

both the WMP and proposed addition of maneuverable training land by Fort Irwin are required to consult with the USFWS under Section 7 of the ESA.

If the proposed WMP is not implemented, the land on which the Lane Mountain milk-vetch populations (or portions thereof that occur outside of Fort Irwin would remain as is. The public land located in the Coolgardie Population is under BLM management and is currently Class M, or Moderate Use Class, under the CDCA. This class provides for a wide variety of present and future uses, such as mining, livestock grazing, recreation, energy, and utility development. This class is also designed to conserve desert resources and to mitigate damage to those resources that permitted uses may cause. New mining claims and patents, grazing allotments, and utility developments are not likely to be permitted in this area. Therefore, adverse affects to Lane Mountain milk-vetch from these sources are not likely. Adverse affects from recreation and currently permitted mining operations, however, may occur, as these activities may continue in the area.

4.5.7.2.2 Other Vegetation

Cumulative impacts have resulted and will result in a corresponding reduction in native plant cover and an increase in exotic European annual exotics. The disturbance creates an environment in which only a select number of pioneering early-succession species survive or colonize. Native vegetation may be destroyed or unable to survive as conditions change.

4.6 Cultural Resources & Paleontology

A total of 506 archaeological sites are currently recorded within the study area. This includes 407 prehistoric sites, 73 historic sites, 17 sites with both prehistoric and historic components, and 9 military sites.

Most of the cultural resources sites within the study area lie within valley and basin floors where the majority of military training occurs. These sites could be adversely affected by proposed military land use of the area for training maneuvers. Tracked and other vehicular traffic traversing across valley and basin floors will degrade their context. Sites located in staging areas will be destroyed through the clearing and staging process, and excavation for tank traps and emplacements could also result in the destruction of cultural resources. Unauthorized collecting and vandalism will degrade cultural resources where they occur.

Upon issuance of the Record of Decision for the proposed project, an existing MOA (1981, amended 1983) between Fort Irwin, the Advisory Council on Historic Preservation, and the California SHPO will be reviewed and modified to include any acquired lands. This original agreement requires that the Army proceed with the identification, evaluation, and mitigation process for cultural resources on lands withdrawn for military use and provide an opportunity for interested parties to comment on the process.

Table 4.6-1 below presents a general overview of the cultural resource information within the study area, including its' various alternatives. Included are the number of acres and percentage of each area that has been inventoried for cultural resources, and the number of known and recorded archaeological sites within them.

Table 4.6-1 Summary of Inventoried Area and Cultural Sites by Alternative.

ALTERNATIVE	TOTAL ACREAGE	INVENTORIED ACREAGE	PERCENT INVENTORIED	NUMBER OF KNOWN RESOURCES
Alternate I	135,370 acres	49116.42 acres	36%	429
Alternate II	156,292 acres	27022.48 acres	17%	265
Alternate III	48,629 acres	12834.58 acres	26%	165
Alternate IV	183,164 acres	51967.39 acres	28%	439
Alternate V	71,843 acres	21339.39 acres	30%	193
<u>Study Area</u>	<u>249,649 acres</u>	<u>55611.05 acres</u>	<u>22%</u>	<u>506</u>

Table 4.6-2: Cultural Sites in the Study Area.

	HIGH USE				MEDIUM USE				LOW USE				OFF-LIMITS			
	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE
PREHISTORIC	189	3	80	106	162	8	114	40	6	0	1	5	50	4	15	31
HISTORIC	26	0	12	14	48	14	24	10	1	0	0	1	0	0	0	0
MULTI-COMPONENT	6	1	2	3	9	1	6	2	0	0	0	0	0	0	0	0
MILITARY	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	230	4	103	123	219	23	144	52	7	0	1	6	50	4	15	31

(sites), CE Considered Eligible, CI Considered Ineligible, NE Not Evaluated

All alternatives within the study area contain significant cultural resources. The number of cultural and paleontological sites will increase as additional inventories are performed within the selected Alternative.

A description of the resources within each of the alternatives is presented in sections below.

4.6.1 Alternative I: East/West

4.6.1.1 Impacts

Approximately 36 percent of the acreage (excluding the UTM 90 area) in this alternative had been inventoried for cultural resources. Nearly 50% of the Superior Valley portion of the Alternative has now surveyed, while 25% of the Eastgate portions of the alternative has been inventoried for cultural resources.

Within this alternative, there are 429 known archaeological sites within this alternative, as recorded in the Fort Irwin Cultural Resource Database and the California Historic Resources Inventory System (CHRIS) database. This includes 342 prehistoric sites, 64 historic sites, 14 multi-component (historic and prehistoric components) sites, and 9 military sites. The prehistoric sites are comprised of 289 are lithic scatters, 15 habitation sites, 14 lithic quarries, 6 campsites, 6

rockshelters, 3 stone circles, 2 lithic reduction sites, 2 cleared circles, 2 rock alignments, 1 food processing site, 1 fire hearth, and 1 trail. The historic sites include 27 mining sites, 18 homesteading sites, 11 refuse disposal sites, 7 historic road segments, and 1 residential site. The 13 multi-component sites include 7 historic homesteading sites with prehistoric lithic scatters, 2 historic campsites with prehistoric lithic scatters, 3 prehistoric habitation sites with historic refuse, and 1 lithic scatter with historic refuse.

Of the 429 cultural resources within Alternative I, 31 sites are considered eligible for the National Register of Historic Places (NRHP), 263 sites are considered ineligible, and 135 sites have not been formally evaluated for the NRHP.

The total number of known and recorded sites within each of the proposed Use Areas (High, Medium, Low, Off-Limits) and their NRHP eligibility status are listed in Table 4.6-1. Sites listed as NE are sites in which a NRHP evaluation was not offered at the time of recording and/or sites that require a site evaluation update due to the time that has passed since their initial recording and evaluation. These sites have unknown potential for eligibility.

Table 4.6-3: Recorded Cultural Resources Within the Land Use areas of Alternative I.

	HIGH USE				MEDIUM USE				LOW USE				OFF-LIMITS			
	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE
PREHISTORIC	144	3	80	61	157	8	114	35	2	0	1	1	38	4	15	19
HISTORIC	21	0	12	9	44	14	24	6	0	0	0	0	0	0	0	0
MULTI-COMPONENT	4	1	2	1	9	1	6	2	0	0	0	0	1	0	0	1
MILITARY	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	178	4	103	71	210	23	144	43	2	0	1	1	39	4	15	20

(sites), CE Considered Eligible, CI Considered Ineligible, NE Not Evaluated

Of the 429 sites within this alternative, 178 (41.5%) are located within the proposed High Use area, 210 (49 %) lie within the Medium Use area, 2 (0.4 %) are in the Low Use area, and 39 (9.1 %) are located within the Off-Limit area.

Sixty percent (n=107) of the sites within the High Use area have been evaluated for the NRHP, while 79.5 % (n=167) of the sites within the Medium Use area have been evaluated. Fifty percent (n=1) of the sites within the Low Use area and 48.7% (n=19) of the sites within the Off-Limit area have been evaluated for the NRHP.

While only 4 sites are considered eligible for the NRHP within the High Use area, 60.1 % (n=107) of the known sites within this area have been evaluated. Contrarily, 79.5% (n=167) of the 210 sites within the Medium Use area have been evaluated, with 23 sites considered eligible for the NRHP.

Of the 31 sites considered eligible for the NRHP, 15 are prehistoric, 14 are historic, and 2 sites are multi-component. Resources considered eligible for the NRHP include 6 prehistoric habitation sites, 3 prehistoric lithic scatters, 2 prehistoric campsites, 2 prehistoric lithic quarries, 1 prehistoric rock shelter, 1 prehistoric cleared circle, 5 historic roads, 6 historic homesteads, 3 historic mining sites, 1 historic homestead with a prehistoric habitation site component, and 1 historic homestead with a prehistoric lithic scatter.

Cultural resources sites located within the proposed High and Medium use areas are likely to be significantly adversely affected by training maneuvers if not protected or cleared. Sites located within the Low use area are less likely to be adversely affected by training, but would not likely go entirely unaffected, if not protected or cleared. Resources within Off-Limits/Non-maneuver areas will not be adversely affected.

Paleontological Resources

Paleontological resources sites located within the proposed High and Medium use areas are likely to be significantly adversely affected by training maneuvers. Resources located within the Low use area are less likely to be adversely affected by training, but would not likely go entirely unaffected. Resources within Off-Limits/Non-maneuver areas would not be adversely affected.

Paleontological resources located at the ground surface or just under the ground surface within proposed training corridors in this alternative could be significantly adversely affected by training maneuvers.

4.6.1.2 Mitigation

The following mitigation measures will be implemented, subject to availability of NTC and Fort Irwin funding. The mitigation plan for the NTC and Fort Irwin's preferred alternative is as follows: The predictive model will be used to identify favorable landscapes for cultural resource sites. These landscapes will then be inventoried; sites will then be located and evaluated for National Register of Historic Places (NRHP) eligibility. Eligible sites will be either protected in place or the sites will be mitigated. The second priority will be the projected high use areas, followed by moderate use and then low use areas. All of the high probability areas will be inventoried as time and funds become available. As future sites are discovered, they will be treated in a similar manner.

Section 106 consultation will be required for formal determination of NRHP eligibility for all sites in this alternative. Formal eligibility can only be determined in consultation with the SHPO. Additional mitigation measures for potential adverse effects on cultural resources will be formulated after eligibility determinations are concluded. A Programmatic Agreement (PA) between the Army, the California SHPO, and the Advisory Council on Historic Preservation shall be developed to determine the program for treatment of cultural resources. Additionally, Fort Irwin will implement a paleontological resource identification program.

4.6.2 Alternative II: East Gate/South

4.6.2.1 Impacts

Impacts on cultural resources from training activities in Alternative II would be similar to those discussed in Alternative I. Approximately 17 percent of the acreage in this alternative had been inventoried for cultural resources.

There are 265 archaeological sites known to be present in this alternative, as recorded in the Fort Irwin Cultural Resource Database and the California Historic Resources Inventory System (CHRIS) database. This includes 247 prehistoric sites, 13, historic sites, and 4 multi-component sites containing both prehistoric and historic material. The 247 prehistoric sites include 194 lithic scatters, 6 habitation sites, 15 lithic quarries, 10 campsites, 6 rockshelters, 2 stone circles, 2 lithic reduction sites, 4 cleared circles, 2 rock art sites, 2 rock alignments, 1 food processing site, 1 fire hearth, and 2 trails. The 13 historic sites are comprised of 6 are mining sites, 1 homesteading sites, 1 campsite, 2 refuse disposal sites, 1 ranching site, and 2 historic roads. The multi-component sites include 2 historic campsites with prehistoric lithic scatters, 1 prehistoric habitation site with a historic railroad berm, 1 mining site with a prehistoric lithic scatter, and 1 prehistoric lithic scatter with historic refuse.

Of the 265 cultural resources within Alternative II, 8 sites are considered eligible for the National Register of Historic Places (NRHP), 123 sites are considered ineligible for the NRHP, and 134 sites have not been formally evaluated for the NRHP.

The total number of known and recorded sites within each of the proposed Military Land Use Areas (High, Medium, Low, Off-Limits) and their NRHP eligibility status are listed in Table 4.6-2. The classification of cultural resource sites by Land Use area is only a rough approximation as resources can be within multiple Land Use areas. Sites listed as NE are sites in which a NRHP evaluation was not offered at the time of recording and/or sites that require a site evaluation update due to the time that has passed since their initial recording and evaluation. These sites have unknown potential for eligibility.

Table 4.6-4: Recorded Cultural Resources Within the Land Use areas of Alternative II.

	HIGH USE				MEDIUM USE				LOW USE				OFF-LIMITS			
	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE
PREHISTORIC	92	0	27	65	103	2	80	21	4	0	1	3	47	3	13	31
HISTORIC	6	0	1	5	8	3	1	4	1	0	0	1	0	0	0	0
MULTI-COMPONENT	2	0	0	2	2	0	0	2	0	0	0	0	0	0	0	0
MILITARY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	100	0	28	72	113	5	81	27	5	0	1	4	47	3	13	31

(sites), CE Considered Eligible, CI Considered Ineligible, NE Not Evaluated

Of the 265 sites within this alternative, 100 (37.7%) are within the High Use area, 113 (42.7%) are within the Medium Use area, 5 (1.9%) are located within the Low Use area, and 47 (17.7%) are in the Off-Limit area.

Twenty-eight percent (n=28) of the sites within the High Use area have been evaluated for the NRHP, while 76.1 % (n=86) of the sites within the Medium Use area have been evaluated.

Twenty percent (n=1) of the sites within the Low Use area and 34% (n=16) of the sites within the Off-Limit area have been evaluated for the NRHP.

While the proposed High Use area does not currently contain cultural resources that are considered eligible for the NRHP, only 28 percent (28 out of 100) of the known sites within this area have been evaluated. Contrarily, 76% (86 sites) of the 113 sites within the Medium Use area have been evaluated, with only five considered eligible for the NRHP.

Of the 8 sites considered eligible for the NRHP, 5 are prehistoric and 3 are historic. The majority (62.5%, 5 sites) of the sites considered eligible for the NRHP are located within the Medium use area, while 37.5% (3 sites) are located within the Off-Limit use area.

Of the 5 Prehistoric sites considered eligible for the NRHP, 3 are not assigned to a specific cultural period, 1 is a Late Prehistoric period site, and 1 contains Pinto through Late Prehistoric age material. The 3 historic sites include 2 historic road segments and 1 homestead site.

Cultural resources sites located within the proposed High and Medium use areas are likely to be significantly adversely affected by training maneuvers. Sites located within the Low use area are less likely to be adversely affected by training, but would not likely go entirely unaffected. Resources within Off-Limits/Non-maneuver areas would be the least adversely affected.

Significant impacts would result if military training adversely impacted archeological sites eligible for inclusion on the NRHP.

Paleontological Resources

Alternative II contains more areas with Undetermined Potential and fewer areas with Low Potential, when compared to the outlined paleontologically sensitive areas in Alternative I. Impacts on paleontological resources from training activities in this alternative would be similar to those discussed in Alternative I.

4.6.2.2 Mitigation

Proposed mitigation for impacts on cultural resources will be the same as those identified for Alternative I.

4.6.3 Alternative III: East Gate

4.6.3.1 Impacts

Impacts on cultural resources from training activities in Alternative III would be similar to those discussed in Alternative I. Approximately twenty-six percent of the acreage in this alternative had been inventoried for cultural resources.

There are 165 archaeological sites known to be present in this alternative, as recorded in the Fort Irwin Cultural Resource Database and the California Historic Resources Inventory System (CHRIS) database. This includes 158 prehistoric sites, 5 historic sites, and 2 multi-component sites containing both prehistoric and historic material. The 158 prehistoric sites include 137 lithic scatters, 2 habitation sites, 8 lithic quarries, 4 rock shelters, 2 stone circles, 2 cleared circles, 2 rock alignments, and 1 trail. The 5 historic sites are comprised of 2 mining sites, 1 homesteading

site, and 2 historic road segments. The 2 multi-component sites are historic campsites with prehistoric lithic scatters.

Of the 165 cultural resources within Alternative III, 8 sites are considered eligible for the National Register of Historic Places (NRHP), 123 sites are considered ineligible for the NRHP, and 34 sites have not been formally evaluated for the NRHP.

The number of sites known to occur within the High, Medium, Low use and Off-limit areas of Alternative III and the number that are eligible for inclusion on the NRHP are listed in Table 4.6-3. The classification of cultural resource sites by Land Use area is only a rough approximation as resources can be within multiple Land Use areas.

Table 4.6-5: Recorded Cultural Resources Within the Land Use areas of Alternative III.

	HIGH USE				MEDIUM USE				LOW USE				OFF-LIMITS			
	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE
PREHISTORIC	32	0	27	5	99	2	80	17	2	0	1	1	23	2	8	13
HISTORIC	1	0	1	0	4	3	1	0	0	0	0	0	0	0	0	0
MULTI-COMPONENT	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	0
MILITARY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	33	0	28	5	105	5	81	19	2	0	1	1	25	0	0	0

(sites), CE Considered Eligible, CI Considered Ineligible, NE Not Evaluated

Of the 165 sites within this alternative, 33 (20%) are within the High Use area, 105 (63.6%) are within the Medium Use area, 2 (1.2%) are located within the Low Use area, and 25 (15.2%) are in the Off-Limit area.

Eighty percent (n=28) of the sites within the High Use area have been evaluated for the NRHP, while 81.9% (n=86) of the sites within the Medium Use area have been evaluated. Fifty percent (n=1) of the sites within the Low Use area and 43.5% (n=10) of the sites within the Off-Limit area have been evaluated for the NRHP.

The proposed High Use area of this alternative does not currently contain cultural resources that are considered eligible for the NRHP. Only five of the 86 evaluated sites within the Medium Use area are considered eligible for the NRHP, while 2 sites within the Off-Limit se area are considered eligible. None of the evaluated sites within the Low Use area are considered eligible.

Of the 8 sites considered eligible for the NRHP, 5 are prehistoric and 3 are historic. The majority (62.5%, 5 sites) of the sites considered eligible for the NRHP are located within the Medium use area, while 37.5% (3 sites) are located within the Off-Limit use area.

Of the 5 Prehistoric sites considered eligible for the NRHP, 3 are not assigned to a specific cultural period, 1 is a Late Prehistoric period site, and 1 contains Pinto through Late Prehistoric age material. The 3 historic sites include 2 historic road segments and 1 homestead site.

Cultural resources sites located within the proposed High and Medium use areas are likely to be significantly adversely affected by training maneuvers. Sites located within the Low use area are less likely to be adversely affected by training, but would not likely go entirely unaffected. Resources within Off-Limits/Non-maneuver areas would be the least adversely affected.

Paleontological Resources

While the vast majority of land within Alternative III contains Low Potential, some upland areas and/or lacustrine settings have High Potential. Impacts on paleontological resources from training activities in this alternative would be similar to those discussed in Alternative I.

4.6.3.2 Mitigation

Proposed mitigation for impacts on cultural resources will be the same those identified for Alternative I.

4.6.4 Alternative IV: Southwest/East Gate/UTM 90

4.6.4.1 Impacts

Impacts on cultural resources from training activities in Alternative IV would be similar to those discussed in Alternative I. Approximately 28 percent of the acreage (including the UTM 90 area) in this alternative had been inventoried for cultural resources.

There are 439 archaeological sites known to be present in this alternative, as recorded in the Fort Irwin Cultural Resource Database and the California Historic Resources Inventory System (CHRIS) database. This includes 351 prehistoric sites, 65 historic sites, and 14 multi-component sites containing both prehistoric and historic material, and 9 military sites. The 358 prehistoric sites include 295 lithic scatters, 15 habitation sites, 14 lithic quarries, 9 campsites, 6 rock shelters, 3 stone circles, 2 lithic reduction sites, 2 cleared circles, 2 rock alignments, 1 food processing site, 1 fire hearth, and 1 trail. The 65 historic sites are comprised of 27 mining sites, 18 homesteading site, 11 historic refuse sites, 1 residential site, 1 ranching site, and 7 historic road segments. The 14 multi-component sites include 7 historic homesteads with prehistoric lithic scatters, 3 prehistoric habitation sites with historic refuse, 2 historic campsites with prehistoric lithic scatters, 1 historic homestead with a prehistoric habitation component, and 1 prehistoric lithic scatter with historic refuse.

Of the 439 cultural resources within Alternative IV, 31 sites are considered eligible for the National Register of Historic Places (NRHP), 263 sites are considered ineligible for the NRHP, and 145 sites have not been formally evaluated for the NRHP.

Table 4.6-6: Recorded Cultural Resources Within the Land Use areas of Alternative IV.

	HIGH USE				MEDIUM USE				LOW USE				OFF-LIMITS			
	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE
PREHISTORIC	150	3	80	67	158	8	114	36	4	0	1	3	40	4	15	21
HISTORIC	21	0	12	9	44	14	24	6	0	0	0	0	0	0	0	0
MULTI-COMPONENT	4	1	2	1	9	1	6	2	0	0	0	0	0	0	0	0
MILITARY	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	184	4	103	77	211	23	144	44	4	0	0	0	40	4	15	21

(sites), CE Considered Eligible, CI Considered Ineligible, NE Not Evaluated

Of the 439 sites within this alternative, 184 (41.9%) are within the High Use area, 211 (48.1%) are within the Medium Use area, 4 (0.9%) are located within the Low Use area, and 40 (9.1%) are in the Off-Limit area.

Fifty-eight percent (n=107) of the sites within the High Use area have been evaluated for the NRHP, while 79% (n= 167) of the sites within the Medium Use area have been evaluated. Twenty-five percent (n=1) of the sites within the Low Use area and 48% (n=19) of the sites within the Off-Limit area have been evaluated for the NRHP.

The majority (74%, 23 sites) of the 31 sites considered eligible for the NRHP are located within the Medium use area, while 13% (4 sites) are located in both the High and Off-Limit use area.

Of the 31 sites considered eligible for the NRHP, 15 are prehistoric, 14 are historic, and 2 sites are multi-component.

The majority (74.2%, 23 sites) of the sites considered eligible for the NRHP are located within the Medium use area, while 17.4% (4 sites) are located within each the High Use area and the Off-Limit use area.

Cultural resources sites located within the proposed High and Medium use areas are likely to be significantly adversely affected by training maneuvers. Sites located within the Low use area are less likely to be adversely affected by training, but would not likely go entirely unaffected. Resources within Off-Limits/Non-maneuver areas would be the least adversely affected.

Paleontological Resources

While the vast majority of land within Alternative IV contains Low Potential, some upland and/or lacustrine settings have High Potential. Impacts on paleontological resources from training activities in this alternative would be similar to those discussed in Alternative I.

4.6.4.2 Mitigation

Proposed mitigation for impacts on cultural resources will be the same as those identified for Alternative I (Section 4.6.1.2).

4.6.5 Alternative V: East Gate/UTM 90

4.6.5.1 Impacts

Impacts on cultural resources from training activities in Alternative V would be similar to those discussed in Alternative I. Approximately 30 percent of the acreage (including the UTM 90 area) in this alternative had been inventoried for cultural resources.

There are 193 archaeological sites known to be present in this alternative, as recorded in the Fort Irwin Cultural Resource Database and the California Historic Resources Inventory System (CHRIS) database. This includes 186 prehistoric sites, 5 historic sites, and 2 multi-component sites containing both prehistoric and historic material. The 186 prehistoric sites include 153 lithic scatters, 3 habitation sites, 14 lithic quarries, 5 rockshelters, 2 lithic reduction sites, 2 stone circles, 2 cleared circles, 2 rock alignments, 1 prehistoric campsite, 1 fire hearth, and 1 trail. The 5 historic sites are comprised of 2 mining sites, 1 homesteading site, and 2 historic road segments. The 2 multi-component sites are historic campsites with prehistoric lithic scatters.

Of the 193 cultural resources within Alternative V, 8 sites are considered eligible for the National Register of Historic Places (NRHP), 123 sites are considered ineligible for the NRHP, and 62 sites have not been formally evaluated for the NRHP.

Table 4.6-7: Recorded Cultural Resources Within the Land Use areas of Alternative V.

	HIGH USE				MEDIUM USE				LOW USE				OFF-LIMITS			
	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE	#	CE	CI	NE
PREHISTORIC	49	0	27	22	99	2	80	17	2	0	1	1	36	3	13	20
HISTORIC	1	0	1	0	4	3	1	0	0	0	0	0	0	0	0	0
MULTI-COMPONENT	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
MILITARY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	50	0	28	22	105	5	81	19	2	0	1	1	36	3	13	20

(sites), CE Considered Eligible, CI Considered Ineligible, NE Not Evaluated

Of the 193 sites within this alternative, 50 (25.9%) are within the High Use area, 105 (54.4%) are within the Medium Use area, 2 (1.0%) are located within the Low Use area, and 36 (18.7%) are in the Off-Limit area.

Fifty-six percent (n=28) of the sites within the High Use area have been evaluated for the NRHP, while 81.9% (n=86) of the sites within the Medium Use area have been evaluated. Fifty percent (n=1) of the sites within the Low Use area and 44.4% (n=16) of the sites within the Off-Limit area have been evaluated for the NRHP.

The proposed High and Low Use areas of this alternative do not currently contain cultural resources that are considered eligible for the NRHP. Only five of the 86 evaluated sites within the Medium Use area are considered eligible for the NRHP, while 3 sites within the Off-Limit area are considered eligible.

Of the 8 sites considered eligible for the NRHP, 5 are prehistoric and 3 are historic. The majority (62.5%, 5 sites) of the sites considered eligible for the NRHP are located within the Medium use area, while 37.5% (3 sites) are located within the Off-Limit use area.

Cultural resources sites located within the proposed High and Medium use areas are likely to be significantly adversely affected by training maneuvers. Sites located within the Low use area are less likely to be adversely affected by training, but would not likely go entirely unaffected. Resources within Off-Limits/Non-maneuver areas would be the least adversely affected.

Paleontological Resources

While the vast majority of land within Alternative IV contains Low Potential, some upland and/or lacustrine settings have High Potential. Impacts on paleontological resources from training activities in this alternative would be similar to those discussed in Alternative I.

4.6.5.2 Mitigation

Proposed mitigation for impacts on cultural resources will be the same those identified for Alternative I (Section 4.6.1.2).

4.6.6 Alternative VI: No Action Alternative

4.6.6.1 Impacts

No significant impacts on cultural and paleontological resources are expected from Alternative VI. Federal lands located in Alternative I have been transferred to the Army by Congressional action under the Fort Irwin Military Lands Withdrawal Act of 2001. The Army will manage the transferred land pursuant to the Fort Irwin ICRMP which will be modified to include the newly withdrawn area.

Existing sites outside Fort Irwin will continue to be affected over time by recreational use. Education and research would allow continued collection of information from cultural sites in the study area, and site-specific evaluation and mitigation would continue to be applied to federal actions on public lands.

4.6.6.2 Mitigation

No mitigation measures are proposed.

4.6.7 Cumulative Impacts

Cumulative impacts to cultural and paleontology within the ROI are not anticipated to be significant due to proposed mitigation. Over the past hundred years through present day many sites within the ROI have been and continue to be disturbed by illegal collection and vandalism. As the land within the chosen alternative will be under Army control, access to sites currently open to the public and largely unprotected from collection and vandalism will no longer be accessible to the general public. In the ROI as a whole, several sites are under restricted access for collectors, however the vast number of undocumented and un-surveyed areas remains accessible and largely uncontrolled, un-patrolled, or unregulated. In the selected alternative are cultural and paleontological identified sites that will be mitigated, either by placing the area off-limits to training or by identification and removal of artifacts before training could occur. The use of the predictive model should increase the number of sites located and thus mitigate the impact to less than significant. Due to the above, it is believed that the proposed project would have a positive cumulative effect on these resources as sites that would be subject to illegal collection and destruction would no longer be accessible to the public.

4.7 Air Quality

Significant air quality impacts are defined as those that cause, or contribute to, an exceedance of a federal or state ambient air quality standard (AAQS). The MDAQMD established daily and annual threshold levels to attain or prevent exceedance of federal and state AAQS (described in Section 3.7, Air Quality, and presented in Table 4.7-1). Federal conformity issues are addressed in the Fort Irwin General Conformity Requirements Land Acquisition Project (see Appendix E, Air Conformity Study).

Table 4.7-1: Criteria Thresholds

THRESHOLD	UNITS	VOC	CO	NOx	SO ₂	PM-10
MDAQMD Annual	Tons	25	100	25	25	15
MDAQMD Daily	Pounds	137	548	137	137	82

4.7.1 Construction

Roads and camera towers will be constructed to monitor training exercises. Emissions produced from the construction will be minimal compared to the operational impacts from the training exercises; thus, construction emissions will not be discussed further in this document.

4.7.2 Fugitive Dust Emissions

Particulate emissions from fugitive dust were evaluated as PM-10 through an extensive analysis of vehicle patterns used in the training exercises. The analysis, developed in cooperation with the MDAQMD, was used to determine federal conformity and is included in a “General Conformity Requirements, Land Acquisition Project, Fort Irwin National Training Center” study.

Fugitive dust emission estimates were concentrated on operations that would differ between alternatives. Sources of fugitive dust at Fort Irwin include vehicle miles traveled by equipment,