 1993. Roadside ditches as corridors for range expansion of the western harvester ant (*Pogonomyrmex occidentalis* Cresson). Landscape Ecology 8:93-102.
- Donaldson, W., A. H. Price, and J. Morse. 1994. The current status and future prospects of the Texas horned lizard (*Phrynosoma cornutum*) in Texas. Texas Journal of Science 46:97-113.
- Fair, W. S. 1995. Habitat requirements and capture techniques of Texas horned lizards in South Texas. M.S. thesis, Texas A&M University-Kingsville, TX. 101pp.
- Fair, W. S., and S. E. Henke. 1997a. Effects of habitat manipulations on Texas horned lizards and their prey. Journal of Wildlife Management 61:1366-1370.
- Fair, W. S., and S. E. Henke. 1997b. Efficacy of capture methods for a low density population of *Phrynosoma cornutum*. Herpetological Review 28:135-137.
- Henke, S. E., and M. Montemayor. 1998. Diel and monthly variations in capture success of *Phrynosoma cornutum* via road cruising in southern Texas. Herpetological Review: (In press).
- Lambert, S., and G. M. Ferguson. 1985. Blood ejection frequency by *Phrynosoma cornutum* (Iguanidae). Southwestern Naturalist 30:616-617.
- Miller, L. 1948. An enemy of the horned lizard. Copeia 1948:67.
- Milne, L. J., and M. J. Milne. 1950. Notes on the behavior of horned toads. American Midland Naturalist 44:720-741.
- Milstead, W. W., and D. W. Tinkle. 1969. Interrelationships of feeding habits in a population of lizards in southwestern Texas. American Midland Naturalist 81:491-499.
- Montanucci, R. R. 1989. Maintenance and propagation of horned lizards (*Phrynosoma*) in captivity. Bulletin of the Chicago Herpetological Society 24:229-238.
- Munger, J. C. 1984a. Home ranges of horned lizards (*Phrynosoma*): circumscribed and exclusive? Oecologia 62:351-360.
- Munger, J. C. 1984b. Long-term yield from harvester ant colonies: implications for horned lizard foraging strategy. Ecology 65:1077-1086.
- Munger, J. C. 1986. Rate of death due to predation for two species of horned lizard, *Phrynosoma cornutum* and *P. modestum*. Copeia 1986:820-824.
- Peslak, J., Jr. 1985. Texas horned lizard. Texas Natural History Summer 1985:17-22.
- Pianka, E. R., and W. S. Parker. 1975. Ecology of horned lizards: a review with special reference to *Phrynosoma platyrhinos*. Copeia 1975:141-162.
- Potter, G. E., and H. B. Glass. 1931. A study of respiration in hibernating horned lizards, *Phrynosoma cornutum*. Copeia 1931:128-131.
- Price, A. H. 1990. *Phrynosoma cornutum* (Harlan): Texas horned lizard. Catalogue of American Amphibians and Reptiles 469:1-7.
- Prieto, A. A., Jr., and W. G. Whitford. 1971. Physiological responses to temperature in the horned lizards, *Phrynosoma cornutum* and *Phrynosoma doulassii*. Copeia 1971:498-504.
- Ramsey, L. W. 1956. Nesting of Texas horned lizards. Herpetologica 12:239-240.
- Reeve, W. L. 1952. Taxonomy and distribution of the horned lizard genus *Phrynosoma*. University of Kansas Science Bulletin 34:817-960.
- Schmidt, P. J., W. C. Sherbrooke, and J. O. Schmidt. 1989. The detoxification of ant (*Pogonomyrmex*) venom by a blood factor in horned lizards (*Phrynosoma*). Copeia 1989:603-607.
- Sherbrooke, W. C. 1981. Horned lizards: unique reptiles of the western North America. Southwest Parks Monuments Assoc. Globe, AZ. 48pp.
- Sherbrooke, W. C. 1990. Rain-harvesting in the lizard, *Phrynosoma cornutum*: behavior and integumental morphology. Journal of Herpetology 24:302-308.
- Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill Book Co., Inc., New York, NY. 536pp.
- Summerlin, J. W., and L. R. Green. 1977. Red imported fire ant: a review on invasion, distribution, and control in Texas. Southwestern Entomology 2:94-101.
- Texas Parks and Wildlife Code. 1987. 51 T.A.C. Sec. 65.171-65.177.
- Whitford, W. G., and M. Bryant. 1979. Behavior of a predator and its prey: the horned lizard (*Phrynosoma cornutum*) and harvester ants (*Pogonomyrmex* spp.). Ecology 60:686-694.
- Whiting, M. J., J. R. Dixon, and R. C. Murray. 1993. Spatial distribution of a population of Texas horned lizards (*Phrynosoma cornutum*: Phrynosomatidae) relative to habitat and prey. Southwestern Naturalist 38:150-154.
- Wright, A. H. 1949. Handbook of lizards. Comstock Publ. Co., Ithaca, NY. 557pp.



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Permit #172

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**Acronym List**

AAF	Army Air Field
ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
ADA	Air Defense Artillery
ADNL	Day Night Average Sound Level for A-weighted noise
AEF	Army Evaluation Force
af	acre feet
afy	acre feet per year
APE	Area of Potential Effect
AR	Army Regulation
ARMS	Archaeological Management System
ARNG	Army National Guard
ARPA	Archaeological Resources Preservation Act
AST	above ground storage tank
ATC	Air Traffic Control
BCT	Brigade Combat Team
BLM	Bureau of Land Management
BRAC	Base Realignment and Closure
CDNL	Day Night Average Sound Level for C-weighted noise
CEQ	Council on Environmental Quality
CERCLA	Comprehensive, Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CX	Categorical Exclusion
dB	decibel
dBp	peak sound pressure level
DEIS	Draft Environmental Impact Statement
DNL	Day Night Average Sound Level
DoD	Department of Defense
DOE	Directorate of Environment
DOPAA	Description of Proposed Action and Alternatives
DPTMS	Director of Plans, Training, Mobilization, and Security
DPW	Directorate of Public Works
DRI	Desert Research Institute
DU	depleted uranium
EA	Environmental Assessment
EBS	Environmental Baseline Survey
ECO	Environmental Compliance Officer

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EIS	Environmental Impact Statement
EO	Executive Order
EOD	explosives ordnance disposal
EPA	U.S. Environmental Protection Agency
EPCWID	El Paso County Water Improvement District
EPWU	El Paso Water Utilities
EUL	Enhanced Use Leasing
FAA	Federal Aviation Administration
FEIS	Final Environmental Impact Statement
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FONSI	Finding of No Significant Impact
FORSCOM	Forces Command
FTX	field training exercise
FY	fiscal year
GIS	Geographic Information System
gpd	gallons per day
GSA	General Services Administration
GWOT	Global War on Terrorism
HPO	Historic Preservation Officer
HQ	Headquarters
HQDA	Headquarters Department of Army
ICRMP	Integrated Cultural Resources Management Plan
ICUZ	Installation Compatible Use Zone
ID	Identification
INRMP	Integrated Natural Resources Management Plan
ISCP	Installation Spill Contingency Plan
ISD	Independent School District
ITAM	Integrated Training Area Management
km	kilometer
km <sup>2</sup>	square kilometer
km <sup>2</sup> d	square kilometer days
LOS	level of service
MCL	maximum contaminant level
mg	milligram
mg/L	milligram per liter
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MTR	Military Training Route
NAAQS	National Ambient Air Quality Standards

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NAGPRA	Native American Graves Protection and Repatriation Act
NEAP	Natural Events Action Plan
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NM	New Mexico
NMDGF	New Mexico Department of Game and Fish
NMED	New Mexico Environment Department
NMHP	New Mexico Heritage Program
NMSU	New Mexico State University
NO <sub>2</sub>	nitrogen dioxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
OSHA	Occupational Health and Safety Administration or Act
PA	Programmatic Agreement
PCB	polychlorinated biphenyls
PEIS	Programmatic Environmental Impact Statement
PL	Public Law
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
POL	petroleum, oil, and lubricants
R&D	Research and Development
RCI	Residential Communities Initiative
RCMP	Range Complex Master Plan
REC	Record of Environmental Consideration
RFMSS	Range Facility Management Support System
RMP	Resource Management Plan
RMPA	Resource Management Plan Amendment
ROD	Record of Decision
ROI	Region of Influence
ROW	right of way
RPHC	Record of Historic Properties Consideration
RPMP	Real Property Master Plan
SDZ	Surface Danger Zone
SEIS	Supplemental Environmental Impact Statement
SHPO	State Historic Preservation Officer



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SO <sub>2</sub>	sulfur dioxide
SOP	standard operating procedure
SPCCP	Spill Prevention, Control, and Countermeasures Plan
SWMU	solid waste management unit
TA	Training Area
TADC	Training Area Development Concept
TC	Training Circular
TCEQ	Texas Commission on Environmental Quality
TCP	Traditional Cultural Property
TDY	temporary duty
THPO	Tribal Historic Preservation Officer
TPD	Technical Data Package
TRADOC	Training and Doctrine Command
U.S.	United States
USACAS	U.S. Army Combined Arms Support Battalion
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
WQS	Water Quality Standard