



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Arizona State Office

One North Central Avenue, Suite 800

Phoenix, Arizona 85004-4427

www.blm.gov/az/



In Reply Refer To:
1610 (931/310)
AZA-31733

June 16, 2006

Dear Reader:

Thank you for your interest and participation in the evaluation of the proposed Arizona Game and Fish Department's (AG&FD) shooting range near Mohave Valley. In response to comments from the public, other agencies, and Native American Tribes, there has been another alternative developed and analyzed since the public review copy of the environmental assessment (EA)/plan amendment was made available January 14, 2004.

The proposed plan amendment, EA, and Finding of No Significant Impact, providing information concerning the lands and resources potentially affected by the proposed shooting range, can be found on the Bureau of Land Management's (BLM) internet website at http://www.blm.gov/az/env_docs/library/shooting_range_ea.pdf. If you do not have internet access, you can request a paper copy or CD by calling the Kingman Field Office at (928) 718-3700.

At this time, two items are being considered:

1. The Kingman Field Manager is seeking comment on the suitability for conveyance under the Recreation and Public Purposes (R&PP) Act, as amended (43 U.S.C. 869 et seq.) of the Willow Road alternative. There is a 45-day comment period from the date of publication in the Federal Register. Comments must be postmarked by August 7, 2006 and should be sent to Bureau of Land Management, Kingman Field Office, Attention: Joyce Cook, 2755 Mission Boulevard, Kingman, Arizona 86401.
2. The State Director is proposing to amend the Kingman Resource Management Plan (RMP) for the Boundary Cone Road location.

The BLM's planning process includes an opportunity for administrative review via a plan protest to the BLM Director. A protest to the proposed plan amendment must be filed in accordance with 43 CFR 1610.5-2. This plan protest procedure is only applicable to the proposed plan amendment. If the plan is amended, another decision will address the actual disposal and will include a 30-day appeal period.

There is a 30-day protest period from the date of publication in the *Federal Register* for this plan amendment. Protests must be postmarked by July 21, 2006.

The protest must be specific to the proposal to categorize the subject parcels described in the EA for the Boundary Cone Road location as:

- Available for disposal under the R&PP Act, and
- The buffer designation on the Boundary Cone Road location.

These parcels were designated for retention when the Kingman RMP was approved in March 1995.

If you wish to protest the proposed plan amendment, you can do so by filing a letter of protest with:

US Postal Service

Director, Bureau of Land Management
Attention: Ms. Brenda Williams (WO-210)
P.O. Box 66538
Washington, DC 20035

Overnight Express Mail

Director, Bureau of Land Management
Attention: Ms. Brenda Williams, (WO-210)
1620 L Street, NW, Suite 1075
Washington, DC 20236

E-mail and faxed protests will not be accepted as valid protests unless the protesting party also provides the original letter by either regular or overnight mail, postmarked by the close of the protest period. Under these conditions, the BLM will consider the e-mail or faxed protest as an advanced copy, and it will receive full consideration. If you wish to provide the BLM with such advance notification, please direct faxed protests to the attention of the BLM Protest Coordinator at (202) 452-5112, and e-mails to Brenda_Hudgens-Williams@blm.gov.

Protests filed late or filed with the State Director or Field Manager shall be rejected by the BLM Washington Office (WO-210).

All relevant facts need to be included in the letter of protest. All relevant facts, reasons, and documentation are very important to understand the protest, rather than just expressing disagreement with the proposed decision. At a minimum, the letter of protest must contain the following information:

1. The name, mailing address, telephone number, and interest of the person filing the protest.
2. A statement of the issue or issues being protested.
3. A statement of the part or parts of the plan amendment being protested.
4. A copy of all documents addressing the issue or issues that were submitted during this plan amendment process by the protesting party, or an indication of the date the issue or issues were discussed for the record.
5. A concise statement explaining why you believe the State Director's proposed amendment is wrong.

Individual respondents may request confidentiality. If you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your protest. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

Following the protest period and resolution of any protests submitted, a Decision Record will be issued. The Decision Record will be mailed to all participants in this planning process and all other interested people upon their request.

For questions and further assistance, please contact Joyce Cook at (928) 718-3716. Your interest and participation is greatly appreciated.

Sincerely,



Elaine Y. Zielinski
State Director

MOHAVE VALLEY SHOOTING RANGE

AZA-31733



Proposed Resource Management Plan (RMP) Amendment & Recreation and Public Purpose (R&PP) Disposal

ENVIRONMENTAL ASSESSMENT FINDING OF NO SIGNIFICANT IMPACT

AZ-030-2002-0057

Prepared By:
Bureau of Land Management
Kingman Field Office
2755 Mission Boulevard
(928) 718-3700

JUNE 2006

BLM

Kingman Field Office



Finding of No Significant Impact
For
The Mohave Valley Shooting Range
Proposed Plan Amendment to the Kingman Resource Management Plan and Recreation
and Public Purposes Act Disposal and Environmental Assessment
(AZ-030-2002-057, AZA-31733)

Introduction

The Bureau of Land Management (BLM), Kingman Field Office has analyzed a proposal to amend the Kingman Resource Management Plan. The proposed amendment and proposed Recreation and Public Purposes Act disposal for a shooting range, AZA-31733, have been analyzed in the attached Environmental Assessment, AZ-030-2002-0057.

Rationale for Determination

The elements of context and intensity of impacts as found in 40 CFR 1508.27 were considered when determining significance. The proposed plan amendment and proposed shooting range at both alternative locations are addressed in this Finding of No Significant Impact.

The context of the impacts of the proposed plan amendment and the proposed shooting range at either alternative location is considered to be at the local level as opposed to regional or national level. During the process of preparing the EA, there were no issues or impacts at a regional or national level identified. The effects described in the EA are either specific to a site or occur in close proximity to the site.

When considering the intensity of the impacts I looked at both beneficial and adverse impacts in the long term and short term as follows:

The proposed plan amendment to allow for disposal of 315 acres at the Boundary Cone road location and to allow for modified management of 470 acres for a buffer, would not detract from the implementation of Resource Management Plan decisions such as for Visual Resource Management, desert tortoise habitat objectives, Cultural Resources, Lands, Minerals, or Recreation for this area. Management of the buffer site for public safety would not detract from the implementation of BLM's multiple use management for the area. The Kingman Field Office of the BLM manages approximately 2.7 million acres.

The proposed action and alternatives would not affect any areas such as prime or unique farmlands, wetlands, historic sites, Threatened or Endangered species, wilderness areas, areas of critical environmental concern, or riparian areas.

There would be effects to cultural resources and Native American Religious concerns from either the Boundary Cone road or Willow road locations. The site specific effects would result in the loss of lithic scatters and cleared circular areas, etc. This loss would be mitigated by recordation and, in some cases, data recovery of such sites. Shooting is occurring on a random basis in the area of Boundary Cone Butte which is of religious importance to the Native Americans. Shooting at a range is expected to relocate some of the random shooting and not add to it. Extensive Tribal consultation did not produce documentation of religious or human rights violations. Mitigation would be subject to consultation with the State Historic Preservation Office in conjunction with the Advisory Council and Ft. Mojave Tribe. The proposed disposal of public property (either location) and potential for subsequent operation as a shooting range would not affect the eligibility of Boundary Cone Butte for inclusion in the National Historic Register of Places.

Public health and safety would be beneficially impacted by provision of a safe environment for shooting. It is expected that random target shooting would continue to occur but at a diminished rate as people take advantage of the shooting range opportunities.

The visual effects described in the Environmental Assessment are within the Resource Management Plan described objectives for the area. The noise levels would increase in the area of the shooting range but would be within State standards. The noise levels would be further reduced below what is described in the EA since the proposed action calls for the construction of berms around the shooting range. Berms were not in place or factored into the noise analysis.

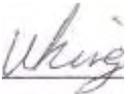
The elements presented in the Environmental Assessment that would guide the operation of the shooting range at either alternative location were developed based on operation of other shooting ranges throughout the state of Arizona. These guidelines are meant to increase the safety of the range as well as minimize environmental harm.

Under the No Action alternative, none of the impacts associated with construction and operation of a shooting range would occur. Random shooting and associated impacts such as trash and lead deposition, visual and noise, would continue and likely increase. There would be no local facility available to the general public to provide for safe shooting or for a law enforcement academy or to maintain firearms qualifications.

The effects described in the Environmental Assessment are based on best available science with the document being prepared by an interdisciplinary team with involvement from other agencies, the public and Native American Tribes. For these reasons, I believe that the effects have been well described and do not involve unique or unknown risks nor is this decision setting a precedent for future actions in this area. The proposed action or alternatives do not threaten a violation of Federal, State, or local laws.

Determination

On the basis of the information contained in the attached Environmental Assessment, including the points summarized above, as well as public, other agency, and Native American Tribal involvement throughout the process, it is my determination that neither the proposed amendment or the proposed shooting range at either of the alternative locations, or the no action alternative, will have significant impacts on the quality of the human environment.



Wayne King
Field Manager, BLM Kingman Field Office

June 12, 2006

Date

DOCUMENTS AVAILABLE FOR REVIEW

Copies of any of the following materials, except the NRA Range Source Book, may be obtained by calling the Bureau of Land Management at (928) 718-3700.

DOCUMENTS:

Report: Sound, Noise & Sport Shooting Ranges

Available online at "www.basfaz.com/sound_&_noise.htm"

Range Safety Rules

Available online at "www.basfaz.com/range_safety_rules_sign.htm"

ARS 17 601-603

Available online at "www.basfaz.com/laws_&_legal_issues.htm"

National Rifle Association, Range Source Book

Available for purchase online at "www.nra.org"

Kingman Resource Area Resource Management Plan, March, 1995

BLM Mineral Potential Report

BLM Environmental Site Assessment Report

BLM Tortoise Habitat Map

AG&FD Proposed Development Plan

AG&FD Feasibility Assessment

BLM Buffer Fence Detail

BLM Range – Tortoise – Fence Detail

AG&FD Seven Mile Hill Noise Assessment

Sample Range Operation Agreement

Draft Joint Management Agreement

Arizona Milepost Spring 2003

Boundary Cone Road Sound Test Conducted June 7, 2003

Boundary Cone Road Sound Test Conducted April 26, 2004

US Institute for Environmental Conflict Resolution Final Status Report

October 26, 2005

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ENVIRONMENTAL ASSESSMENT

I. INTRODUCTION

In March 2001 the Arizona Game and Fish Department (AG&FD) applied to the Kingman Field Office for public land for a public shooting range under the Recreation and Public Purposes (R&PP) Act. This document assesses impacts of the proposed issuance of a Recreation and Public Purpose (R&PP) patent. The document also proposes an amendment to the Kingman Resource Management Plan (RMP) approved March 1995 to allow for disposal under the R&PP Act and designate the buffer for special management should the Boundary Cone Road location be selected.

- A. Need for the Proposed Action. A public shooting range is needed within the Bullhead City/Mohave Valley area to support the Hunter Education Program, promote safe hunting and shooting practices, provide the public with safe shooting areas and encourage hunters to become more proficient with their equipment. Law enforcement agencies are in need of a shooting range in order to achieve and maintain firearms qualifications. Mohave Community College, Bullhead City Campus has been considering a Law Enforcement Academy that would be enhanced by a local shooting range.

Under the R&PP Act, the types of uses envisioned were parks, fire departments, churches, schools, and other similar uses. The RMP also stated special consideration would be given to nonconforming uses. A shooting range is considered to be a nonconforming use that is not compatible with residential development. The RMP also provides that other public lands within disposal areas may be considered for R&PP. Because the proposed action is considered a non-conforming use but represents a viable use of public land, it warrants further consideration through a plan amendment.

- B. Conformance with Land Use Planning. The Kingman Resource Management Plan (RMP) approved March 1995 identified specific lands to be reserved for R&PP near growing communities.

The Boundary Cone Road alternative would require a plan amendment (43 CFR 1600) in order to be implemented because the RMP did not identify the proposed area for the shooting range as available for disposal. When assessing the proposal to amend the plan, the Planning Criteria from the RMP, with respect to R&PP, was used as well as the project specific Criteria, listed in *Appendix B*.

The Willow Road alternative is public land that was identified in the Kingman RMP for disposal. Since the RMP was completed in 1995, Field Office boundaries have been adjusted so this alternative is located in the Lake Havasu City Field Office (LHFO). A current RMP planning process in the LHFO, with a decision expected in July 2007, would remove this section from disposal based on concerns from AG&FD in relation to tortoise habitat and ADOT regarding the location of State Route 95.

The Kingman RMP designated the public lands involved in both alternatives as part of the “*Kingman Extensive Recreation Management Area (ERMA)*”. (Decision RR05, page 75). The current RMP planning process in the LHFO would also designate public lands involved in the Willow Road alternative as part of an ERMA. Both alternatives would be in compliance with the BLM policy of custodial management of dispersed recreation activities within ERMAs.

C. Relationship to Statutes, Regulations, and Other Plans.

The Recreation and Public Purposes Act of 1926, as amended (44 Stat. 741, amended, 43 U.S.C. 869-4) authorizes the Bureau of Land Management (BLM) to lease or sell public lands for recreational or public purposes to State and local governments and qualified nonprofit organizations below fair market value.

The Federal Land Policy and Management Act of 1976 (FLPMA), 43 CFR 2740, and the subsequent 2741 Manual and H-2740-1 Handbook provides public lands be retained in Federal ownership, unless as a result of the land use planning procedure, it is determined that disposal of a particular parcel will serve the national interest. Section 212 of the Act addresses disposal via the Recreation and Public Purposes Act.

The Black Mountain Ecosystem Management Plan, April 1996 facilitates multiple-use management while ensuring the sustained health of the land and resolving long-standing resource use conflicts through forage allocation. Disposal and retention decisions from the RMP are carried forward into this plan. Both the Boundary Cone Road and Willow Road alternatives are located in the Black Mountain Ecosystem.

The proposed action is consistent with the goals and objectives outlined for Desert Tortoise Habitat Management on the Public Lands: a Rangewide Plan (November 1988) prepared by Nevada, Utah, Arizona and California to ensure viable populations and improve the status of the species.

AG&FD would secure any and all necessary permits, such as zoning, Corps of Engineers, Arizona Department of Environmental Quality, and Arizona Department of Water Resources approval. The sound standards as prescribed in Arizona Revised Statutes (ARS) 17-601 through 603 are applicable to this project.

D. Decisions to be Made.

The State Director would make a decision on whether or not to amend the Kingman Resource Management Plan.

The Field Manager would make the following decisions:

1. Whether or not to classify public land as suitable for issuance of an R&PP patent to the AG&FD.
2. Selection of one of the location alternatives or the no action alternative presented in this EA.

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action – Boundary Cone Road

The AG&FD has proposed a shooting range to be located in T. 19 N., R. 21 W. on approximately 315 acres in Sections 35 and 36 on the north side of Boundary Cone Road, just east of the north-south power transmission lines (*See Appendix A for map, legal description and conceptual design map*). This location is 2½+ miles east of State and private land and 1½+ miles northwest of a subdivided (10 acre parcels) private section. In order to describe the land by aliquot part for disposal purposes, approximately 5-10 acres would be located on the south side of Boundary Cone Road. This land would remain undeveloped and may be used for shooting range signs only.

The shooting range would be developed as described in section II.C. below.

Access would be from Boundary Cone Road and would include a cattle guard and a gate. The AG&FD would work with Mohave County to provide turn lanes for safe ingress and egress into the site. Power and telephone are available along Boundary Cone Road and could be extended to the site at some point in the future.

In addition to the area needed for the Shooting range facilities, there would be a buffer encompassing approximately 470 acres in Sections 25, 26, 35 and 36 of T. 19 N., R. 21 W. See *Appendix A* for map, legal descriptions and conceptual design map. The buffer would be ¼ mile on the east side and ½ mile on the north side of the shooting range and would remain in Federal ownership and managed under a Cooperative Management Agreement with the AG&FD. Uses in the buffer area would be limited to those compatible with safe operation of the shooting range.

The minerals in sections 26 and 36 (395 acres) are administered by the BLM and would be retained by BLM as directed by the R&PP Act. The minerals in section 25 and 35 (390 acres) are owned by a third party and are subject to development. The AG&FD would purchase the mineral estate or enter into an agreement to ensure non-development of the minerals. BLM would not convey the surface estate until the mineral estate purchase or agreement has been completed.

It is proposed to amend the plan in accordance with Section 202 of the Federal Land Policy and Management Act (FLPMA) of 1976 and 43 CFR 1600. The proposed amendment would classify the lands listed under “Range” in *Appendix A* for disposal under the R&PP Act, Section 208 of FLPMA and 43 CFR 2740). The Amendment would also designate the lands listed under “Buffer” in *Appendix A* for special management with the objective to provide for public safety. All future applications in the buffer would be subject to review to determine compatibility with safe range operation.

B. Alternative 1 – Willow Road Alternative

This alternative is located in T. 18 N., R. 21 W., Section 28 and would include the Federal surface and minerals of the entire section with the exception of 30 acres in the NW¼ in the vicinity of Milltown. The shooting range would be developed as described in section II.C. below. (See *Appendix A* for map, legal description and conceptual design map). Shooting range facilities may have to be adjusted to better fit the terrain and criteria. All public land for the shooting range and the buffer would be disposed of through a patent with a limited reverter clause on uncontaminated lands only.

Access to the Willow Road location is east from Highway 95 along Willow Road approximately 4-4.5 miles. The first 1.5 miles are paved, .5 mile is a dirt road maintained by Mohave County, 1 mile is a dirt road crossing Indian Reservation and private lands and is occasionally maintained by a private sand and gravel operator. The remaining 1-1.5 miles follows the historic Mohave Road across a corner of State land with the remainder crossing public land to a point near a north-south gas pipeline corridor where access can be made to Section 28.

C. Features Common to the Proposed Action and Alternative 1

SHOOTING RANGE

The shooting range would consist of seven different types of ranges including a 5-field trap and skeet range, a 5-stand sporting clays range, a 5-point 500-yard police rifle range, practical pistol bays, a 25-point 200-yard public range, a 25-point 50-yard pistol range, and possibly an archery range (See *Appendix A* for conceptual design map). The shooting range would be operated under a set of range safety rules typical for shooting ranges. An equitable user fee would be charged.

The trap and skeet range would include a clubhouse and a restroom. The public range would include a range office and a restroom. All facilities would be in compliance with the Americans with Disabilities Act (ADA). Sanitation would either be through the use of a septic system or a naturally composting system. All buildings, shades and other above-ground structures would be non-reflective and painted to blend with the natural color of the environment, thereby reducing the visual affect. Rock staining may be used if needed to ensure visual continuity. All ranges would have an associated parking area.

Night shooting is anticipated approximately three times a week. Shooting between 10 pm and 7 am would not be permitted. Lighting at night would be kept to a minimum and would be low intensity lights intended to minimize light pollution. Night shooting lights would be stadium style with reflector shields to direct the light where needed.

There would also be a maintenance compound that includes RV spaces for caretaker quarters consisting of two pads, hookups, dump station, storage sheds, and a pet enclosure/dog run. Alternative forms of power such as solar, wind and generators with proper containment systems may be employed. Water would be provided either through the drilling of a well or a cistern using water delivery. It is anticipated site planning and development would occur during a 3-5 year period.

The shooting range would be fenced with a 4-wire smooth wire fence using green T-posts 30' apart, stays 7½' apart, bottom wire 18" high, 2nd wire 28" high, 3rd wire 38" high and the 4th wire 50" high. The shooting range would also include tortoise fencing, 1" wide by 2" high wire mesh buried 6" below the surface and 18" above the surface and attached to the bottom strand of wire. AG&FD would conduct the biological clearances and would remove all wildlife, barrel cacti and ocotillos from the area prior to construction. Tortoise would be moved to the buffer area. Salvaged plants would be used for landscaping around the facilities or relocated in the buffer.

Effective lead management practices would be implemented including shooting range layout considerations and surface water runoff controls (filtered channels and detention basins) to ensure lead is contained on site while allowing for the natural flow of water. Scheduled soil testing, inspection, and a lead recovery and a recycling program would be part of the project design.

All ranges within the shooting range would be constructed to meet the sound criteria defined in the Arizona Revised Statutes (ARS) 17-601-603 through the use of impact berms. Berms on all ranges, with the exception of the trap and skeet and sporting clay ranges, would consist of a backstop, 20' high, 1:1 slope, 90 percent compaction with a non-rock surface, and lateral berms 10' high. All ranges would meet the National Rifle Association (NRA) guidelines for design, sound levels, and safety as outlined in the NRA Range Source Book dated November 1999. This document may be reviewed at the BLM Kingman Field Office or a copy may be obtained from the National Rifle Association through their website at www.nra.org.

In order to meet state and local requirements, use of water to reduce dust will be used as necessary and equipment coming from areas known to have noxious weeds will be required to wash equipment.

The AG&FD will provide design plans for review to any and all agencies of interest including BLM, Corps of Engineers, and various departments in Mohave County including Planning & Zoning, Flood Control and Public Works.

BUFFER

The buffer area would be relatively undisturbed except it would be completely fenced with a 4-wire smooth wire fence, green T-posts 30' apart, stays 7½' apart, bottom wire

18” high, 2nd wire 28” high, 3rd wire 38” high and the 4th wire 50” high. “**Shooting Range Do Not Enter**” signs would be posted every 50 yards on the entire fence.

D. No Action Alternative.

A shooting range would not be authorized on public land in the Bullhead City/Mohave Valley area. Currently there is uncontrolled shooting on public lands at many locations. Typically this an individual or a small group of people setting up in a wash or against a suitable backstop, erecting targets such as cans, bottles, plywood, refrigerators, boats, signs, and other available trash to shoot.

E. Alternatives Considered But Not Analyzed.

Several alternative locations were considered as follows:

1. Sections 28 and 33 in T. 19 N., R. 21 W.
2. Section 18 in T. 18 N., R. 21 W.
3. Section 18 in T. 20 N., R. 21 W.
4. Section 9 in T. 19 N., R. 21 W.
5. Sections 22 and 27 in T. 19 N., R. 21 W.
6. Section 29 in T. 19 N., R. 21 W.
7. Section 30 in T. 19 N., R. 21 W.
8. Sections 34 and 35 North of Boundary Cone Road in T. 19 N., R. 21 W.
9. Section 35 in T. 19 N., R. 21 W. and Secs. 2 and 3 in T. 19 N., R. 21 W., South of Boundary Cone Road.
10. Section 36 South of Boundary Cone Road in T. 19 N., R. 21 W.

During the Alternative Dispute Resolution (ADR) process, the following alternative locations were considered:

11. Section 4, T. 19 N., R. 21 W.
12. Section 8, T. 19 N., R. 21 W.
13. Section 16, T. 18 N., R. 21 W.
14. Section 4, T. 17 N., R. 21 W.
15. Section 9, T. 17 N., R. 21 W.
16. Section 22, T. 17 N., R. 21 W.,
17. Section 27 and 34, T. 19 N., R. 21 W.

A map in **Appendix B** shows the location of the alternatives above. **Appendix B** identifies the criteria that were considered when locating the shooting range. Some of the criteria are more critical than others. The site must be in Arizona since the Arizona Game & Fish Department is the applicant. A north shooting direction is important so shooters are not blinded by the sun in the mornings and afternoons. A major highway cannot be immediately adjacent to the north. Location in Category I and II desert tortoise habitat has been avoided as it would require mitigation and compensation that is not considered to be cost effective. It is also important to have the range located far enough away from potentially developable land to ensure the long-term use of the range.

The majority of alternatives were eliminated from further consideration primarily due to lack of access, location in close proximity to land valuable for residential development or having high value resources such as Category II desert tortoise habitat. Alternatives considered during the ADR process were eliminated for the same reasons with consensus from all stakeholders.

In addition to the above alternatives, an indoor shooting range was considered. An indoor shooting range would not allow for all the various shooting sports such as trap and skeet, and the \$5-6 million price tag it takes to develop this type of range makes this alternative economically unfeasible.

III. Affected Environment

A. General Setting.

Boundary Cone Road Alternative

This site is located on the north side of Boundary Cone Road approximately 7 miles east of Highway 95 (*see map in Appendix A*). This parcel is within an area of contiguous public land. The site is a minimum of 1½ miles from any private or State land with development potential. It is approximately 1½ miles east of the Mohave County Material Site and 2 miles southeast of the Mohave County Landfill. It is just east of two major north/south power transmission lines. An old alignment of Boundary Cone Road and an old road between Oatman and Needles, shown on a 1917 survey plat and identified in the survey notes as a ferry road, runs east/west in the southern portion of the range site. A water pipeline shown on the 1917 plat has been removed. There is evidence there may have been a telegraph line in the area at one time. The area slopes from east to west approximately 3-5% and is dissected by numerous washes, large and small. The uplands are generally covered with desert pavement and basalt, volcanic fragments. Vegetation is sparse and consists of creosote, catclaw, cholla, ocotillo and barrel cacti. Wildlife inhabiting the area includes coyote, lizards, various birds, and desert tortoise. This area has been closed to livestock grazing since 1974 and reserved for wildlife and watershed uses. There are no active unpatented mining claims at the proposed location.

Willow Road Alternative

This site is located south, southeast of the Milltown site in Mohave Valley (*see map in Appendix A*). It lies east of a north-south gas pipeline corridor. The area has been heavily impacted by ATV use, target practice with firearms and illegal dumping. The historic Mohave Road crosses the northwest corner of the section. A tribal police shooting range is located approximately 1 mile to the west on the north side and at the end of Willow Road on tribal lands. A section of State Land with an underlying residential designation lies to the southwest with the nearest private land 1 mile to the west.

The area slopes from east to west approximately 3-15% and is dissected by numerous washes, large and small. The uplands are generally covered with desert pavement and basalt, volcanic fragments. Vegetation is sparse and consists of creosote, catclaw, cholla, ocotillo, and barrel cacti. Wildlife inhabiting the area includes coyote, lizards, various birds, and desert tortoise. This area has been closed to livestock grazing since 1974 and reserved for wildlife and watershed uses. Both the surface and mineral estate are Federally-owned and there are no active unpatented mining claims or rights-of-way of record in Section 28.

No Action Alternative

The area for this alternative encompasses the Colorado River Valley in Arizona from SR 68 south to the Topock Marsh, from the Black Mountains west to residential development. This is where people go to shoot, wherever there is a road on public land away from residential development. It includes the environmental elements described in both above alternatives. Private lands are subject to development and are being marketed for low, medium, and high density housing, golf courses, commercial business and

unofficial subdivisions or lot splitting. Public lands are for multiple uses including recreation, wildlife habitat, rights-of-ways and mineral development. It can be difficult to balance these uses. There are thousands of acres of public lands where the mineral estate is privately owned subject to sale and development. Depending on the wording in the mineral reservation document, BLM may or may not have any right or jurisdiction over the surface use including environmental clearances and analysis. State lands are generally undeveloped with some rights-of-ways. The Fort Mojave tribal property is intermingled with privately-owned property and is used for farming, housing, and vacant land. Recent developments include a power plant and casinos.

B. Critical Elements.

Boundary Cone Road and Willow Road Alternatives

The Critical Elements of the Human Environment (BLM Handbook H-1790-1) were considered during this project with respect to the proposed action, no action and any other alternatives. The table below lists the critical elements and pertinent comments on each. Elements not affected by the Proposed Action or alternatives will not be discussed further in this EA.

Critical Element	Comment
Air Quality	There would be dust from construction for either alternative. Dust abatement during construction is part of the proposed action. No other affects to air quality are expected.
ACECs	Neither alternative site is located in or near an ACEC.
Cultural Resources	Would be impacted as discussed below.
Farmlands, Prime/Unique	There is no Prime or Unique Farmlands located at either site.
Floodplains	Washes go though both sites. The shooting range would be designed to allow the natural functioning of these washes. Permits may be required from Army Corps of Engineers.
Nat. Amer. Rel. Concerns	Impacts to native American Religious concerns are discussed below.
Environmental Justice	It was determined “environmental justice” was not impacted for either alternative as the range is a minimum of 1 mile from private land or tribal land and associated residences.
T& E Species	A search of the Arizona Game and Fish Heritage Data Base Management System data base and BLM technical expert knowledge of T&E species habitat requirements and locations supports the determination that there would be “no affect” to T&E species within the project and action area from the proposed action as none are present.
Wastes, Hazardous/Solid	Potential contamination is discussed below.
Water Quality	The facility is being designed to contain lead contamination.
Wetlands/Riparian Zones	There are no Wetlands or Riparian zones at either site
Wild & Scenic Rivers	There is no designated Wild or Scenic Rivers at either location.
Wilderness	Neither proposed site is in a Wilderness area. The closest wilderness area is approximately 5 miles from either location.
Noxious/Invasive Weeds	The proposed action includes measures to insure noxious weeds are not spread at the site.

In addition to the above critical elements, the following non-critical elements were considered but were determined to not be affected:

1. Wild Horse and Burro. The proposed site is located within the Black Mountain Herd Management Area (HMA). The Black Mountain HMA encompasses approximately 1,094,000 acres of Federal, State, and private lands and is actively managed to sustain a herd of 478 wild burros in thriving ecological balance with the environment. The Black Mountain Ecosystem Management Plan (1996) provides guidance for management actions on public lands within the HMA. The Plan allows for the development of Recreation and Public Purpose permits and leases in non-critical burro habitat. The proposed action is located in non-critical habitat and would not adversely impact the management or the maintenance of a healthy, viable herd of wild burros in the Black Mountain HMA.

2. Rights-of-Way. An R&PP patent would be issued subject to valid existing rights-of-way. BLM has authorized the following rights-of-way across public land proposed for the Boundary Cone Road location:

Serial #AZA-24775 – Issued to Citizens Utilities for a 69 KV power-line right-of-way, 20’ wide.

Serial #AZA-20911 – Issued to Mohave County for Boundary Cone Road right-of-way, 100’ wide.

The rights-of-way would continue to be managed in accordance with the terms and conditions in each grant. Operation of the facility within each right-of-way would not be affected by the construction and operation of a shooting range.

There are no rights-of-way of record within the Willow Road Alternative.

Future rights-of-way across the patented range property would require approval of the AG&FD.

C. Affected Resources.

The following resources are expected to be impacted by the proposed project:

1. Cultural Resources. The area encompassed by both sites has been used by prehistoric and historic peoples. The prehistoric uses consisted of traveling through, collecting materials for the creation of stone implements, gathering plants for food and ceremonial uses. Archaeological sites reflecting these uses consist of chipped stone scatters resulting from stone tool manufacture or from testing and breaking raw materials down for transport. The historic uses were typically associated with mining, grazing or transportation.

2. Native American Religious Concerns. The Fort Mojave and Hualapai Tribes have expressed a concern that the range could impact the spiritual values they assign to nearby sacred sites including a mountain named Boundary Cone. The entire Mohave Valley area is part of the ancestral lands of the Fort Mojave and Hualapai Tribes, and they are taught of spiritual ties and connections to the land. Places on this landscape have special meaning pertaining to the traditions and oral histories of these Tribes.

3. Wildlife/Special Status Species

The following species are found at both alternative sites and are BLM Sensitive Species due to declining populations and loss of habitat: Desert Tortoise has been found to den in small caves found along wash banks and under shrubs on the uplands; habitat for the chuckwalla, is found in the project area and; the western burrowing owl and other

migratory birds are known to occur in this area. Several BLM sensitive bat species are known to forage in the project area.

4. Sound. Different people have different perceptions of what sound they like and what sound they don't like. Noise differs from pleasant sounds only in the fact that it often disturbs us. (see *Appendix C* for detailed description)

The determination of what sounds are considered to be noise is a personal judgment of annoyance based on the intensity, duration, time of day, and number of times the event takes place. Sound measurements are based on sound pressure levels expressed in decibel (dBA) units. A higher decibel level of sound generally correlates with people's judgment of the annoyance of the sound.

When Congress passed the Noise Control Act of 1972, the U. S. Environmental Protection Agency (EPA) was tasked with publishing descriptive data on the effect of noise which might be expected from various levels and exposure situations and to publish information (see *Appendix C* for more information). State standards are governed by the May 17, 2002, Arizona State Legislature Senate Bill 1008 amending Title 17, Arizona Revised Statutes, Chapter 6, relating to outdoor shooting ranges. It requires the sound from a shooting range not exceed an LEQ(h) of 64 dB(A) when measured within 20 feet from the nearest occupied structure.

Major generators of sound in this area include passing traffic, aircraft flying overhead or target practice. Currently, shooting takes place at many different locations on public lands and quite often occurs adjacent to private land. Medium and heavy trucks generate sound levels ranging from 84 to 88 dB(A) and train traffic generates sound levels ranging from 88 to 98 dB(A) measured 50 feet from the source.

5. Minerals and Mineral Estate. Sand and gravel is very common throughout the Colorado River Valley. Occurrences of metallic minerals are not common in the valleys but there have been efforts to locate gold, silver, and other precious metals. Mineral estate is a subsurface right in any given parcel of land that allows for the exploration or use of minerals potentially to the detriment of the surface estate. This area has many sections of land where the BLM manages the surface estate but the mineral estate is owned by a third party such as the Santa Fe Railroad.

6. Hazardous Materials. A Phase I environmental site assessment for hazardous materials has revealed there are no hazardous materials currently within the boundaries of either site. Lead deposition is occurring on a wide area due to random shooting.

7. Visual Resources. The majority of Mohave Valley, including both alternative locations, is classified by BLM as Visual Resource Management (VRM) Class IV. Class IV allows consideration of activities that require major modification of the existing character of the landscape. The level of change to the landscape can be high, may dominate the view, and may be the major focus of viewer attention. Every attempt should still be made to minimize visual impacts to the landscape.

8. Recreation Resources. Dispersed recreation activity occurs in the area of both sites, including driving off-highway vehicles (OHVs), hiking, rock-hounding, target shooting, and sightseeing. Visitor use of this region for recreation pursuits is relatively high, due to the close proximity of several population centers and the high volume of tourists visiting

the Nevada casinos, Oatman, and Route 66. OHV use is likely the most popular activity, and includes periodic organized events involving hundreds of vehicles. Target shooting is also popular and often results in areas that are littered with shell casings and shot up materials. Both shooting range proposals are in the vicinity of the Mohave and Milltown Railroad Trails managed by BLM. Motorized and non-motorized use on these trails allows visitors to view the remains of the historic railroad grade and ore-processing facilities at Milltown.

9. Socio-Economics. The Tri-State Region, where California, Nevada and Arizona come together, is a popular year-round recreation spot and the mild warm winters attract many out-of-state tourists. Boundary Cone Road is the main artery that provides access to the historic mining town of Oatman and its wild burros, the Goldroad Mine and historic Route 66. Even in the summer, when daytime temperatures often exceed 110 degrees, the Colorado River, Lake Mohave and the Laughlin casinos still attract thousands of visitors.

10. Adjacent or Nearby Land Uses/Ownership. Land in the area is managed by BLM or owned by the Arizona State Land Department, the Fort Mojave Indian Tribe, or private landowners. Public land is managed by BLM in accordance with the decisions from the approved Kingman RMP 1995.

IV. Environmental Consequences

A. Boundary Cone Road Alternative.

1. Cultural Resources. 100% of the shooting range was surveyed in late 2002 for cultural resources. There were five historic archaeological sites discovered and recorded. In September 2004, an additional site was recorded consisting of a cleared circular area. All archaeological sites within the shooting range would be obliterated by the proposed action. A report was prepared documenting the location and description of the sites.

2. Native American Religious Concerns. This location lies within 2 miles of, and within view of Boundary Cone, considered by the Fort Mojave and Hualapai Tribes to be a sacred site. Because of the values assigned to Boundary Cone by the Tribes, Boundary Cone has been determined eligible for listing in the National Register of Historic Places as a traditional cultural property. The tribes have not provided information regarding specific impacts a shooting range would have on current practices occurring at this or other sacred sites, but they have stated that the presence of the shooting range would adversely affect the spiritual values associated with Boundary Cone Butte and the valley in general. The visual impact would be minimized by painting structures in desert earth tones, rock staining, using low intensity lighting and utilizing desert landscaping as described in the proposed action.

Sound testing conducted in June 2003 at the proposed shooting range shows that the sound of one firearm would diminish to less than a whisper approximately one mile from the shooting location. The results of the sound testing are described under "Sound" below. An additional sound test was conducted in April 2004 to simulate a more realistic shooting range scenario and showed the sound would be comparable to a dishwasher in the next room. See *Appendix C*. Gunfire, and echoes reverberating against the Black Mountains, could be heard at the sacred site. It should be noted the sound testing conducted was done so without the benefit of berms that would be constructed as part of the proposed action, thereby reducing the amount of sound even further.

3. Wildlife/Special Status Species. The project area contains Category II and III tortoise habitat. Category II is classified as higher value habitat than Category III. The shooting range area of the Proposed Action is within Category III habitat while the buffer area is within Category II. The proposed relocation of tortoise would cause some stress but would be minimized as tortoise would be relocated within their original home-range. They would be removed by the AG&FD utilizing AG&FD tortoise handling guidelines. Approximately 315 acres of habitat would be lost as a result of implementation of the proposed action. Encounters between humans and tortoise are expected to increase due to the higher use of the project area and surrounding lands. Effects to tortoise may be an increase in collection, harassment, and vandalism by shooting, and mortality associated with road kill. This is an Arizona State-listed species that requires additional mitigation in order to keep it from becoming a federally-listed threatened and endangered species.

With implementation of the proposed action approximately 315 acres of habitat for the chuckwalla and foraging habitat for bats and migratory birds would be degraded or permanently removed. Collection and human induced mortality of chuckwalla could increase as a result of higher recreational use within the surrounding areas. Displacement or mortality of the western burrowing owl may occur if facilities or roads are placed on or within sight of burrowing owl burrows.

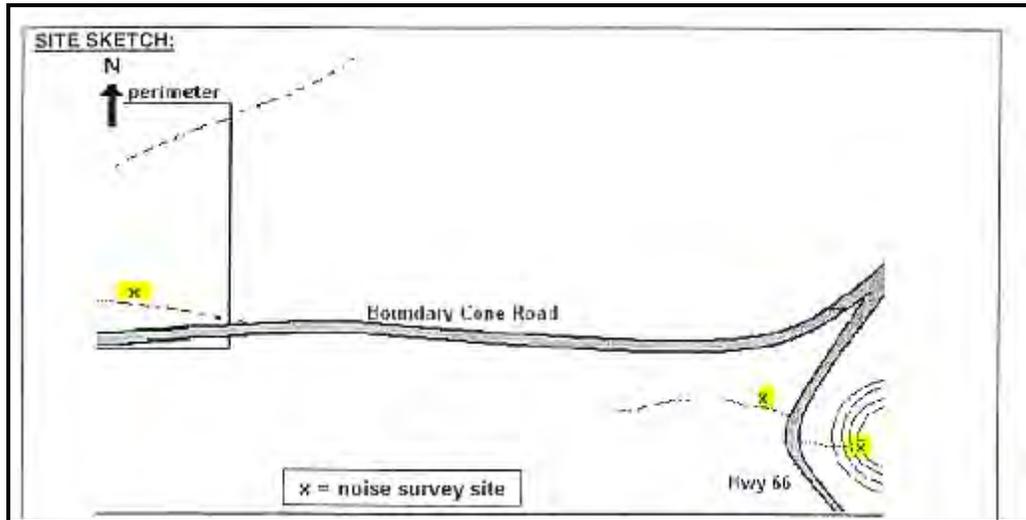
4. Sound. The proposed action is 1½ miles northwest of a mostly undeveloped section of private land and 2½ miles east of occupied residences.

Sound testing was conducted by a consultant on June 7, 2003 between 5:30 and 6:30 p.m. at the Boundary Cone Road location. Sound pressure levels were recorded of four 30-06 rifle shots and three 12 gauge shotgun shots over an approximate 3-minute period. Firing took place at the approximate center of the proposed range in a north direction. Measurements were recorded at the northeast, southeast and southwest perimeter of the range to determine sound levels off-site and at points approximately 20 yards west of the shooter and 100 yards north of the center of the range to determine maximum sound levels that may be experienced while on-site. Decibel levels at the various locations were as follows:

20 yards west of shooter	88.6 dB(A)
100 yards north of shooter	58.5 dB(A)
Southwest corner of proposed range	53.8 dB(A)
Southeast corner of proposed range	50.2 dB(A)
Northeast corner of proposed range	55.4 dB(A)

A second sound test was conducted by a consultant on April 26, 2004 to more closely simulate an actual shooting range. Multiple pistols, rifles, and shotguns were fired over a 20 minute period. Measurements were taken at three locations: a) one approximately 50 yards east of the firing line, b) one approximately 120 yards east of Route 66 on the west side of Boundary Cone, and c) one 100 yards west of Route 66. Decibel levels at these locations were as follows:

a) 50 yards east of firing line	80.5 dB(A)
b) 100 yards west of Route 66	58.4 dB(A)
c) Boundary Cone Butte	50.2 dB(A)



While this is below the decibel level required by State law at the nearest residence of 64 dB(A), whether the amount of sound is considered as offensive noise is perceived differently by each individual. See *Appendix C* for detailed information regarding sound. Interested parties located at the base of Boundary Cone Butte stated gunfire, as well as echoes off the Black Mountains, could be heard. It should be noted these sound tests were conducted without the benefit of berms that would be constructed as part of the proposed action.

5. Minerals and Mineral Estate. The minerals in sections 26 and 36 (395 acres) are managed by the BLM and there are no mining claims or mineral material sales. The minerals in Sections 25 and 35 (390 acres) are owned by a third party and may be subject to development. A mineral potential report was completed for Sections 25, 26, 35 and 36 in T. 19 N., R. 21 W. The report concluded there is low potential for metallic mineral (gold), and high potential for the occurrence of sand and gravel. BLM administered minerals in the shooting range (Sec. 36 – 185 acres) would not be available for development as the Secretary of the Interior has not enacted any laws and regulations for mineral development on land disposed of under the R&PP Act. The BLM administered minerals in the buffer area (Sec. 26 and 36 – 210 acres) will remain open for mining claims which could conflict with the operation of the range shooting range. The sale of BLM-administered minerals is discretionary and likely would not be approved in the buffer area.

If the AG&FD negotiates with the mineral estate owner to either buy the mineral estate or comes to a written non-development agreement for the mineral estate in section 25 and 35 (390 acres in the range shooting range and buffer areas and up to 1280 acres for the entire sections), there would be no mineral development opportunities in the area covered by the agreement. This would also provide protection for desert tortoise habitat and may be considered as compensation for lost tortoise habitat within the shooting range.

If the mineral estate cannot be purchased or an agreement with the mineral estate owner cannot be reached, this shooting range location would not be developed.

6. Hazardous Materials. Implementation of the proposed action could potentially contaminate the ground surface and ground water with lead, arsenic, and antimony from bullets. The natural drainage ways coursing through the proposed project area are subject to infrequent periodic flooding. Depth to ground water is 100+ feet below the ground surface.

There are four movement pathways where lead deposited on firing ranges has potential risk to human health. These pathways are:

- as airborne particulate matter
- as waterborne particles in suspension in storm runoff
- in solution in storm runoff
- in solution in ground water

It is expected that potential lead contamination to ground water resources would not be significant due to high soil pH's, and infrequent low annual rainfall. For these reasons it is also expected that lead deposited particles from firing ranges would not penetrate the ground surface to great depth. If significant concentrations of lead or arsenic reach ground water that is consumed by humans, a variety of health problems could potentially occur. Airborne lead particles may be a result of the shooting activity itself. These particles may settle on the soil surface in gun firing areas and later transported by wind and dust movement. The Colorado River Valley is a dry region with the exception of the river itself.

The four major factors influencing the movement of particulate or dissolved lead through soil media are: rainfall intensity and frequency, soil pH, soil permeability, and soil profile development (morphology). The proposed action contains soil resources that have a high soil pH, low rainfall, (6 to 9 inches mean annual precipitation), and low rainfall frequency. The soils in the proposed action are generally coarse textured, and have minimal to medial profile development.

Implementation of effective lead management practices, as described in the proposed action, would further reduce the potential for lead contamination and risks to the health or safety of humans or wildlife.

7. Visual Resources. Implementation of the proposed action would add man-made structures and disturbances to the natural landscape. These manmade changes would be readily apparent to observers viewing the area from Boundary Cone Road, because of the close proximity of the project to the road. Night lighting at the facility would reduce the natural darkness that is currently present in this area. Use of earth-tone colors on structures, low-level lighting, and re-vegetation of disturbed areas and rock staining would help to reduce the contrasts and visibility of the project to passersby. The project would meet BLM visual objectives for the area.

8. Recreation Resources. Development of the shooting range facility would eliminate opportunities for dispersed recreation on several hundred acres of public land. Existing off-highway vehicle routes would be cut off at the boundaries of the range, however, alternative routes are present in the same area, and no destinations would be left inaccessible. Camping on public lands, with a 14-day limit, is permitted and would likely increase in the range vicinity. Random shooting is expected to continue to some extent but education opportunities associated with the range could reduce some safety concerns. Development of this shooting range may lessen the incidence of random shooting and related trash deposition on other areas of public land.

9. Socio-Economics. It is expected the shooting range would provide additional tourist dollars to the local economies. Shooting-related competition events could bring people into the area that might not normally visit the area and could result in the use of a variety of services and activities offered in the region including increased use of casinos, Route 66, Historic Oatman and the Goldroad Mine.

Cost of development at this location is expected to be approximately \$1,000,000.00. A 69 kV power transmission line parallels Boundary Cone Road. A 12 kV distribution line could be extended from the current point of terminus approximately 3 miles to the west utilizing existing poles at an estimated cost of \$2/foot or \$32,000. Mohave County has expressed an interest in obtaining power to their material pit to the west of this site, which could result in sharing some of this expense. The cost to complete the Sec. 106 consultation on the location is estimated to be \$7,500. Access to the location is direct from Boundary Cone Road, therefore there would be no need to acquire access. A value has been placed on the mineral estate by the Railroad of \$100/acre or \$39,000.

10. Adjacent or Nearby Land Uses/Ownership. If the plan is amended, a 315 acre parcel of private land would be within contiguous public land. A 470 acre buffer to the north and east of the 315 acres of private land would be retained in public ownership but managed to insure public safety and uses compatible with range operation. Future disposal of public land would not be expected in the area of the shooting range because the parcel was picked for remoteness to provide an area that would not disturb activities on private land and is not expected to impact property values. Amendment of the plan would allow for disposal of public land to serve an important public purpose and an important Arizona state program that would insure longevity of the proposal.

Adjacent public land would continue to be managed for multiple use and protection of valuable resources as prescribed in the Kingman RMP and to the extent allowed by law. The Interdisciplinary Team reviewed the plan decisions applicable to this area and have determined that the ability to implement the plan would not be affected by the implementation of the proposed action including as noted below:

Cultural: During the course of this project the importance of Boundary Cone Butte to Native Americans has been ascertained. Regardless of the alternative selected, BLM would implement decisions dealing with 1) nomination of cultural resources for listing in the national register of historic places; 2) protecting scientific information potential of sites (possibly through recovery or avoidance); 3) initiate studies to identify existing socio-cultural values, as well as areas and cultural resource properties with socio-cultural values for Native American groups, residents and land users. All other cultural decisions would be unaffected by the proposed action.

Hazardous Materials: The proposed action contains lead containment procedures and would not affect the RMP plan decisions for hazardous materials and protection of groundwater, aquifers or riparian systems.

Minerals: Approximately 315 acres would be unavailable for mineral exploration with the possibility of another 470 acres within the buffer also being unavailable. Since the minerals in this area are predominately sand and gravel and found throughout the area of the Kingman Field Office, implementation of exploration for sand and gravel would not be affected.

Wildlife: The proposed action would not affect the ability to implement the decisions pertaining to general wildlife. The decision pertaining to managing special status species and their habitat would be affected as 315 acres of Sonoran desert tortoise habitat is being conveyed out of public ownership. Also, the increase of users in the area could contribute to the loss of tortoise which would further compromise the decision. The RMP decision dealing with compensation for loss of desert tortoise habitat would be implemented through mitigation measures of fencing and purchase of sub-surface mineral estate.

Visual: The area is within VRM class IV and this designation would not change because of the proposed action.

Recreation: The area is within an extensive management area for dispersed recreation and would not change.

Lands and Realty: Rights-of-way and other lands permits would continue to be processed in the area adjacent to the shooting range subject to environmental analysis consistent with the RMP and as required by law. The proposed action would conflict with the decision to retain land in areas of blocked public ownership but the RMP does allow for consideration of disposal outside identified areas on a case-by-case basis following a plan amendment.

Uses of private, State and Tribal lands are not expected to be affected by the proposed plan amendment or the siting of a shooting range on public land.

B. Willow Road Alternative.

1. Cultural Resources. 100% of Section 28 was surveyed for cultural resources. The survey resulted in locating 240 prehistoric archaeological sites and 4 historic sites. The four historic sites are associated with the Milltown historic site in Section 21 immediately North of Section 28. Most of the prehistoric sites are chipped stone scatters resulting from stone tool manufacture or lithic reduction to test and break the raw materials down for transport. Some of these sites consist of cleared circular areas, 1 to 5 meters in diameter, that have been identified by the AhaMakav as areas of spiritual importance or "Sacred Areas". Some rock features were identified by the AhaMakav as having religious significance, but the nature of the religious importance was not revealed. Other site types of unknown age include rock piles or cairn and masonry structures.

Any historic and prehistoric sites located within the 30 acres being retained around the historic Milltown site would not be disturbed by this action. Any historic and prehistoric sites located within the shooting range and buffer would be subject to destruction by ground disturbance associated with construction and use of the shooting range.

2. Native American Religious Concerns. This site also lies within the traditional homeland of the Fort Mojave and Hualapai Tribes. It is located approximately 6 miles from Boundary Cone, the sacred site discussed in the Boundary Cone Road location. Due to the large number of prehistoric sites located on the property, it is evident this area was used extensively by Native Americans. The sacred areas and rock features of religious significance identified by the AhaMakav in Section 28 would be subject to destruction by ground disturbance associated with construction and use of the shooting range.

3. Wildlife. Impacts to wildlife at the Willow Road location are similar to those at the Boundary Cone Road location described above.

4. Sound. The same or similar sound impacts could be expected at the Willow Road location as those described for the Boundary Cone Road location. Since Boundary Cone Butte is approximately 6 miles from this location, as opposed to 2.5 miles from the Boundary Cone Road location, it is expected the sound level would be approximately 40 dB(A) which would be comparable to normal night-time sound. This would be based on the fact there are no berms that would be constructed as part of the proposed action.

The State land to the southwest could possibly be developed for residential purposes at some point in the future. Terrain and design factors would keep the sound level well below the state standard of 64 dB(A).

5. Minerals and Mineral Estate. BLM administered minerals on public land disposed of through the R&PP Act would not be available for development as the Secretary of the Interior has not enacted any laws and regulations for mineral development on land disposed of under the R&PP Act. A field reconnaissance of Section 28 indicated there is low potential for metallic mineral (gold), and high potential for the occurrence of sand and gravel. Sand and gravel is very common throughout the Colorado River Valley. There is a sand and gravel pit located in the wash in Section 32 south of Section 28.

6. Hazardous Materials. Contamination impacts as a result of a shooting range would be the same regardless of location. A field reconnaissance of Section 28 resulted in the location of a tailings dump associated with the historic Milltown site, however, this area is within the 30 acres in Section 28 that would be retained around the historic site. No other hazardous materials were identified in Section 28.

7. Visual Resources. Impacts to visual resources at the Willow Road location are the same or similar to those at the Boundary Cone Road location described above. The project would meet BLM visual objectives for the area.

8. Recreation. Development of the shooting range facility would eliminate opportunities for dispersed recreation on several hundred acres of public land. Existing off-highway vehicle routes would be cut off at the boundaries of the range, however, alternative routes are present in the same area, and no destinations would be left inaccessible. Camping on public lands, with a 14-day limit, is permitted and would likely increase in the range vicinity. Random shooting is expected to continue to some extent but education opportunities associated with the range could reduce some safety concerns. Development of this shooting range may lessen the incidence of random shooting and related trash deposition on other areas of public land.

9. Socio-Economics. The significant increase in range development costs include access road upgrade, substantial dirt work, relocating and channelizing at least one, and possibly three, watercourses. Economic benefits of a shooting range at this location to the local economy would be the same as the Boundary Cone Road alternative.

Cost of development at this location is expected to be approximately \$3,000,000.00. Bringing power into Section 28 would require extension of an existing distribution line located on Willow Road approximately 2 miles. Costs for a new line to extend power are estimated at \$5/foot or approximately \$52,800. Costs for acquiring legal access could be expensive and time consuming and are unknown. Access across tribal lands requires a proposal be brought before the Tribal Council who then makes a recommendation to the Bureau of Indian Affairs (BIA) based on the benefit to the tribe. If there is no benefit, it may not be approved. If approved, BIA will determine appropriate compensation. If and when State Route 95 is realigned, BLM may seek an opportunity for an access interchange at Willow Road. This could facilitate long term access needs to Section 28. Access across the gas pipelines would require coordination with the pipeline company(s) to assure adequate pipeline protection. Recordation and data recovery for the 244 sites identified would cost approximately \$300,000.

10. Adjacent or Nearby Land Uses/Ownership. The southwest corner of this section is common to the northeast corner of a State land section. The Arizona State Land Department (ASLD) has advised the State Trust land to the southwest has an underlying residential designation. ASLD has recommended shooting range facilities in the west half of the section be moved to the east half of the section to ensure the new alignment of State Route 95 will buffer State Trust lands from shooting range activities.

The Arizona Department of Transportation has identified the preferred route for realignment of State Route 95 in Arizona through the west half of Section 28. If and when this highway is built in Arizona, it may facilitate access to this location, but the alignment may have to be adjusted if Section 28 is selected for the shooting range.

A tribal police shooting range one mile west of Section 28 at the end of Willow Road is used regularly for firearms qualifications for law enforcement personnel within the Fort Mojave tribe. It would seem feasible the tribal shooting range could be eliminated if and when a new shooting range is constructed, thereby eliminating possible conflicts with adjacent land valuable for residential development. However, Indian reservation land is managed as a sovereign Nation, therefore there is no guarantee of this possibility.

There is a perception a shooting range will devalue property when, in fact, there are those that like to live close to a shooting range. Since there is not currently any residential development within 1½ miles, if a shooting range were built at this location, all future developments should include a full disclosure.

The Mohave Road 4WD trail and the Mohave and Milltown Railroad Trails trailhead is located just north of this alternative. The Mohave Road is a historic road that was a major transportation corridor from the historic mining town of Oatman to the east-west railroad main line located near Topock. Portions of the historic Mohave Road could be further degraded by upgrading and/or SR 95 realignment.

C. No Action Alternative.

1. Cultural Resources. While there would be no impacts due to this action, use of public land is not prohibited and destruction of cultural resources could occur through general uses that typically occur on public land such as recreation, rock hounding, and off highway use. Trespass is a common occurrence on public land and can also destroy cultural resources.

2. Native American Religious Concerns. Shooting and target practice occurs almost on a daily basis in Mohave Valley. There is nothing to preclude the public from using Boundary Cone as a backstop for target practice.

3. Wildlife/Special Status Species. Animals would not be relocated due to the proposed action. This would not prevent impacts due to increased human population and use of public land.

4. Sound. Shooting will continue to occur on public land. The degree of noise heard will depend on the proximity to the shooting location(s).

5. Minerals and Mineral Estate. While sand and gravel is prevalent throughout Mohave Valley, privately owned minerals sold for development account for a large part of the

economy. Depending on the language in the mineral reservation patent, BLM may not have any legal basis to require environmental clearances, documentation or rehabilitation. Many acres of public land could be impacted by mineral development.

6. Hazardous Materials. Uncontrolled lead contamination could and will continue due to random shooting. Lead from uncontrolled random shooting could be transported either through the air via dust particles or through drainages during storm runoff.

The degree of hazard may not be considered very high since the entire area is arid and there is not much opportunity for movement to water sources.

7. Visual Resources If the Proposed Action or Willow Road Alternative were not selected, and no organized shooting range was available in this region, wildcat shooting on public lands would continue or increase and would likely result in continued degradation of public land visual quality due to typical trash deposition at such locations.

8. Recreation. A decision to not implement either the Boundary Cone Road or Willow Road alternatives could result in continued or increased wildcat shooting on public lands by individuals, law enforcement agencies and private security firms. With the current trend of increased recreation use on public lands in this region, conflicts between shooters and other public land users concerned for their own safety may increase.

9. Socio-Economics. There would not be any benefits to local communities from organized shooting events from this proposed action. Thousands of dollars identified for range development costs would not be spent. Those that need or want to shoot would have to drive the approximately 60 miles round trip to Kingman and the Seven Mile Hill Shooting Range.

10. Adjacent or Nearby Land Ownership. Residential areas may find shooting in close proximity unless posted or prohibited.

D. Cumulative Impacts.

Native American Religious Concerns. The Fort Mojave Tribe maintains each and every action occurring in Mohave Valley contributes to the degradation of the spiritual values and their connections with the land. Mohave Valley consists of intermingled land ownership as described in Adjacent or Nearby Land Ownership below. As population increases, impacts are also expected to increase, for example, increased recreation use of public lands, possible road and utility infrastructure, etc.. Developments are occurring in Mohave Valley on private lands such as housing and golf courses and on tribal lands such as farming, casinos, and a power plant.

Wildlife/Special Status Species. Past projects such as power lines, pipelines, Topock substation Topock power plant and private land development such as the Laughlin Ranch and expected projects such as the SR 95 realignment all contribute to habitat loss and fragmentation and illegal wildlife collection.

Sound. The tribal police shooting range and random target practice currently occurring would add to the overall noise created by the proposed shooting range. The realignment of SR 95 would bring traffic noise in closer proximity to the proposed shooting range and to Boundary Cone. Commercial air traffic is currently occurring and is expected to increase.

Visual Resources The addition of a shooting range facility at either location will add to the number of manmade modifications already existing in the region including power lines, Topock substation, Topock power plant, SR 95 realignment, and other projects.

Public lands in this area will continue to be modified as nearby populations continue to grow and further infrastructure is required. The shooting range will also add to “light pollution” of the night sky in this vicinity, but is relatively inconsequential in comparison to the substantial glow cast by the Bullhead City/Laughlin/Mohave Valley population centers.

Adjacent or Nearby Land Ownership. There are many new residential and industrial developments occurring in the Colorado River Valley, some of which are very large, and consist of high density housing, golf courses, and industrial parks. The Laughlin Ranch development alone consists of approximately 3½ square miles in the Bullhead City limits and an additional 12 square miles outside the city limits in the county. A new bridge across the Colorado River is planned. US 95 in Nevada is being widened and SR 95 in Arizona from I40 to SR 68 is being studied and analyzed. There is potential for a substantial population increase which would mean even more housing, shopping, infrastructure, and use of public land.

State Route 95 in Arizona is currently two lanes north from I-40 at Topock through the Havasu National Wildlife Refuge and four lanes through Mohave Valley and Bullhead City to where it connects with State Route 68 at the Laughlin Bridge. It also runs south in Arizona through Lake Havasu City, Parker and Quartzsite to Yuma. The route through Mohave Valley and Bullhead City creates a liability for ADOT and a feasibility study has been conducted to realign it to the east to create a four-lane access-controlled highway. The need for this type of highway in Arizona has been questioned as there is also a US 95 in California from Needles north through Nevada to Las Vegas. It also runs south in California through Blythe to I-10. It is thought most of the traffic that would use SR 95 is ultimately accessing casinos in Laughlin or going to Las Vegas and will funnel traffic to one of the two bridges that cross the Colorado River. There is a possibility of a third bridge being built in the future. Traffic on SR 95 is currently moderate to heavy and can be expected to increase significantly with the large new developments underway.

Other potential ground disturbing actions could include mineral material development on split estate where the surface is managed by BLM and the minerals are privately owned. In many of these cases, which is widespread on odd-numbered sections in the valley and depending on the specific wording in the mineral reservation document, the mineral estate may be sold and developed without regard for the surface estate. The State of Arizona has oversight to assure compliance with environmental laws and regulations for development of private minerals. With these type of split estates, there is no permitting or approval required by BLM.

V. Mitigation

A. Boundary Cone Road Alternative

1. Burrowing owl and chuckwalla: These species would be relocated outside of the project area if it is determined that an individual would be destroyed or the burrow of a burrowing owl would be disturbed or destroyed by project implementation. The owls would be removed from the burrow and the burrow collapsed to prevent owl reentry.

2. Mitigation measures for archaeological sites determined eligible for the National Register will be developed in consultation with the State Historic Preservation Officer to resolve adverse effects and resolved prior to patent issuance. Mitigation for such sites would involve recordation and archival research. According to the Fort Mojave Tribe, there are no measures that could be taken to mitigate the adverse effects of the proposed shooting range on the spiritual values assigned to Boundary Cone.

B. Willow Road Alternative

1. Mitigation for wildlife would be the same as for the Boundary Cone alternative.
2. Mitigation measures for archaeological sites determined eligible for the National Register would be developed in consultation with the State Historic Preservation Officer and Indian tribes to resolve adverse effects and resolved prior to patent issuance. Mitigation for most archaeological sites would involve recordation and other methods of data recovery at the proponent's expense. BLM would continue consultation with the Fort Mojave Tribe to determine possible mitigation measures for the sacred areas identified by the AhaMakav.

VI. Consultation and Coordination

List of Preparers/Commentors

BLM Kingman Field Office

- Joyce Cook, Realty Specialist/Project Manager
- Don McClure, Planning and Environmental Coordinator
- John Rose, Archaeologist
- Rebecca Peck, Wildlife Biologist
- Bruce Asbjorn, Outdoor Recreation Planner
- Art Smith, Geologist
- Paul Hobbs, Soil Scientist
- Scott Elefritz, Wild Horse & Burro Specialist
- Jack Spears, Range Management Specialist
- Bob Hall, Public Affairs Specialist
- Craig Johnson, BLM Archaeologist
- Paul Misiaszek, BLM Geologist
- Jim Whittington, BLM Public Affairs Specialist

BLM Arizona State Office

- Gary Stumpf, Archaeologist
- Carol Kershaw, Realty Specialist
- Don Applegate, Outdoor Recreation Planner
- Linda Marianato, Planning and Environmental Coordinator

Arizona Game & Fish Department

- Bob Posey, Region III, Director
- Zen Mocarski, Public Affairs Specialist

Tri-State Shooting Recreation Center, Inc.

- Pat Otto, President

Others

- Cherie Shanteau, U. S. Institute for Environmental Conflict Resolution

October 21, 2002 BLM Project Coordination Meeting. Determined interdisciplinary (ID) team members and scheduled team meeting.

November 21, 2002 Letters to Hualapai, Fort Mohave, Hopi, Colorado River and Yavapai-Prescott Indian Tribes.

January 6, 2003	AG&FD letters to EPA and ADEQ.
January 8, 2003	Personal contact of three occupied residences on Ellery Road, and one concerned citizen in Sun Valley subdivision.
February 18, 2003	Presentation to Mohave County Public Land Use Committee. Forwarded resolution of support to Board of Supervisors.
March 26, 2003	Notice of Realty Action and Intent to Amend the Kingman Resource Management Plan published in the Federal Register.
March 24, 2003	Public Notice mailed to mailing list.
March 25, 2003	Correction to Public Notice mailed to mailing list changing the comment period from 30 days to 45 days.
March 26-May 10	Public comment period. Twenty-three Public Comment Forms provided at the public open house on April 16, 2003 were received, all in support, as well as 8 letters in support and 1 letter expressing concern about sound. Three public comment forms supporting the range were received postmarked after the May 10 comment deadline.
April 1, 2003	Correction to Notice of Realty Action and Intent to Amend the Kingman Resource Management Plan, changing the comment period from 30 days to 45 days, published in the Federal Register.
April 9, 2003	Bob Posey, AG&FD, discussed proposal with Mohave County Planning and Zoning.
April 16, 2003	Public Open House held with 28 people in attendance.
April 23, 2003	Letter dated 4/17/03 received from Ahamakav Cultural Society, Fort Mojave Indian Tribe expressing concern and requesting ethnographic study (Ethnography: a branch of anthropology dealing with the scientific description of individual cultures).
April 28, 2003	Discussion between Archaeologist John Rose and Fort Mojave Tribe regarding concerns.
May 2, 2003	John Rose provided additional information, including proposed action, purpose and need, and sound testing to Fort Mojave Tribe.
May 29, 2003	John Rose, Andy Whitefield and Duane Aubuchon of AG&FD met with Fort Mojave Tribe regarding concerns.
June 4, 2003	Joyce Cook met with parties expressing concern about sound. After seeing actual location of the proposed shooting range, parties agreed the sound would not be a problem.
July 24, 2003	John Rose, Joyce Cook, Ruben Sanchez, Don Charpio and Bob Posey met with Fort Mojave Tribal members on site to discuss their concerns.
August 6, 2003	Letter to Fort Mojave Tribe requesting specifics regarding their concerns.
September 3, 2003	Letter from Fort Mojave Tribe requesting ethnographic study.
October 3, 2003	Letter to Fort Mojave Tribe stating there is no justification for an ethnographic study and requesting any information they wanted to share.
October 23, 2003	Letter from Fort Mojave Tribe objecting to determination an ethnographic study is not necessary.
October 29, 2003	John Rose met with Fort Mojave Tribe members on site and showed them the sites discovered during archaeological clearance. All agreed nothing was prehistoric. John provided sound information for their review. Still concerned with visual impacts and need for ethnographic study. All agreed to meet with the State Historic Preservation Office.
December 12, 2003	Public Review Copy of Environmental Analysis (EA) mailed to mailing list.

December 12, 2003 News Release to local media regarding availability of public review copy of EA.

January 14, 2004 Comment period ends for public review copy of EA. The following comments were received:
 Five letters of support were received expressing the desire and need for a shooting range in the area.
 One phone call expressing concern the shooting range will lower property values was received. This comment was addressed under the cumulative impacts section.
 A letter was received from Mohave County Flood Control District expressing concern with alteration of washes. Coordination and review of design plans was addressed in the proposed action. A response letter was prepared.
 A letter was received from the Arizona Department of Transportation regarding a possible conflict with the State Route 95 realignment. This comment was addressed in the cumulative impacts section. A response letter was prepared.

January 21, 2004 Response letters to the Mohave County Flood Control District and Arizona Department of Transportation were mailed out.

January 22, 2004 A meeting with Fort Mojave Tribal members, the State Historic Preservation Office and BLM State and Field Office archaeologists was held on site. Expressed concerns about visual and audible impacts to Boundary Cone.

March 18, 2004 A meeting was held with BLM staff and managers and Ft. Mojave Tribal Council. The tribal representatives stated there would be visual and audible impacts on tribal members visiting Boundary Cone. Exact effects could not be disclosed due to need to preserve religious confidentiality.

April 14, 2004 Letter from Hualapai Tribe stating Boundary Cone is a traditional cultural property and requested a meeting to discuss potential impacts.

April 26, 2004 A second sound test was conducted with Linda Otero from the Ft. Mojave tribe present. Pistols, rifles and shotguns were fired to simulate and actual shooting range. Gunfire could be heard from Boundary Cone as well as echoes from the Black Mountains.

May 20, 2004 John Rose met with Hualapai Tribal chairwoman and members to discuss potential impacts to Boundary Cone, considered a sacred place by the tribe.

May 28, 2004 John Rose met with Hualapai Tribal members on site. The area is considered to be part of their aboriginal territory.

June 23, 2004 Copy of mineral appraisal provided to Newmont Realty Company by AG&FD.

June 29, 2004 Contacted U. S. Institute for Environmental Conflict Resolution to start Alternative Dispute Resolution process.

July 21, 2004 Received inquiry from Congressman Trent Franks office with copies of constituent letters.

August 30, 2004 Response to Congressman Trent Franks office faxed from BLM Arizona State Office.

September 20, 2004 Newmont Realty Company expressed disagreement with mineral appraisal provided by AG&FD.

October 7, 2004 Received letter from Salt River Pima-Maricopa Indian Community deferring consultation to Colorado River Indian Tribes.

October 18, 2004 John Rose met with Ft. Mojave Tribal members and a cultural resource consultant from the Quechan Tribe on site to look at recent prehistoric discovery on the proposed property considered to be sacred. The site has been recorded.

Alternative Dispute Resolution (ADR)

Ongoing objections against the proposed action were expressed by local Native American Tribes with no avenue for resolution or mitigation offered. BLM entered into a contract with the U.S. Institute for Environmental Conflict Resolution in September 2004. A series of stakeholder meetings using an ADR process resulted in the development of an alternative location, the Willow Road alternative, for consideration and analysis.

October-November Interviews with BLM, AG&FD, Tri-State Shooting Recreation Center, Fort Mojave and Hualapai Tribes, Arizona State Land Department (ASLD), etc.

December 9, 2004 Stakeholder Meeting at Mohave Community College to discuss possible alternatives. Two alternatives were visited that day. Tribes and ASLD were going to take locations under consideration. Tribes may be interested in a tour of 7 Mile Shooting Range and elder tour of 4 sections being considered.

February 8, 2005 Tour of 7 Mile Shooting Range and 4 locations being considered by approximately 20 members of Fort Mojave and Hualapai Tribes. (Sec. 16 (seen from a distance), 28 T18NR21W, 9 and 22 T17NR21W)

February 25, 2005 Second stakeholder meeting. Tribes advised Sec. 28 OK. Sec. 9 Not. Would need elder trip to consider Sec. 16.

March 2, 2005 Field trip with Bob Posey of AG&FD and Don McClure and Joyce Cook of BLM to look at Sec. 16 and 28 T. 18 N., R. 21 W. to determine feasibility. Access issues too great for Sec. 16. Eliminate from further consideration. Wish to reconsider Sec. 9, T. 17 N., R. 21 W. Has good access and power and a lot of disturbance.

March 2, 2005 Tri-State Shooting Recreation Center Meeting. Voted to table Boundary Cone Road location in favor of consideration of Sec. 28 and Sec. 9.

Mar/Apr, 2005 Cultural survey of Willow Road Sec. 28

March 15, 2005 Greg Keller Arizona State Land Department. Advised they would prefer Sec. 9. Could live with E½ of Sec. 28. If no significant cultural found, will discuss further.

March 17, 2005 Presented Secs. 28 and 9 as possible alternative locations in BLM Project Coordination Meeting.

March 29, 2005 Letter from AG&FD stating they have reached an impasse on mineral rights purchase from Newmont Realty on Boundary Cone Road site.

April 8, 2005 Letter from KFO Field Manager to Fort Mojave Tribal Chair requesting a meeting. No response.

April 13, 2005 Field trip with Tri-State members to Willow Road Sec. 28 site. Felt location was too remote.

April 19, 2005 Note from AG&FD engineers that Willow Road site Sec. 28 and power plant site Sec. 9 would be too expensive to build. Cultural survey suspended.

May 5, 2005 One possible additional alternative offered for tribal consideration, 1 mile west of Boundary Cone Road location, north of Mohave County pit. Category II desert tortoise habitat. Would require plan amendment and begin environmental process all over again including cultural survey, mineral report, hazmat survey, clearances, publications, etc. Minerals are Federal.

July 12, 2005 Meeting with US Institute, Fort Mojave and KFO Archaeologist to discuss possible new alternative 1 mile west of Boundary Cone Road location. Not acceptable to tribe. Nothing really acceptable.

September 1, 2005 Final ADR meeting held.

September 27, 2005 Formal tribal consultation meeting between BLM and Fort Mojave Tribe. Discussed access, archaeological and spiritual values need to be determined.

October 3, 2005 Field trip with Fort Mojave cultural rep, KFO BLM Archaeologist and Realty Specialist to Willow Road Sec. 28.

Nov 05/Jan 06 Cultural survey on Willow Road Sec. 28 resumed and completed. 244 sites identified.

December 14, 2005 Meeting with Tri-State and BLM KFO Field Manager & AG&FD. Concerns regarding time and money expended. BLM is considering all viable alternatives.

December 9, 2005 AG&FD Engineer provided conceptual layout of facilities for Willow Road site and cost estimate for construction.

December 29, 2005 Letters to Arizona Department of Transportation, Arizona State Land Department and Federal Highways Administration requesting comments regarding Willow Road Sec. 28.

January 30, 2006 Letter from Arizona State Land Department advising residential designation for Sec. 32 southwest of Sec. 28 and suggesting shooting be directed to the east and facilities be relocated so as not to impact the placement of the State Route 95 realignment. It's placement should buffer State land from the shooting range.

February 9, 2006 Letter from Arizona Department of Transportation advising Willow Road Sec. 28 is located in two of the three study corridors for the realignment of State Route 95 and in particular the preferred corridor. A shooting range so close to the road would not be favorable. Two of the corridors encompass the west $\frac{3}{4}$ of the Willow Road alternative.

April 12, 2006 Meeting with Bob Posey, AG&FD, to update EA and discuss status and schedule.

April 25, 2006 Letter to Nora McDowell, Ft. Mojave Tribal Chairperson, regarding status, scheduling a meeting, and requesting information on access on reservation lands and any cultural or spiritual information.

May 1, 2006 Letter from State Historic Preservation Office regarding clarification needed on cultural survey reports.

May 3, 2006 Federal Register Notice provided to BLM Washington for review.

May 3, 2006 Meeting with Tri-State Recreation Center Inc. with Ruben Sanchez acting on behalf of Field Manager to provide update of progress and anticipated schedule.

May 22, 2006 Briefing by Field Manager to State Director regarding progress and anticipated schedule.

May 22, 2006 Meeting with Field Manager and Fort Mojave Tribal Chair to discuss progress and anticipated scheduled. Provided process for access across tribal land, expressed concern with alternatives and affects on spiritual values and maintains there is nothing that can be done to mitigate the impacts of a shooting range to the spiritual ties and connections to the land and reiterated there are no plans for a shooting range on tribal lands.

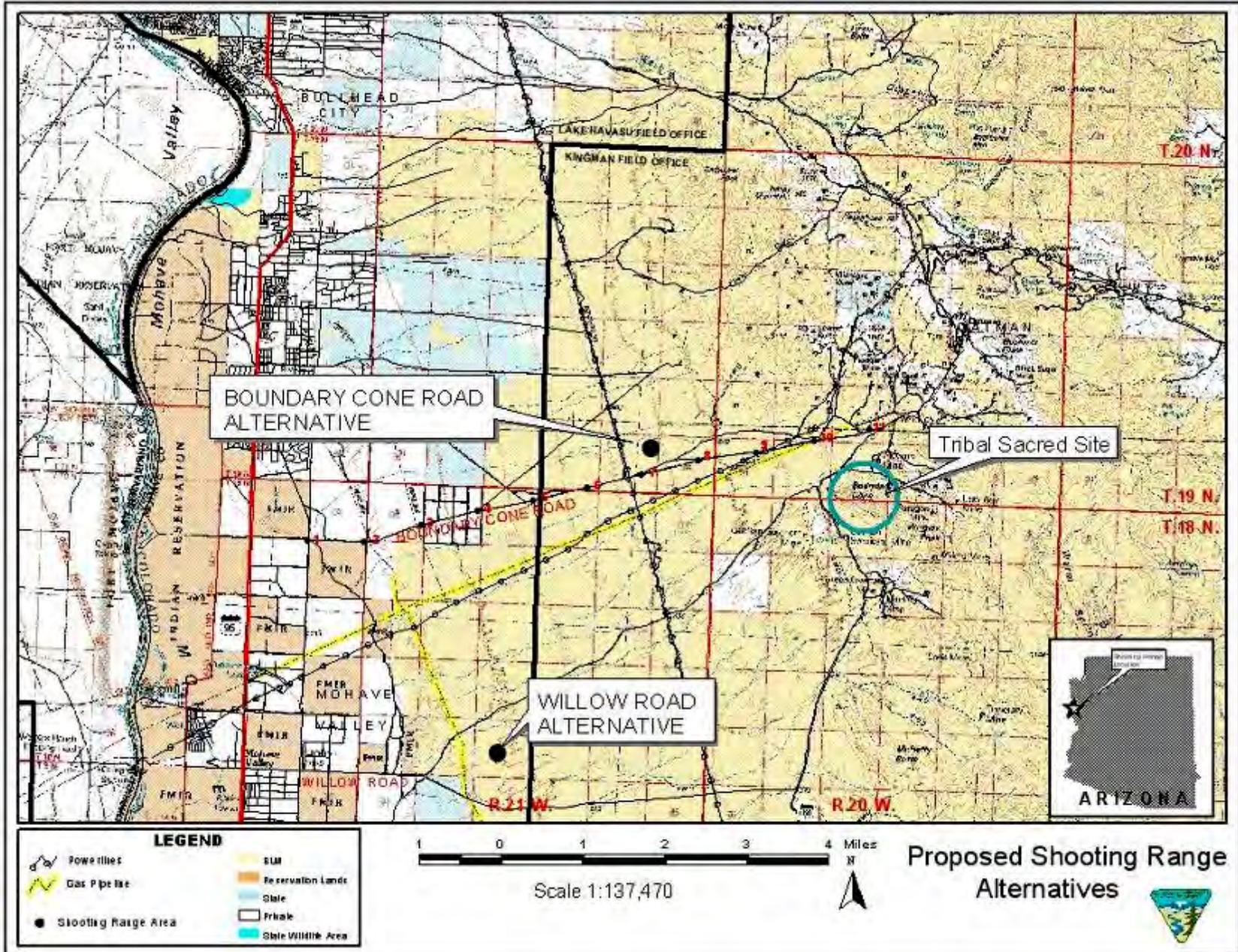
ID Team Meetings: 10/31/02, 11/20/02, 12/11/02, 1/8/03, 1/29/03, 2/18/03, 3/24/03, 5/1/03, 6/10/03, 8/4/03, 9/9/03, 10/23/03, 11/13/03, 1/20/04, 2/2/04, 5/10/04, 5/28/04. The purpose of these meeting is to identify what input is needed by various team members in the process, assure the input is provided and review status of the project.

Tri-State Shooting Recreation Center, Inc. Meetings: 4/3/02, 5/1/02, 6/5/02, 7/10/02, 8/7/02, 9/4/02, 10/2/02, 11/6/02, 12/4/02, 1/8/03, 2/5/03, 3/5/03, 4/2/03, 5/7/03, 6/4/03, 7/2/03, 8/6/03, 9/3/03, 11/5/03, 12/3/03, 1/7/04, 2/4/04, 3/3/04, 4/7/04, 5/5/04, 7/7/04, 8/4/04, 9/12/04, 10/6/04, 11/3/04, 12/1/04, 1/5/05, 2/2/05, 3/2/05, 4/6/05, 5/4/05, 6/1/05, 7/6/05, 8/3/05, 9/7/05, 10/5/05, 11/2/05, 12/7/05, 1/4/06, 2/1/06, 3/1/06, 4/5/06, 5/3/06, 6/7/06. The purpose of these meetings is to keep those interested in the range development up to date on the progress.

Mohave Valley Daily News newspaper publications of Federal Register notice in legal notices: 3/26/03, 4/2/03, and 4/9/03. 12/13/03 article “Federal study finds no significant environmental impact”, public review EA availability and comment period ending 1/14/04.

Bullhead City Bee newspaper publications of Federal Register notice in legal notices: 3/28/03, 4/4/03, and 4/11/03.

Other newspaper articles: 3/26/03, 4/16/03, and 4/20/03.



APPENDIX A

Legal Descriptions

Boundary Cone Road Alternative

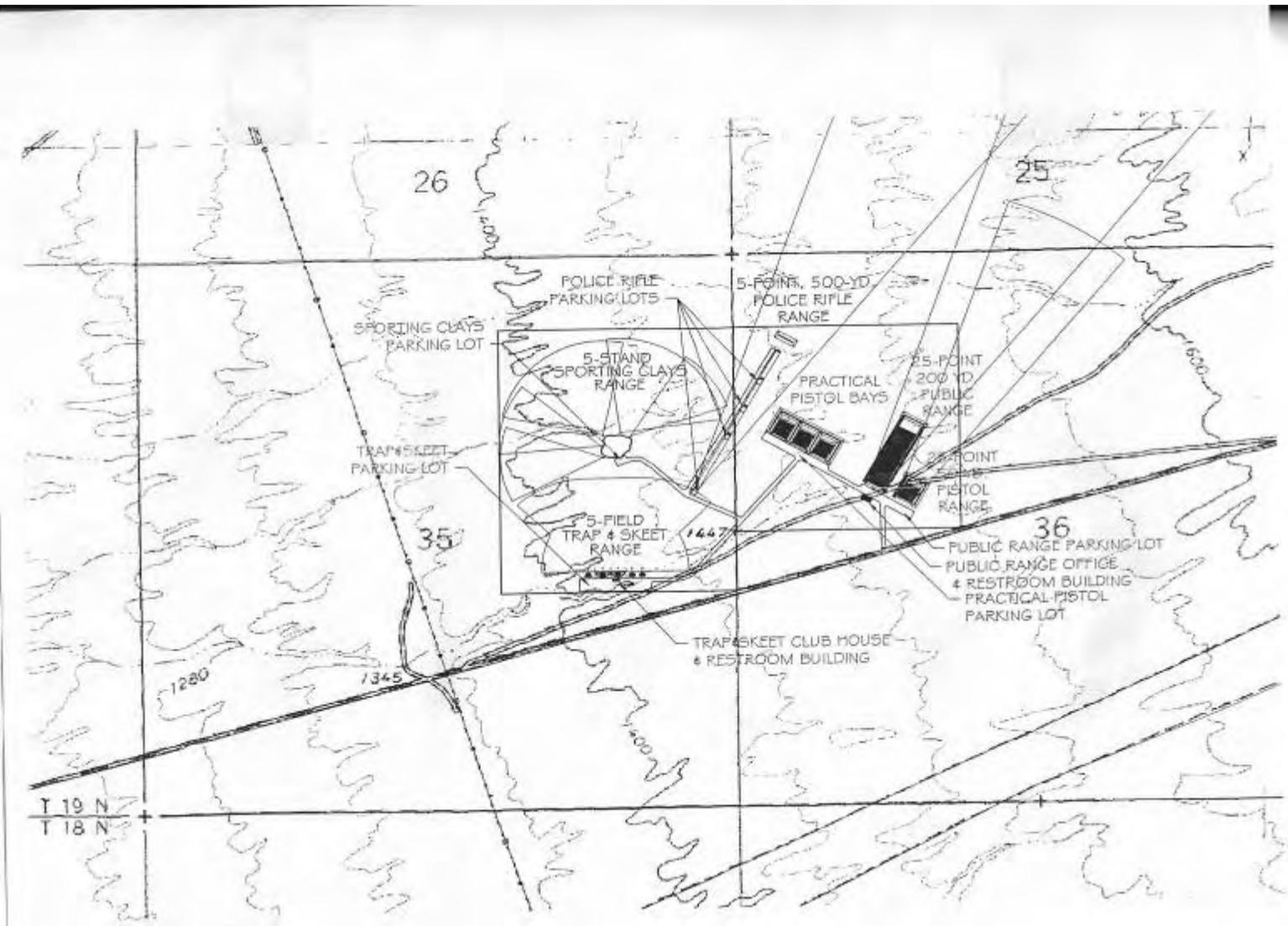
Range: Gila and Salt River Meridian, Arizona
T. 19 N., R. 21 W.,
Sec. 35, S¹/₂NE¹/₄NE¹/₄,SE¹/₄NW¹/₄NE¹/₄,E¹/₂SW¹/₄NE¹/₄,
SE¹/₄NE¹/₄,N¹/₂NE¹/₄SE¹/₄,N¹/₂SW¹/₄NE¹/₄SE¹/₄,
NE¹/₄NW¹/₄SE¹/₄,N¹/₂SE¹/₄NW¹/₄SE¹/₄;
Sec. 36, S¹/₂NW¹/₄NE¹/₄,N¹/₂SW¹/₄NE¹/₄,N¹/₂S¹/₂SW¹/₄NE¹/₄,
S¹/₂N¹/₂NW¹/₄,S¹/₂NW¹/₄,N¹/₂NE¹/₄NW¹/₄SW¹/₄,
NW¹/₄NW¹/₄SW¹/₄;
Containing 315 acres, more or less.

Buffer: Gila and Salt River Meridian, Arizona
T. 19 N., R. 21 W.,
Sec. 25, SW¹/₄NE¹/₄SE¹/₄,S¹/₂NW¹/₄SE¹/₄,S¹/₂N¹/₂SW¹/₄,
S¹/₂S¹/₂;
Sec. 26, S¹/₂NE¹/₄SE¹/₄,SE¹/₄NW¹/₄SE¹/₄,E¹/₂SW¹/₄SE¹/₄,
SE¹/₄SE¹/₄;
Sec. 35, N¹/₂NE¹/₄NE¹/₄,NE¹/₄NW¹/₄NE¹/₄;
Sec. 36, N¹/₂N¹/₂N¹/₂,S¹/₂NE¹/₄NE¹/₄,N¹/₂SE¹/₄NE¹/₄;
Containing 470 acres, more or less.

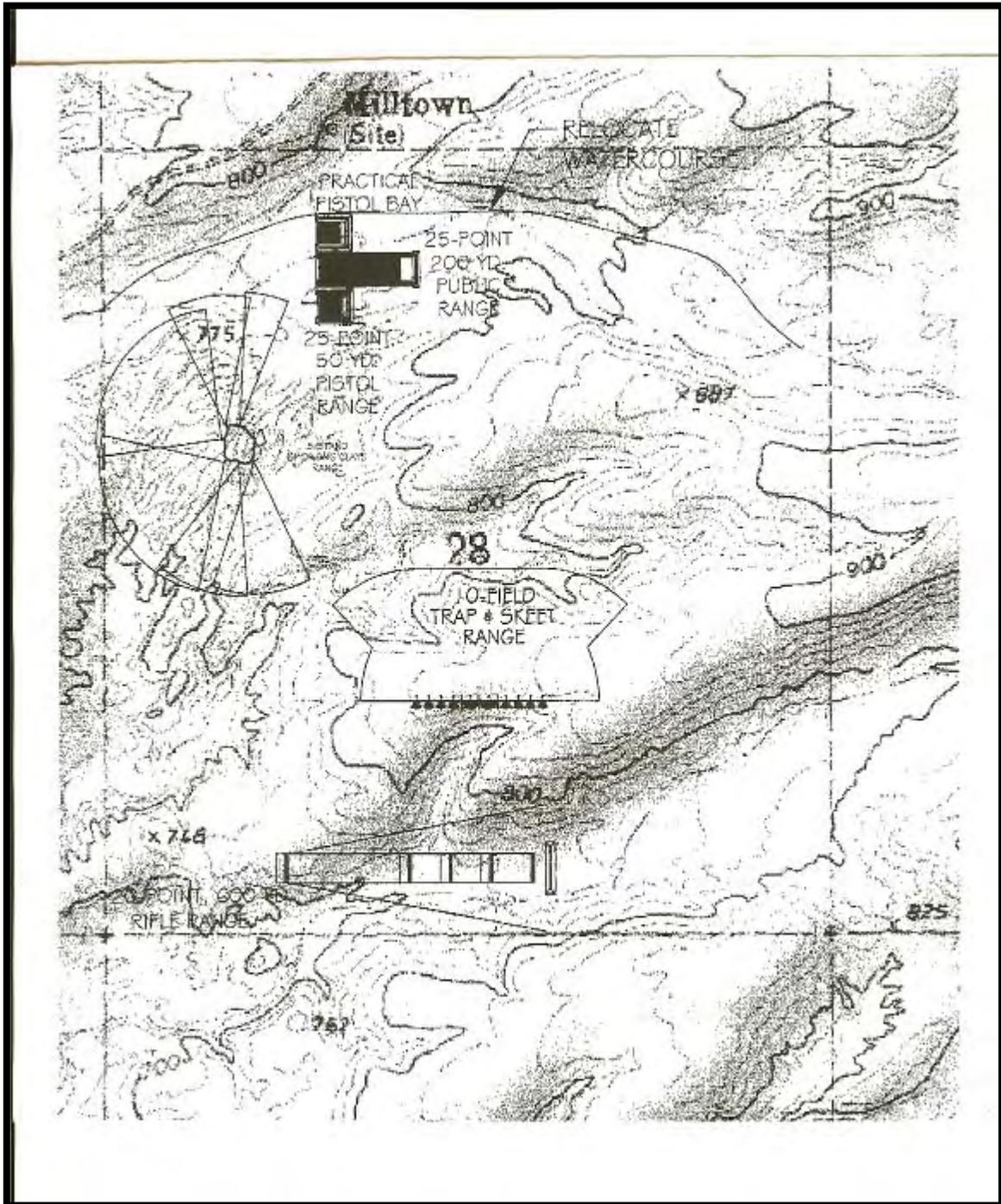
Willow Road Alternative

Gila and Salt River Meridian, Arizona
T. 18 N., R. 21 W.,
Sec. 28, NE¹/₄,NE¹/₄NE¹/₄NW¹/₄,S¹/₂N¹/₂NW¹/₄,S¹/₂NW¹/₄,S¹/₂;
Containing 610 acres, more or less.

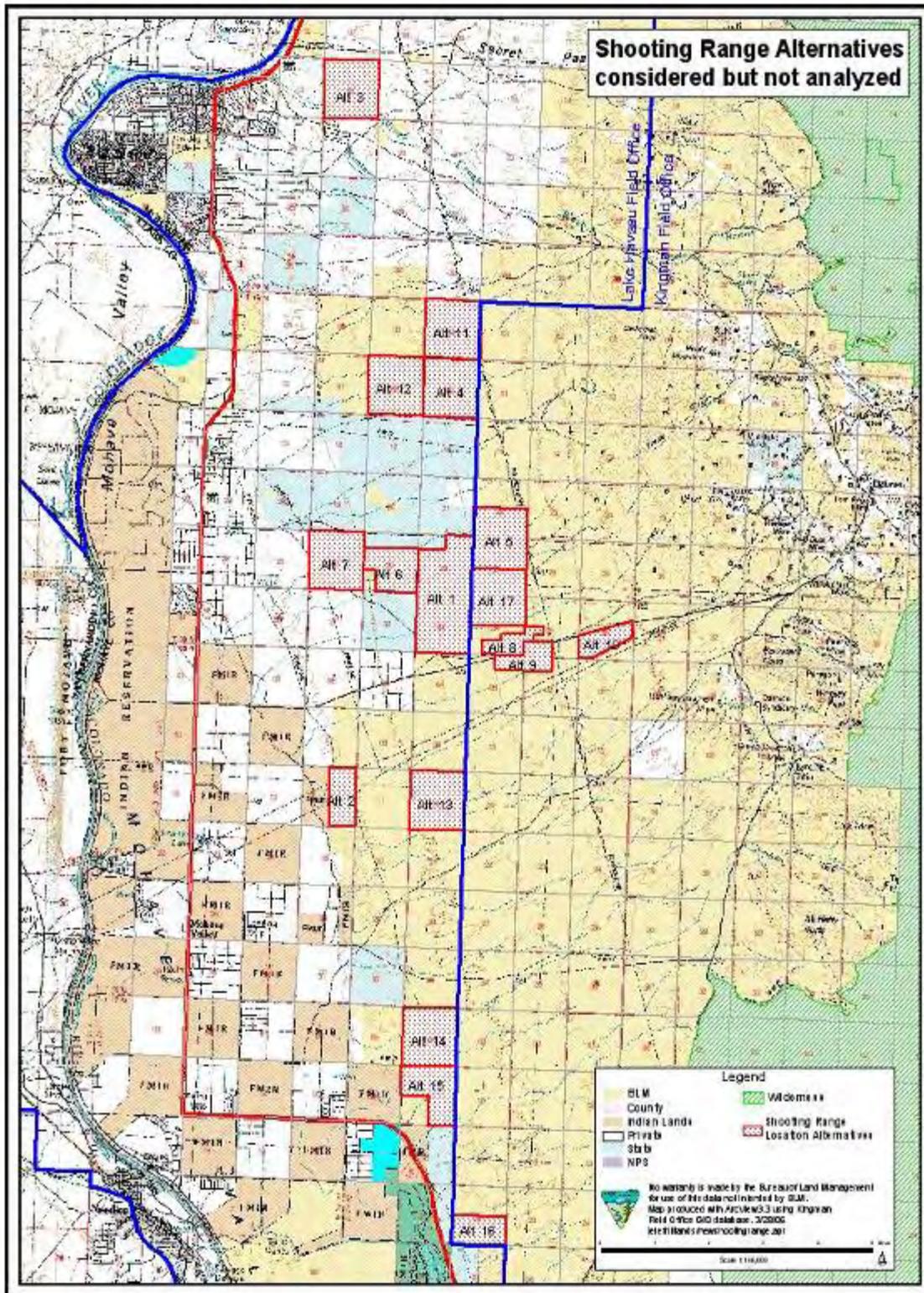
APPENDIX A - BOUNDARY CONE ROAD ALTERNATIVE
CONCEPTUAL DESIGN MAP



APPENDIX A – WILLOW ROAD ALTERNATIVE
CONCEPTUAL DESIGN MAP



APPENDIX B – ALTERNATIVES MAP



APPENDIX B
PROPOSED SHOOTING RANGE PLANNING CRITERIA

1. Within 20 miles and 30 minutes drive of major population center – Bullhead City/Mohave Valley
2. Has at least .5 mile buffer area between range and adjacent property owners.
3. Located on or near paved access.
4. Flat terrain within range footprint adjacent to natural terrain backstop
5. North shooting direction – avoids shooting into the sun during different times of the day and year.
6. 100 acres minimum foot print size.
7. Suitable down-range safety area (the area, from the shooting position, that would contain ammunition using lateral berms and a backstop, and the buffer beyond)
8. Long-term economic feasibility.
9. Located in an area not subject to encroachment by private land development.
10. No major unmitigable cultural resource issues such as intaglios, prehistoric villages, etc.
11. No surface water, riparian or major perennial watercourse within the range footprint or adjacent to site.
12. Located in Arizona.
13. Consistent with BLM land management plans, policies, directives and applicable laws.
 - a. Located outside valuable habitats such as Category I and II tortoise habitat.
 - b. Located outside of special management areas such as Wilderness and Areas of Critical Environmental Concern (ACEC).
 - c. Located in an area where there are no un-patented mining claims.
 - d. Located where there is no split estate.
 - e. Does not block existing access to public lands.
 - f. Located a minimum of 1 mile from potentially developable private and state land.
 - g. Identified for disposal in land use plan.
 - h. Consistent use of public land identified for disposal.
 - i. Outside active grazing allotment.
 - j. Outside Threatened and Endangered Species habitat.
 - k. Free from hazardous substances that are a threat to human health and safety.
 - l. Located outside wildlife movement corridors.

Appendix C. Information on Noise Levels

Sound is an acoustic energy that is measured in decibels. The decibel combines the magnitude of sound with how humans hear. Since human hearing covers such a large range of sounds, it does not lend itself to be measured with a linear scale. Instead of a linear scale, a logarithmic scale is used to represent sound levels and the unit is called a decibel or dB. The term dBA will most often be used and this refers to the loudness that a human ear would perceive. The ear has its own filtering mechanisms and the inclusion of the A after dB indicates that the scale has been adjusted or “fine tuned” to hear like a human.

The decibel scale ranges from 0 dBA, the threshold of human hearing, to 140 dBA where serious hearing damage can occur. Table 1 represents this scale and some of the levels associated with various daily activities. A serene setting might have a decibel level of 30 dBA while a peaceful subdivision might be at 40 to 50 dBA. Alongside a freeway the sound level (i.e. noise) might be in the range of 70 to 80 dBA. The transition from a peaceful environment to a noisy environment is around 50 to 70 dBA. Sustained exposure to noise levels in excess of 65 dBA can have health effects.

Noise control can occur along the path in two ways: through distance or by inserting an obstruction.

Distance is an effective noise control because geometric spreading reduces the level of sound. For a stationary single source of noise (aka, a point source), the noise expands in a bubble shape and, at double the distance, the noise level will decrease by 6 dBA.

A report regarding sound and shooting ranges was prepared for the Arizona Joint Legislative Committee on Firearms Safety and Sport Shooting Ranges on January 4, 2001 and provides a formula for estimating sound levels at different distances. For every doubling of the distance from the source, the sound pressure levels will be reduced by 6 decibels over a free field. A free field is defined as a flat plane with no obstructions. Terrain, vegetation and lateral berms and backstops required to contain ammunition would provide an additional 5-10 dB(A) reduction. Conditions such as clouds, where sound carries farther, and wind, where sound is disbursed faster, could cause slightly higher or lower levels, respectively.

The second form of noise control consists of the use of walls or berms to intercept the noise. This forces sound waves to bend around them or diffract. This diffraction causes the sound waves to consume energy and thus reduces the sound level. To be effective, berms need to be at least as high as the line of sight to the facility – that is, block the view. Once the height is equal to an interception of the line of sight, a good rule of thumb is that it requires an additional 2 ft. of height for each additional 1 dB reduction in noise levels.

Desert vegetation is not likely to reduce noise levels. Research has indicated that vegetation has to be dense, deep and tall to be effective.

The above information was substantially taken from “Arizona Milepost” Spring 2003, Vol. 3 No. 2 Sound Barriers and Noise Control prepared by Larry Scofield, Arizona Department of Transportation (ADOT) and Bruce Tymer, California DOT (CALTRANS).

Common Indoor and Outdoor Noise Levels

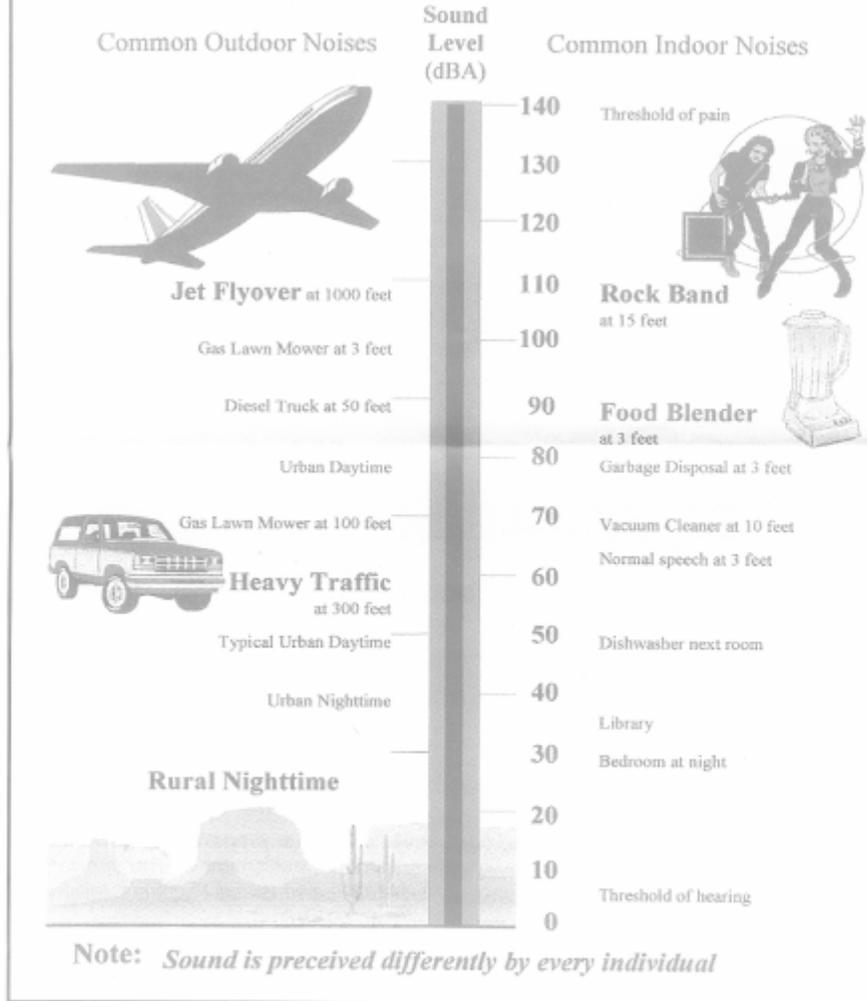


Table 1

The EPA studies (1974, Report #550/9-74-004) found that noise levels were best defined by collecting noise over a 24 hour period to include both daytime activities, for which people are more tolerant of environmental noise, and the nighttime, for which people are less tolerant of environmental noise. The 24-hour averaged noise level is called the Day-Night Level and abbreviated as Ldn. EPA stated that a Ldn of 45 dB would be adequate to permit speech communication in the home. An outdoor Ldn of 55 dB or less would permit speech communication at approximately 6.5 feet. EPA also recommends a 24-hour averaged sound level of 70 dB or less to protect from hearing loss. Typical noise levels found in various environments are listed in the table below:

Sound Source/Measurement Location	A-Weighted Sound Pressure Level
Pneumatic chipping hammer at operators ear, hydraulic press operating, 50 horsepower siren at 98.4 feet	120 dBA
Accelerating motorcycle at 3.3 feet, metal casting shakeout area, high-speed woodworking tools	110 dBA
Shouting at 5 feet, looms in textile mill, an electric furnace area	100 dBA
Loud lawnmower at operator's ear, subway train passing, printing press operations	90 dBA
School children in noisy cafeteria, a noisy restaurant	80 dBA
Freeway traffic at 164 feet distance, freight train at 98.4 feet, vacuum cleaner, passenger car at 50 MPH	70 dBA
Normal male voice at 3.3 feet	60 dBA
Copying machine at 6.6 feet, average residence, or a large office	50 dBA
Suburban area at night, quiet office, audiometric testing booth	40 dBA
Air conditioning in an auditorium, soft whispers	30 dBA
Quite wooded area with no wind, sound studio for movie theater	20 dBA
Anechoic sound testing chamber	10 dBA

NOTE: Noise levels are "typical" sound pressure levels during the noise event.