

## CHAPTER 1 INTRODUCTION AND PURPOSE OF AND NEED FOR THE PROPOSED INRMP

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### 1.1 INTRODUCTION

The Barry M. Goldwater Range (BMGR) in southwestern Arizona is a major U.S. military installation, encompassing 1,733,921 acres (2,709 square miles), that is used by the U.S. Air Force and U.S. Marine Corps (hereafter Air Force and Marine Corps) to train military aircrews to fly air combat missions. To a lesser extent, the range is also used for other national defense purposes, most of which support or are associated with air combat training.

This Environmental Impact Statement (EIS) was prepared to support development of a proposed Integrated Natural Resources Management Plan (INRMP) for the BMGR. Development of the INRMP is a statutory requirement of both the Military Lands Withdrawal Act (MLWA) of 1999 (Public Law [P.L.] 106-65) and the Sikes Act, as amended (most recently amended by the Sikes Act Improvement Amendments, hereafter "Sikes Act" [16 U.S. Code (U.S.C.) 670a et seq.]). The MLWA, which is the current federal statutory authorization for the BMGR, requires that the INRMP must provide for the:

... proper management and protection of the natural and cultural resources of [the range], and for sustainable use by the public of such resources to the extent consistent with the military purposes [of the range]... [P.L. 106-65 §3031(b)(3)(E)(i)].

The MLWA also specifies that the INRMP must be prepared and implemented in accordance with the Sikes Act [P.L. 106-65 §3031(b)(3)(D)]. The Sikes Act sets forth resource management policies and guidance for U.S. military installations and requires the preparation of INRMPs for installations—including those, such as the BMGR, composed of withdrawn lands—with significant natural resources. The Sikes Act provides that the "... Secretary of Defense shall carry out a program to provide for the conservation and rehabilitation of natural resources on military installations..." and that an INRMP is to be prepared to facilitate implementation of that program [16 U.S.C. 670a (a)(1)(A) and (B)]. The Act also specifies that:

Consistent with the use of military installations to ensure the preparedness of the Armed Forces, the Secretaries of the military departments shall carry out [the aforementioned program] to provide for—

- (A) the conservation and rehabilitation of natural resources on military installations;
- (B) the sustainable multipurpose use of the resources, which shall include hunting, fishing, trapping and non-consumptive uses; and
- (C) subject to safety requirements and military security, public access to [the BMGR] to facilitate the use [16 U.S.C. 670a (a)(3)].

As indicated by the preceding provisions of the MLWA of 1999 and Sikes Act, the resource conservation components of the pending INRMP for the BMGR will in many ways be

comparable to those developed for many other federal land management plans including existing or pending plans for the nearby Organ Pipe Cactus National Monument (NM) and the adjacent Cabeza Prieta National Wildlife Refuge (NWR) and Bureau of Land Management (BLM) lands. The feature of the pending INRMP that will distinguish it most sharply from most other federal land management plans is that implementation and control of the primary land use of the BMGR—which is the support of designated military purposes—is not subject to review or modification through the development of the INRMP. Decisions regarding current and future military land use at installations subject to Sikes Act planning are assessed through other processes, which may include planning under the auspices of the National Environmental Policy Act (NEPA) of 1969 [42 U.S.C. 4332] or other applicable environmental laws, but are not reviewed through the preparation of an INRMP. Rather, land management on a military installation must be consistent with the military purposes of the installation. In the case of the BMGR, Congress previously determined, through the MLWA of 1999, that this range would be used first and foremost for specific national defense purposes [P.L. 106-65 §3031(a)(2)]. Management of natural resources and public access within the BMGR must be consistent with these specified national defense purposes. However, this national defense mandate for the BMGR does not preclude implementing a management plan that provides for effective conservation, protection, and rehabilitation of natural resources; protection of cultural resources; and, subject to safety requirements and military security, opportunities for sustainable public use. Given the character of the military mission at the BMGR, there are opportunities to use, protect, and conserve resources within the range and latitude available to incorporate effective management methods.

### **1.1.1 EIS and INRMP Relationship**

This EIS addresses five alternative strategies for managing natural and cultural resources and public access within the BMGR. Each of these alternative management strategies represents a potential resource management program, or an INRMP, for the BMGR. The alternative selected in the Record of Decision (ROD) for this EIS will constitute the management strategy that will be implemented for the BMGR.

The INRMP will be extracted from the final EIS as a stand-alone document following the signing of the ROD. This document will include the alternative management strategy selected in the ROD and selected other information already provided in the EIS, and will be used to implement that alternative. Consistent with the MLWA of 1999; the Sikes Act; and Department of Defense (DoD), Air Force, and Marine Corps guidance for preparing INRMPs, the major components of the EIS that will be incorporated in the stand-alone INRMP include:

- purpose, authority, and development history of the INRMP
- future review and amendment procedures for the INRMP
- location and mission of the BMGR
- a brief land use and management history of the BMGR
- current and foreseeable future military missions and land-use
- non-military agency missions and land use
- incorporation of the Integrated Cultural Resources Management Plan (ICRMP) for the BMGR by reference
- provisions for meeting trust responsibilities and access and consultation requirements relative to affected Indian tribes

- public access opportunities and conditions
- overview of the BMGR environment
- resource management goals
- selected resource management alternative.

In addition to these 12 components extracted from the final EIS, the stand-alone INRMP will include a list of management actions and implementation schedules needed to place the selected INRMP management alternative into effect. Statutory and regulatory requirements, including those of NEPA, as appropriate, pertaining to the implementation of specific actions needed to carryout the management guidance provided by the selected INRMP alternative also will be described in the stand-alone INRMP. The management action and implementation schedule features of the stand-alone INRMP are further described in Section 1.5.5.

As already indicated, the statutory authority and guidance for developing the INRMP for the BMGR is provided by the MLWA of 1999 and Sikes Act. The statutory authority and guidance for preparing this EIS is provided by Section 102(2)(c) of the NEPA of 1969 [42 U.S.C. 4332], as implemented by the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] 1500 to 1508), which requires federal agencies to consider potential environmental concerns as early as possible in the development of proposed programs, projects, and activities. The use of an EIS to support and guide the planning process for developing the INRMP is consistent with 40 CFR §1502.4, §1502.25, and §1508.18; Air Force Instruction (AFI) 32-7061, as promulgated at 32 CFR §989, and Marine Corps Order (MCO) 5090.2A for implementing the NEPA; and AFI 32-7064 for integrated natural resources management and the Handbook for Preparing Integrated Natural Resources Management Plans on Marine Corps Installations.

The decision to prepare an EIS for the development of an INRMP for the BMGR was in response to a number of issues. The BMGR is a major federal land holding important for its diverse natural and cultural resources and public outdoor recreation use opportunities as well as its national defense values. When viewed from a regional perspective encompassing the BMGR, Cabeza Prieta NWR, Organ Pipe Cactus NM, and Sonoran Desert NM, the range is a principal component in the largest relatively unfragmented remaining tract of Sonoran Desert. The general public; Native Americans; and multiple federal, state, and local agencies have had a long-standing active interest in management of natural and cultural resources and public access within both the BMGR and the contiguous national monument and national wildlife refuge areas. The various members of these groups have voiced many divergent viewpoints on what would constitute appropriate long-term management of the BMGR.

The CEQ regulations that govern preparation of an EIS provide a readily adaptable planning process for developing the proposed INRMP for the BMGR. Among other advantages, the EIS planning process has well-established requirements and procedures for incorporating public, Native American, and government input, review, and comments in the decision-making process. These procedures directly support the MLWA of 1999 requirement that meaningful opportunities to comment on the proposed INRMP are provided to the state of Arizona, Indian tribes, and the public [P.L. 106-65 §3031(b)(3)(E)(ix)].

The public, Native American, and government involvement process in the development of the INRMP began with scoping for this EIS and has also included public workshops and other means

of contact with Native Americans and various government agencies (see Section 1.8). Public scoping, the workshops, and other means of contact provided opportunities for input, review, and comment before the resource management goals and alternatives presented in this EIS for the INRMP were finalized. Consideration of the environmental consequences of alternative courses of action is at the heart of an EIS process [40 CFR §1502.14], which is the other primary advantage that the EIS process lent to the development of the proposed INRMP. This EIS addresses a wide range of reasonable alternatives for the management of natural resources and public access within the BMGR (see Chapter 3) and identifies the potential environmental consequences of implementing each alternative (see Chapter 5). The alternatives assessed were based on resource management goals that were developed in consideration of the input received during the scoping process and applicable statutory and regulatory requirements. Public, tribal, and agency input during scoping also confirmed that assessing a balanced range of alternatives would be critical to the development of the INRMP and that any such alternatives must be based on clearly defined management purposes, needs, and goals.

The established approach for preparing an EIS provides several other advantages for developing an INRMP. An INRMP must be developed in consideration of both the existing environmental conditions of the installation, as well as the historical conditions and actions that have shaped its current environmental status, so that the potential outcomes of management alternatives may be analyzed and measured relative to the existing norm. The existing environment that would be affected by the INRMP management alternatives assessed in this EIS is described in Chapter 4. The content of Chapter 4 is typical for an affected environment section in an EIS, but this chapter does not include some of the foundation material supporting the development of the INRMP. Chapter 2, as presented in this EIS, is an exception to a standard EIS format and provides this foundation material as well as historical, legal, military mission, agency mission, military land use, military safety and security, and natural and cultural resource factors that will shape and/or control the content and direction of the INRMP.

As required of an EIS, Chapter 5 reports the projected environmental consequences of implementing each management alternative and the potential aggregate effects that could result from the implementation of a mix of management alternatives throughout the BMGR. Chapter 5 also addresses unavoidable adverse impacts and irreversible and irretrievable commitment of resources that would result from the implementation of the various alternatives. Chapter 6 describes the potential cumulative effects of each alternative when added to other past, present, or reasonably foreseeable future actions within the BMGR region of influence. The EIS concludes with a list of preparers; agencies, and organizations consulted in preparing this document; agencies, organizations, and persons receiving the draft EIS; and applicable appendices.

Opportunities for public, tribal, and government agency review and comment on the proposed INRMP continued throughout the EIS development process. Following the completion of public scoping and the workshops, the next opportunity for review and comment came with the publication of the draft EIS. Comments received on the draft EIS were considered and incorporated in the preparation of this final EIS for the INRMP. The final EIS includes the comments submitted during the review period and written responses to those comments. Any changes in the analysis of the alternatives prompted by comments on the draft EIS have been incorporated in the final EIS. The final EIS has also been publicly circulated.

The management alternative selected for implementation from among the range of reasonable alternatives considered in the draft EIS will constitute the basis for the INRMP for the BMGR. This selected alternative will be reported in the ROD for the EIS following the closure of the review period for the final EIS because each of the alternatives identified meet the underlying purpose and need. The alternative ultimately selected in the ROD may differ from the preferred alternative identified in the final EIS, but will be selected from among the range of alternatives reviewed in the draft EIS. The selected INRMP alternative will be the alternative that the decision-making agencies believe will best fulfill their statutory missions and responsibilities, giving consideration to economic, environmental, technical and other factors. The ROD will also identify the environmentally preferred alternative or alternatives. The selected and environmentally preferred alternatives may be the same or may differ [40 CFR §1505.2(b)]. Comments on the final EIS will be considered in the selection of the alternative identified for implementation. A Notice of Availability (NOA) for the final EIS will be published in the Federal Register, with the ROD to be signed no sooner than 30 days after the NOA. After the decision is made in the ROD, the INRMP will be extracted from the EIS and be prepared as a management implementation document with the aforementioned major features. The Sikes Act and MLWA of 1999 require that a number of specific components be incorporated in the INRMP for the BMGR. The locations at which these components are addressed in this EIS are identified in Table 1-1.

Consistent with the Sikes Act, which does not address cultural resources management, the focus of the alternative management strategies examined in this EIS is on natural resources. As required by the MLWA of 1999 [P.L. 106-65 §3031(b)(3)(E)(i)], the final INRMP will also address cultural resources management by incorporating and supporting the goals of the ICRMP for the BMGR that were prepared and reviewed separately (see Section 1.6). Each of the alternative strategies for natural resources management examined in this EIS is consistent with these cultural resource goals.

The MLWA of 1999 also requires that the Secretaries of the Navy and Air Force develop the proposed INRMP in consultation with affected Indian tribes and include provisions in the plan that address how the Secretaries intend to meet the trust responsibilities of the United States relative to Indian tribes, lands, and treaty rights; allow tribal access to the BMGR; and provide for timely consultations with affected tribes [P.L. 106-65 §3031(b)(3)(E)(ii)]. The processes that are being employed for consulting with Indian tribes on the development of the proposed INRMP are described in Section 1.8 of this EIS. Section 1.7 provides an overview of how the Secretaries of the Navy and Air Force propose to meet the aforementioned trust responsibilities and access and other consultation requirements. These issues are addressed in detail in the separate ICRMP.

### **1.1.2 EIS and INRMP Preparers**

The lead agencies for preparing this EIS and the ROD include the U.S. Departments of the Air Force, Navy, and Interior; Arizona Game and Fish Department (AGFD) is a cooperating agency.

**TABLE 1-1  
COMPONENTS OF THE INRMP FOR THE BMGR REQUIRED BY THE MLWA OF 1999 AND SIKES ACT**

Component/Statutory Reference	Location(s) Where Component is Addressed in this EIS
<b>MLWA of 1999</b>	
1. “[Provide] for proper management and protection of the natural and cultural resources” [P.L. 106-65 §3031(b)(3)(E)(i)]	<u>Sections:</u> 1.1, 1.1.1, 1.2.5, 1.3, 1.4.1, 1.4.2, 1.4.3, 1.5, 1.5.1 through 1.5.5, 1.6, 1.7, 1.8, 2.1, 2.3.3, 2.4.1, 2.4.2, 2.5, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.2 to 4.11, 4.14 to 4.18, 4.20, 5.2 through 5.21, and 6.1 through 6.4
2. Provide for “sustainable use by the public of such resources to the extent consistent with the military purposes for which [the BMGR] lands are withdrawn and reserved” [P.L. 106-65 §3031(b)(3)(E)(i)]	<u>Sections:</u> 1.1, 1.1.1, 1.3, 1.4.1, 1.4.3, 1.5.2 through 1.5.5, 1.8, 2.1, 2.2, 2.2.1 through 2.2.9, 2.3.1, 2.3.2, 2.3.3, 2.4.2, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.12, 4.13, 4.20.2, 5.2.1, 5.2.3 through 5.2.8, 5.2.18, 5.3.1, 5.3.3 through 5.3.8, 5.3.18, 5.4.1, 5.4.3 through 5.4.8, 5.4.18, 5.5.1, 5.5.3 through 5.5.8, 5.5.18, 5.6.1, 5.6.3 through 5.6.8, 5.6.18, 5.7.1, 5.7.3 through 5.7.8, 5.7.18, 5.8.1, 5.8.3 through 5.8.8, 5.8.18, 5.11.1, 5.11.3 through 5.11.8, 5.11.18, 5.12, 5.13, 5.16.1, 5.16.3 through 5.16.8, 5.16.18, 5.17.1, 5.17.3 through 5.17.8, 5.17.18, 5.20.1, 5.20.3 through 5.20.8, 5.20.18, and 6.1 through 6.4
3. Provide that the INRMP “be developed in consultation with affected Indian tribes” [P.L. 106-65 §3031(b)(3)(E)(ii)]	<u>Sections:</u> 1.6, 1.7, and 1.8.4
4. Provide how the Secretaries of the Navy and Air Force “intend to meet the trust responsibilities of the United States with respect to Indian tribes, lands, and rights reserved by treaty or Federal law affected by the withdrawal and reservation” [P.L. 106-65 §3031(b)(3)(E)(ii)(I)]	<u>Section:</u> 1.7
5. Provide how the Secretaries of the Navy and Air Force “intend to allow access to and ceremonial use of sacred sites to the extent consistent with the military purposes for which [the BMGR] lands are withdrawn and reserved” [P.L. 106-65 §3031(b)(3)(E)(ii)(II)]	<u>Sections:</u> 1.7, 1.8.4, 2.2.1 through 2.2.9, 2.7.3, 3.2, and 3.3
6. Provide how the Secretaries of the Navy and Air Force “intend to provide for timely consultation with affected Indian tribes” [P.L. 106-65 §3031(b)(3)(E)(ii)(III)]	<u>Sections:</u> 1.5.4, 1.7, and 1.8.4
7. “[P]rovide that any hunting, fishing, trapping on [the BMGR] be conducted in accordance with the provisions of section 2671 of title 10, United States Code” [P.L. 106-65 §3031(b)(3)(E)(iii)]	<u>Sections:</u> 2.4.2, 3.4, and 4.12.3.1
8. “[P]rovide for continued livestock grazing and agricultural out-leasing where it currently exists in accordance with the provisions of section 2667 of title 10, United States Code, and at the discretion of the Secretary of the Navy or the Secretary of the Air Force, as the case may be” [P.L. 106-65 §3031(b)(3)(E)(iv)]	<u>Sections:</u> 1.2.1, 2.3.1, 3.3, 3.4, and 4.6.1.8
9. “Identify current test and target impact areas and related buffer or safety zones” [P.L. 106-65 §3031(b)(3)(E)(v)]	<u>Sections:</u> 1.2.3, 1.4.3, 2.2, 2.2.1 through 2.2.9, 2.3.2, 2.6, 2.6.1, and 2.7

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10. Provide that the Secretaries of the Navy and Air Force “take necessary actions to prevent, suppress, and manage brush and range fires occurring within the boundaries of the [BMGR], as well as brush and range fires occurring outside the boundaries of the [BMGR] resulting from military activities” [P.L. 106-65 §3031(b)(3)(E)(vi)(I)]	<u>Sections:</u> 1.9, 3.3, 3.4, 4.18, and 5.18
11. Provide that the Secretaries of the Navy and Air Force “may obligate funds appropriated or otherwise available to the Secretaries to enter into memoranda of understanding, and cooperative agreements that shall reimburse the Secretary of the Interior for costs incurred” assisting in fire prevention, suppression, and management [P.L. 106-65 §3031(b)(3)(E)(vi)(II)]	<u>Section:</u> 4.8.3
12. “[P]rovide that all gates, fences, and barriers constructed on [the BMGR] after the date of enactment of [the MLWA of 1999] be designed and erected to allow wildlife access, to the extent practicable and consistent with military security, safety, and sound wildlife management use” [P.L. 106-65 §3031(b)(3)(E)(vii)]	<u>Sections:</u> 3.2, 3.3, and 3.4
13. “[I]ncorporate any existing management plans pertaining to [the BMGR], to the extent that the [Secretaries of the Navy, Air Force, and Interior], upon reviewing such plans, mutually determined that incorporation of such plans into [the INRMP] is appropriate” [P.L. 106-65 §3031(b)(3)(E)(viii)]	<u>Sections:</u> 2.1, 3.2, 3.4.1, 4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3, 4.8.3, 4.9.3, 4.10.3, 4.11.3, 4.12.3, 4.13.3, 4.14.3, 4.15.3, 4.16.3, 4.17.3, 4.18.3, 5.2 through 5.21, and 6.1 through 6.4
14. “[I]nclude procedures to ensure that the periodic reviews of the [INRMP] under the Sikes Act are conducted jointly by the [Secretaries of the Navy, Air Force, and Interior], and that affected States and Indian tribes, and the public, are provided a meaningful opportunity to comment upon any substantial revisions to the plan that may be proposed” [P.L. 106-65 §3031(b)(3)(E)(ix)]	<u>Section:</u> 1.5.4
15. “[P]rovide procedures to amend the [INRMP] as necessary” [P.L. 106-65 §3031(b)(3)(E)(x)]	<u>Sections:</u> 1.5.4
<b>Sikes Act</b>	
16. Provide for “fish and wildlife management, land management, forest management, and fish- and wildlife-oriented recreation” [16 U.S.C. 670a(b)(1)(A)]	<u>Wildlife Management—Sections:</u> 1.1, 1.1.1, 1.2.4, 1.3, 1.4.1, 1.4.2, 1.4.3, 1.5.2 through 1.5.5, 1.7, 1.8.1, 1.8.2, 1.8.3, 1.9, 1.10, 2.1, 2.3.3, 2.4.2, 2.5.1, 2.7, 2.8, 3.1 through 3.4, 3.6, 4.5 through 4.8, 4.11, 4.12.1.3, 4.12.1.4, 5.2.11, 5.2.12, 5.3.11, 5.3.12, 5.4.11, 5.4.12, 5.5, 5.6, 5.7, 5.8.11, 5.8.12, 5.9.11, 5.9.12, 5.10.11, 5.10.12, 5.11.11, 5.11.12, 5.12.11, 5.12.12, 5.13.11, 5.13.12, 5.14.11, 5.14.12, 5.15.11, 5.15.12, 5.16.11, 5.16.12, 5.17.11, 5.17.12, 5.18.11, 5.18.12, 5.19.11, 5.19.12, 5.20.11, 5.20.12, and 6.1 through 6.4
	<u>Land Management—Sections:</u> 1.1, 1.1.1, 1.2.4, 1.2.5, 1.3, 1.3.4, 1.4.1, 1.4.2, 1.4.3, 1.5, 1.6, 1.7, 1.8, 1.9, 2.1, 2.3.3, 2.4.1, 2.4.2, 2.5, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.2 through 4.21, 5.2 through 5.21, and 6.1 through 6.4

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	<u>Wildlife Oriented Recreation</u> —Sections: 1.1, 1.1.1, 1.3, 1.4.1, 1.4.2, 1.4.3, 1.5.2 through 1.5.5, 1.8.1, 1.8.2, 1.9, 1.10, 2.1, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.6, 4.7.3.2, 4.11, 4.12, 4.13, 4.14, 4.19, 5.2.3 through 5.2.9, 5.3.3 through 5.3.9, 5.4.3 through 5.4.9, 5.5.3 through 5.5.9, 5.6.3 through 5.6.9, 5.7.3 through 5.7.9, 5.8.3 through 5.8.9, 5.9.3 through 5.9.9, 5.10.3 through 5.10.9, 5.11.3 through 5.11.9, 5.12, 5.13, 5.14.3 through 5.14.9, 5.15.3 through 5.15.9, 5.16.3 through 5.16.9, 5.17.3 through 5.17.9, 5.18.3 through 5.18.9, 5.19.3 through 5.19.9, 5.20.3 through 5.20.9, and 6.1 through 6.4
17. Provide for “fish and wildlife habitat enhancement or modifications” [16 U.S.C. 670a(b)(1)(B)]	Sections: 1.9, 2.5.1, 3.2, 3.4, 3.6, 4.5.3, 4.6.2, 4.6.3.1, 4.6.3.2, 4.6.3.3, 4.6.3.4, 4.6.4.2, 4.7.3.3, 5.5.7, 5.5.18, 5.6.7, 5.6.11, 5.6.18, 5.7.11, 5.8.11, and 5.11.11
18. Provide for “wetland protection, enhancement, and restoration, where necessary for support of fish, wildlife, or plants” [16 U.S.C. 670a(b)(1)(C)]	Sections: 3.4, 3.6, 4.3.1.4, 4.3.3.1, and 4.6.1.2
19. Provide for <i>integration of, and consistency among, the various activities conducted under the [INRMP]</i> [16 U.S.C. 670a(b)(1)(D)]	Sections: 1.1, 1.9, 2.4.3, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 4.2.2, 4.3.2, 4.4.2, 4.5.2, 4.6.2, 4.7.2, 4.8.2, 4.9.2, 4.10.2, 4.11.2, 4.12.2, 4.13.2, 4.14.2, 4.15.2, 4.16.2, 4.17.2, 4.18.2, 4.19.2, 4.20.2, 5.2 through 5.21, and 6.1 through 6.4
20. Provide for “establishment of specific natural resource management goals and objectives and time frames for proposed action” [16 U.S.C. 670a(b)(1)(E)]	Sections: 1.1, 1.5.5, 2.7, 2.8, and 3.2
21. Provide for “sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources” [16 U.S.C. 670a(b)(1)(F)]	Sections: 1.1, 1.1.1, 1.4.1, 1.4.2, 1.4.3, 1.5.4, 1.5.5, 1.8.1, 1.8.2, 1.9, 2.1, 2.7.3, 3.1, 3.2, 3.4, 3.6, 4.12, 5.2.1, 5.2.3 through 5.2.8, 5.2.18, 5.3.1, 5.3.3 through 5.3.8, 5.3.18, 5.4.1, 5.4.3 through 5.4.8, 5.4.18, 5.5.1, 5.5.3 through 5.5.8, 5.5.18, 5.6.1, 5.6.3 through 5.6.8, 5.6.18, 5.7.1, 5.7.3 through 5.7.8, 5.7.18, 5.8.1, 5.8.3 through 5.8.8, 5.8.18, 5.11.1, 5.11.3 through 5.11.8, 5.11.18, 5.12, 5.16.1, 5.16.3 through 5.16.8, 5.16.18, 5.17.1, 5.17.3 through 5.17.8, 5.17.18, 5.20.1, 5.20.3 through 5.20.8, 5.20.18, and 6.1 through 6.4
22. Provide for “public access to the military installation that is necessary or appropriate for the use described in subparagraph (F) [see Component 21], subject to requirements necessary to ensure safety and military security” [16 U.S.C. 670a(b)(1)(G)]	Sections: 1.1, 1.1.1, 1.4.1, 1.4.2, 1.4.3, 1.5.4, 1.5.5, 1.8.1, 1.8.2, 1.8.3, 1.9, 2.1, 2.2, 2.2.1 through 2.2.9, 2.6, 2.6.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.12, 4.13, 5.12, 5.13, and 6.1 through 6.4
23. Provide for “enforcement of applicable natural resource laws (including regulations)” [16 U.S.C. 670a(b)(1)(H)]	Sections: 1.9, 2.5.1, 3.4, 3.6, 4.2.3.1, 4.3.3.1, 4.4.3.1, 4.5.3.1, 4.6.3.1, 4.6.3.3, 4.7.3.1, 4.8.3.1, 4.9.3.1, 4.10.3.1, 4.11.3.1, 4.12.3.1, 4.13.3.1, 4.14.3.1, 4.15.3.1, 4.16.3.1, 4.17.3.1, 4.18.3.1, 4.20.3.1, 5.2.5, 5.3.5, 5.4.5, 5.5.5, 5.6.5, 5.6.8, 5.7.5, 5.8.5, 5.11.5, 5.12.5, 5.12.18, 5.13.5, 5.13.18, 5.14, 5.16.5, 5.17.5, and 5.18.5
24. Provide for “no net loss in the capability of military installation lands to support the military mission of the installation” [16 U.S.C. 670a(b)(1)(I)]	Sections: 1.1, 1.1.1, 1.2.1, 1.2.2, 1.2.3, 1.4.1, 1.4.2, 1.4.3, 1.5.4, 2.2, 2.2.1 through 2.2.9, 2.3, 2.7, 3.3, 3.5, 4.2.2, 4.3.2, 4.4.2, 4.5.2, 4.6.2, 4.7.2, 4.8.2, 4.9.2, 4.10.2, 4.11.2, 4.12.2, 4.13.2, 4.14.2, 4.15.2, 4.16.2, 4.17.2, 4.18.2, 4.19.2, and 4.20.2
25. Provide for “such other activities as the Secretary of the military department determines appropriate” [16 U.S.C. 670a(b)(1)(J)]	Sections: 1.2, 2.3, and 3.3

The final INRMP, which will be based on the resource management alternative selected in the ROD, will be jointly prepared by the Departments of the Air Force, Navy, and Interior and AGFD. The responsibilities of these agencies for preparing the EIS and INRMP and implementing the INRMP are summarized in Table 1-2. At the local planning level for the INRMP, the Departments of the Navy and Air Force are represented by the commanding officers of Marine Corps Air Station (MCAS) Yuma and Luke Air Force Base (AFB), respectively. The Department of the Interior is represented locally by the U.S. Fish and Wildlife Service (USFWS) Cabeza Prieta NWR and BLM Phoenix and Yuma field offices. A Core Planning Team composed of representatives from MCAS Yuma, Luke AFB, Cabeza Prieta NWR, BLM Phoenix Field Office, and AGFD was established to guide and coordinate preparation of this EIS and the final INRMP.

## **1.2 BMGR BACKGROUND**

### **1.2.1 BMGR Renewal**

Acquisition of the BMGR for military aviation training purposes began in 1941, shortly before the United States entered World War II. Although the size of the range has fluctuated somewhat over the years, the BMGR has served continuously as a military training range. On 5 September 1999, the BMGR registered its 58th year as one of the nation's finest and most productive reservations for training military aircrews. One month later, on 5 October 1999, Congress reconfirmed the nation's continuing need for this range by passing the MLWA of 1999. This Act extends authorization for the BMGR for 25 years until 2024 and provides that the DoD may apply for an extension to that authorization should there be a continuing military need for the range beyond 2024 [P.L. 106-65 §3031(d) and (e)]. Under the Act, the range lands are withdrawn<sup>1</sup> from all forms of appropriation under the general land laws—including the mining, mineral leasing, and geothermal leasing laws—and are reserved<sup>2</sup> for continued military use [P.L. 106-65 §3031(a)(1) and (2)]. Land jurisdiction over the eastern and western portions of the BMGR is assigned to the Secretaries of the Air Force and Navy, respectively. The eastern portion of the range was designated as Barry M. Goldwater Range—East (BMGR—East) by the MLWA of 1999 and the western portion was designated as Barry M. Goldwater Range—West (BMGR—West). The division between BMGR—East and BMGR—West is defined by the roughly north-south boundary separating restricted airspaces<sup>3</sup> R-2301E and R-2301W (Figure 1-1).

### **1.2.2 BMGR Regional Setting**

The BMGR was first established in 1941 and, although the range has varied slightly in area over the years with subsequent land withdrawals and deletions, it generally encompassed about 2.7

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<sup>1</sup> “Withdrawing” federal lands means to withhold them by executive or legislative action from settlement, sale, location, or entry under some or all of the general land, mining, and mineral laws in order to limit or prohibit activities normally permitted under those laws. The Defense Withdrawal Act of 1958 (P.L. 85-337) provides that an Act of Congress is required for land withdrawals for military purposes that are more than 5,000 acres in aggregate.

<sup>2</sup> “Reserving” federal lands means designating withdrawn areas for specified public (or governmental) purposes or programs. For example, military reservations established in areas formerly a part of the public domain consist of lands that have been withdrawn and then reserved, nearly always in the same executive or legislative action, for the purpose of military use.

<sup>3</sup> Restricted airspace is designated by the Federal Aviation Administration to denote airspace areas where military activities (such as aerial gunnery, artillery firing, or missile firings) can occur. Restricted areas are depicted on aeronautical charts to alert the crews of aircraft not participating in restricted airspace activities of the potential presence of such hazards. The Federal Aviation Administration delegates control of restricted airspace to the using military agency.

<b>TABLE 1-2</b>					
<b>AGENCY RESPONSIBILITIES FOR PREPARING THE EIS AND FINAL INRMP AND IMPLEMENTING THE FINAL INRMP</b>					
<b>Task</b>	<b>Referenced Authority/Agreement</b>				
	<b>MLWA of 1999</b>	<b>Sikes Act</b>	<b>MLWA Implementation Cooperative Agreement<sup>1</sup></b>	<b>NEPA</b>	<b>EIS for the Proposed INRMP and the Final INRMP</b>
<b>EIS and INRMP Preparation</b>	Secretaries of the Navy, Air Force, and Interior shall jointly prepare the INRMP <sup>2</sup> . INRMP shall be prepared and implemented in accordance with the Sikes Act and provisions of the MLWA <sup>3</sup> .	Secretaries of the Navy and Air Force shall prepare the INRMP in cooperation with the Secretary of the Interior, acting through the Director of the USFWS, and the Director of AGFD <sup>4</sup> .	Departments of the Navy, Air Force, and Interior and the State of Arizona will jointly prepare and implement an ecosystem-based INRMP <sup>5</sup> .	A lead agency shall supervise the preparation of an EIS. Other federal, state, local, or tribal agencies with jurisdiction or special expertise with respect to any environmental issue maybe a cooperating agency upon the request of the lead agency in the preparation of an EIS <sup>6</sup> .	Departments of the Navy, Air Force, and Interior are the lead agencies and AGFD is a cooperating agency for preparing this EIS and the ROD, which will identify the alternative selected for the INRMP. These agencies will jointly prepare the final INRMP based on the resource management alternative selected in the ROD.
<b>EIS and INRMP Decisionmaking</b>	Disagreements on contents of the INRMP or its subsequent amendments shall be resolved by the Secretary of the Navy for BMGR—West and the Secretary of the Air Force for BMGR—East, after consultation with the Secretary of the Interior, acting through the Arizona State Director BLM and Regional Director (Region 2) USFWS <sup>7</sup> .	Secretaries of the Navy and Air Force but INRMP must also reflect the mutual agreement of the Director of the USFWS, and the Director of AGFD concerning the conservation, protection, and management of wildlife resources <sup>8</sup> .	Disagreements on contents of the INRMP shall be resolved by the Secretary of the Air Force for BMGR—East and the Secretary of the Navy for BMGR—West, after consultation with the Secretary of the Interior, acting through the Arizona State Director BLM and Regional Director (Region 2) USFWS and the Governor of Arizona, who may delegate to the Director of AGFD <sup>9</sup> .	The lead and cooperating agencies may support the same preferred alternative or identify separate preferred alternatives in the EIS. The lead agency(ies) signs the ROD selecting the preferred alternative. Cooperating agencies may provide a letter concurring with or objecting to that selection; or cooperating agencies with jurisdiction by law may prepare their own ROD selecting a different environmentally preferred alternative <sup>10</sup> .	Secretaries of the Navy, Air Force, and Interior will sign the ROD for the EIS selecting the preferred resource management alternative for the INRMP. AGFD may concur with or object to that selection. Secretaries of the Navy, Air Force, and Interior and the Director of AGFD will sign the INRMP, which must reflect their mutual agreement concerning the conservation, protection, and management of wildlife resources.

<b>TABLE 1-2</b>					
<b>AGENCY RESPONSIBILITIES FOR PREPARING THE EIS AND FINAL INRMP AND IMPLEMENTING THE FINAL INRMP</b>					
<b>Task</b>	<b>Referenced Authority/Agreement</b>				
	<b>MLWA of 1999</b>	<b>Sikes Act</b>	<b>MLWA Implementation Cooperative Agreement<sup>1</sup></b>	<b>NEPA</b>	<b>EIS for the Proposed INRMP and the Final INRMP</b>
<b>INRMP Review and Amendment</b>	The INRMP shall include procedures to ensure that the periodic reviews of the plan under the Sikes Act are conducted jointly by the Secretaries of the Navy, Air Force, and Interior, and that affected States [Arizona] and Indian tribes, and the public, are provided with a meaningful opportunity to comment upon any substantial revisions to the plan that may be proposed <sup>11</sup> .	The INRMP must be reviewed as to operation and effect by the Secretaries of the Navy and Air Force in cooperation with the Secretary of the Interior, acting through the Director of the USFWS, and the Director of AGFD on a regular basis, but not less often than every five years <sup>12</sup> .	Cooperative Agreement parties will meet as needed to develop, review, and implement the INRMP <sup>13</sup> .	Proposed INRMP amendments will be reviewed under the NEPA as applicable pursuant to 40 CFR § 1501.2, 1501.3, 1501.4, 1502.25, and 1508.18.	Section 1.4.4 of the EIS expresses the intent of the Marine Corps, Air Force, USFWS, and AGFD to review the INRMP, and amend it as necessary, at a minimum of five-year intervals, or as required.

<b>TABLE 1-2</b>					
<b>AGENCY RESPONSIBILITIES FOR PREPARING THE EIS AND FINAL INRMP AND IMPLEMENTING THE FINAL INRMP</b>					
<b>Task</b>	<b>Referenced Authority/Agreement</b>				
	<b>MLWA of 1999</b>	<b>Sikes Act</b>	<b>MLWA Implementation Cooperative Agreement<sup>1</sup></b>	<b>NEPA</b>	<b>EIS for the Proposed INRMP and the Final INRMP</b>
<b>INRMP Public Report Preparation</b>	<p>Concurrent with each review of the INRMP, the Secretaries of the Navy, Air Force, and Interior shall jointly prepare a public report describing changes in the conditions of the BMGR, including current military use of the range, changes in military use since the previous report, and efforts related to the management of natural and cultural resources and environmental remediation during the previous five years. Before the report is finalized, the Secretaries shall invite interested members of the public to review and comment on the report, and shall hold at least one public meeting concerning the report<sup>14</sup>.</p>	<p>Not applicable to Sikes Act requirements.</p>	<p>Cooperative Agreement parties will prepare and issue a report every five years describing changes in the condition of the lands withdrawn and reserved for the BMGR. The report shall include a summary of current and future military use, any changes in military use since the previous report, and efforts related to the management of natural and cultural resources and environmental remediation. Interested members of the public will be invited to review and comment on the report; at least one public meeting concerning the report will be held<sup>15</sup>. The Secretaries of the Air Force and Navy shall resolve any disagreements concerning the contents of the 5-year reports<sup>16</sup>.</p>	<p>Not applicable to NEPA requirements.</p>	<p>Section 1.4.4 of the EIS expresses the intent of the Marine Corps, Air Force, USFWS, and AGFD to prepare and issue the public report specified in the MLWA of 1999 at five-year intervals.</p>

<b>TABLE 1-2</b>					
<b>AGENCY RESPONSIBILITIES FOR PREPARING THE EIS AND FINAL INRMP AND IMPLEMENTING THE FINAL INRMP</b>					
<b>Task</b>	<b>Referenced Authority/Agreement</b>				
	<b>MLWA of 1999</b>	<b>Sikes Act</b>	<b>MLWA Implementation Cooperative Agreement<sup>1</sup></b>	<b>NEPA</b>	<b>EIS for the Proposed INRMP and the Final INRMP</b>
<sup>1</sup> Cooperative Agreement, dated January 2001, by and between the Departments of the Air Force, Navy, and Interior and the State of Arizona to implement MLWA of 1999 at the BMGR <sup>2</sup> P.L. 106-65 Section 3031(b)(3)(A) <sup>3</sup> P.L. 106-65 Section 3031(b)(3)(D) <sup>4</sup> 16 U.S.C 670a (a)(2) <sup>5</sup> Cooperative Agreement Section V.1. <sup>6</sup> 40 CFR §1501.5, 1501.6, 1508.5, and 1508.16 <sup>7</sup> P.L. 106-65 Section 3031(b)(3)(C) <sup>8</sup> 16 U.S.C. 670a (a)(2) <sup>9</sup> Cooperative Agreement Section VII.1. <sup>10</sup> 40 Questions & Answers About CEQ Regulations (14b) <sup>11</sup> P.L. 106-65 Section 3031(b)(3)(E)(ix) <sup>12</sup> 16 U.S.C. 670a (b)(2) <sup>13</sup> Cooperative Agreement Section V.1.e <sup>14</sup> P.L. 106-65 Section 3031(b)(5) <sup>15</sup> Cooperative Agreement Section V.1.b <sup>16</sup> Cooperative Agreement Section VII.2.					

acres until the MLWA of 1999 reduced the land area of the BMGR to 1,733,921 acres (2,709 square miles) (see Figure 1-1). The BMGR is undeveloped and uninhabited because safety requirements of the military training mission conducted on the range restrict both habitation and economic development of the range and specify that public visitation be directly controlled. Nearby communities include Yuma, Wellton, Tacna, Gila Bend, Ajo, and additional neighboring rural communities in Arizona, and San Luis Rio Colorado and Sonoyta in Mexico; all of these communities have been experiencing recent steady increases in population.

Although the land area was reduced by the MLWA of 1999, the capabilities and capacity of the BMGR to support military operations were unaffected. The non-renewed parcels were either unnecessary for continuing or projected military purposes, or mechanisms other than land withdrawal were identified to further the limited military mission support roles of the affected parcels. Overlying restricted airspace that supports military operations at the BMGR was unaffected by the MLWA of 1999. Four contiguous restricted airspace areas (R-2301W, R-2301E, R-2304, and R-2305) overlie almost the entire land area of the BMGR and some adjacent lands, including the Cabeza Prieta NWR (see Figure 1-1).

### **1.2.3 Military Purposes of the BMGR**

The predominant use of the BMGR throughout its history has been to provide land and airspace for air combat training. The MLWA of 1999 continues the historic military purposes of the range. This Act reserves the BMGR for use by the Secretaries of the Air Force and Navy for:

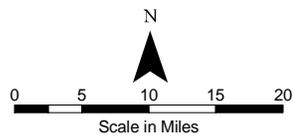
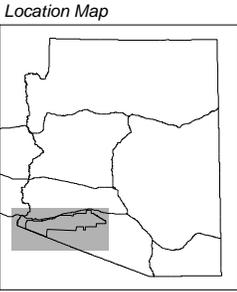
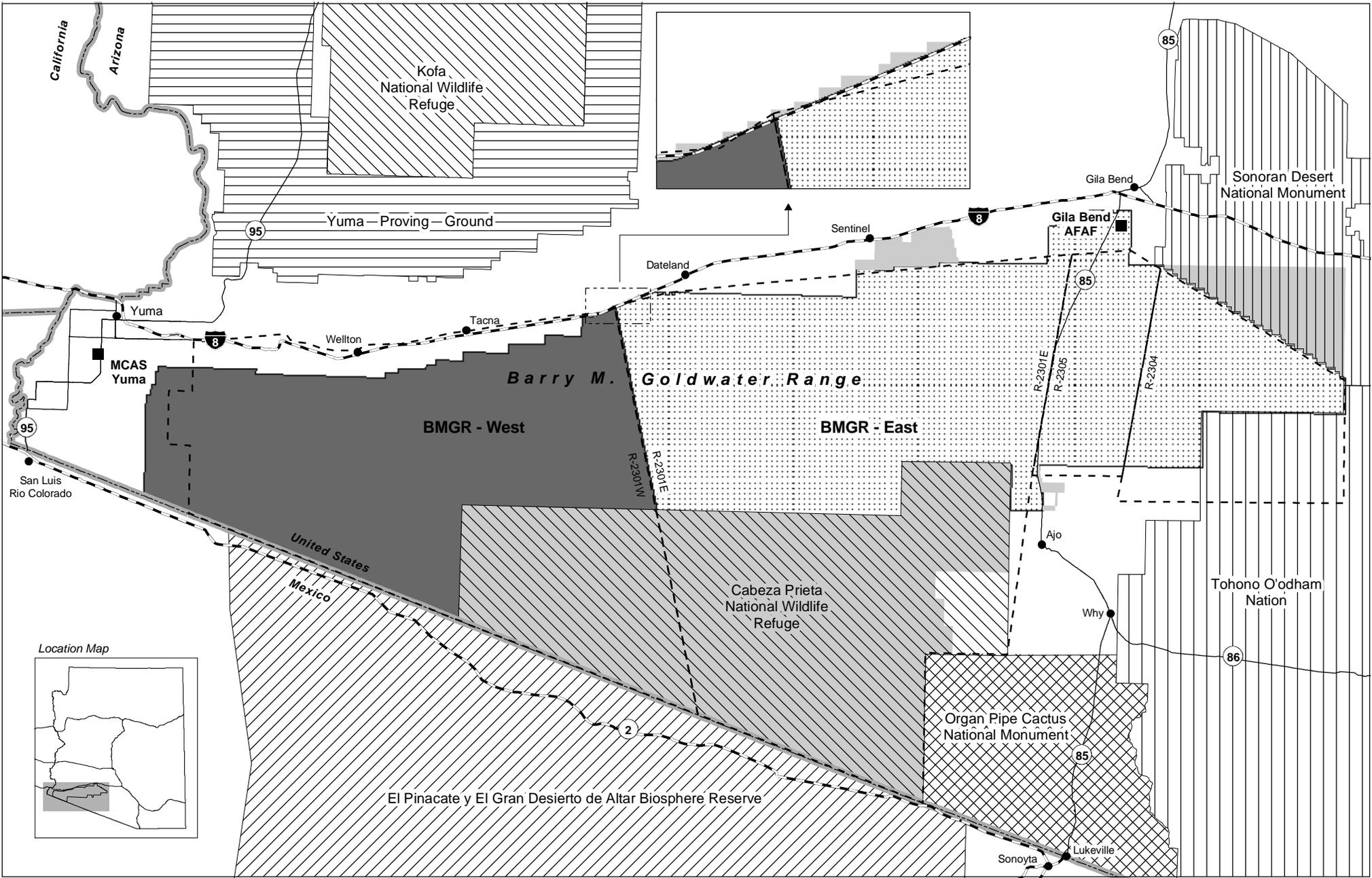
- an armament and high-hazard testing area
- training for aerial gunnery, rocketry, electronic warfare, and tactical maneuvering and air support
- equipment and tactics development and testing; and other defense-related purposes consistent with those specified in this paragraph [P.L. 106-65 §3031(a)(2)].

For the Air Force, Marine Corps, Navy, Air National Guard, Army National Guard, and Air Force Reserve, the BMGR is an essential component of the national defense training base that is indispensable to their abilities to produce the combat-ready aircrews<sup>4</sup> needed to defend the nation and its interests. The BMGR has been one of the nation's most productive military reservations for training tactical aircrews since World War II. As the nation's third largest military reservation<sup>5</sup>, the BMGR has the training capabilities, capacities, and military air base support that provide the flexibility needed to sustain a major share of the country's aircrew training requirements now as well as into the foreseeable future. The value of the BMGR for supporting high-quality aircrew training stems from a combination of the following attributes:

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<sup>4</sup> Aircrew refers to the crew members who operate an aircraft or its various systems. Single-seat fighter or attack aircraft, such as the F-16C or A-10, have one crew member—the pilot. Twin-seat fighter or attack aircraft—such as the F-14, F-15E, or AH-64 (an attack helicopter)—carry a weapons systems officer in addition to the pilot. Transport aircraft—such as the C-130, CH-53 (a helicopter), or UH-60 (a helicopter)—are operated by a pilot, copilot navigator, load master, and other types of crew members. All aircrew members participate in training operations.

<sup>5</sup> The Nellis Test and Training Range in Nevada is the nation's largest military range with 2,919,890 acres (4,562 square miles) withdrawn by the MLWA of 1999. The second largest is the Army's White Sands Missile Range in New Mexico, which encompasses about 2,050,000 acres (3,200 square miles).



**Legend**

- Restricted Airspace Boundary
- State Routes and other Highways
- U.S. Interstate and Mexico Federal Highways
- BMGR - West
- BMGR - East
- Former BMGR Parcels not Renewed by the MLWA of 1999

**BMGR Land Area as Renewed by the MLWA of 1999**

**Figure 1-1**

Restricted land and airspace allows military activities that may be hazardous to either non-participating air traffic or ground surface users to occur without exposing the public or military personnel to undue safety risks and without interruption.

- The extensive land and airspace size has allowed the range to be partitioned into up to nine subranges to support multiple independent training activities simultaneously or used to support large-scale range-wide exercises.
- Ten nearby supporting air bases<sup>6</sup> provide the technical, academic, material, command and control, maintenance, personnel, and community support needed to keep aircraft and aircrews flying.
- Electronic training instrumentation on the range can be used to observe, measure, record, and replay the simultaneous actions of multiple aircraft participating in training activities and can simulate aircraft weapons use as well as enemy missile threats.
- Nearby supporting military airspace provides airborne staging areas for BMGR training activities and relieves BMGR airspace of the need to support lower priority training operations.
- Year-round flying weather allows most training activities to be efficiently performed as planned without weather delays.
- Varied natural terrain adds realism to target simulations and the flight training experience.

These military purposes are examined in detail in the legislative EIS (LEIS) for renewal of the BMGR land withdrawal (U.S. Air Force 1999).<sup>7</sup>

#### **1.2.4 Ecological Significance of the BMGR**

Parallel to its continuing value as an essential national defense asset, the BMGR is also nationally important as a critical component in the largest remaining tract of relatively unfragmented Sonoran Desert in the United States. Composed of the BMGR, Cabeza Prieta NWR, Organ Pipe Cactus NM, Sonoran Desert NM, and BLM Sentinel Plain area, this tract currently totals about 5,000 square miles of which the range contributes almost 55 percent of the land area. The BMGR is important because it encompasses significant east to west ecological gradients that define the interface between the Arizona Upland and Lower Colorado River Valley subdivisions of the Sonoran Desert. The eastern extent of the range harbors some of the most extensive and healthy saguaro cactus-mixed cactus-paloverde forests in the Arizona Upland Subdivision while its western extreme 130 miles away is within the dune fields of the Gran Desierto, which lies around the head of the Gulf of California. The BMGR incorporates much of the diversity of landforms, rainfall, and elevation gradients that are present within the Sonoran Desert in Arizona and that contribute to the biodiversity of this ecoregion (Hall and others 2001). The BMGR is unique for its size and management status. When coupled with the adjacent areas of Organ Pipe Cactus NM, Cabeza Prieta NWR, Sonoran Desert NM and other BLM-administered lands, and the extreme northwestern and western portions of the Tohono O'odham Nation, the BMGR is a key component in one of the largest intact, relatively undisturbed ecosystems in the contiguous United States. At over 1.7 million acres, the BMGR is more than twice the size of any other component in this contiguous complex.

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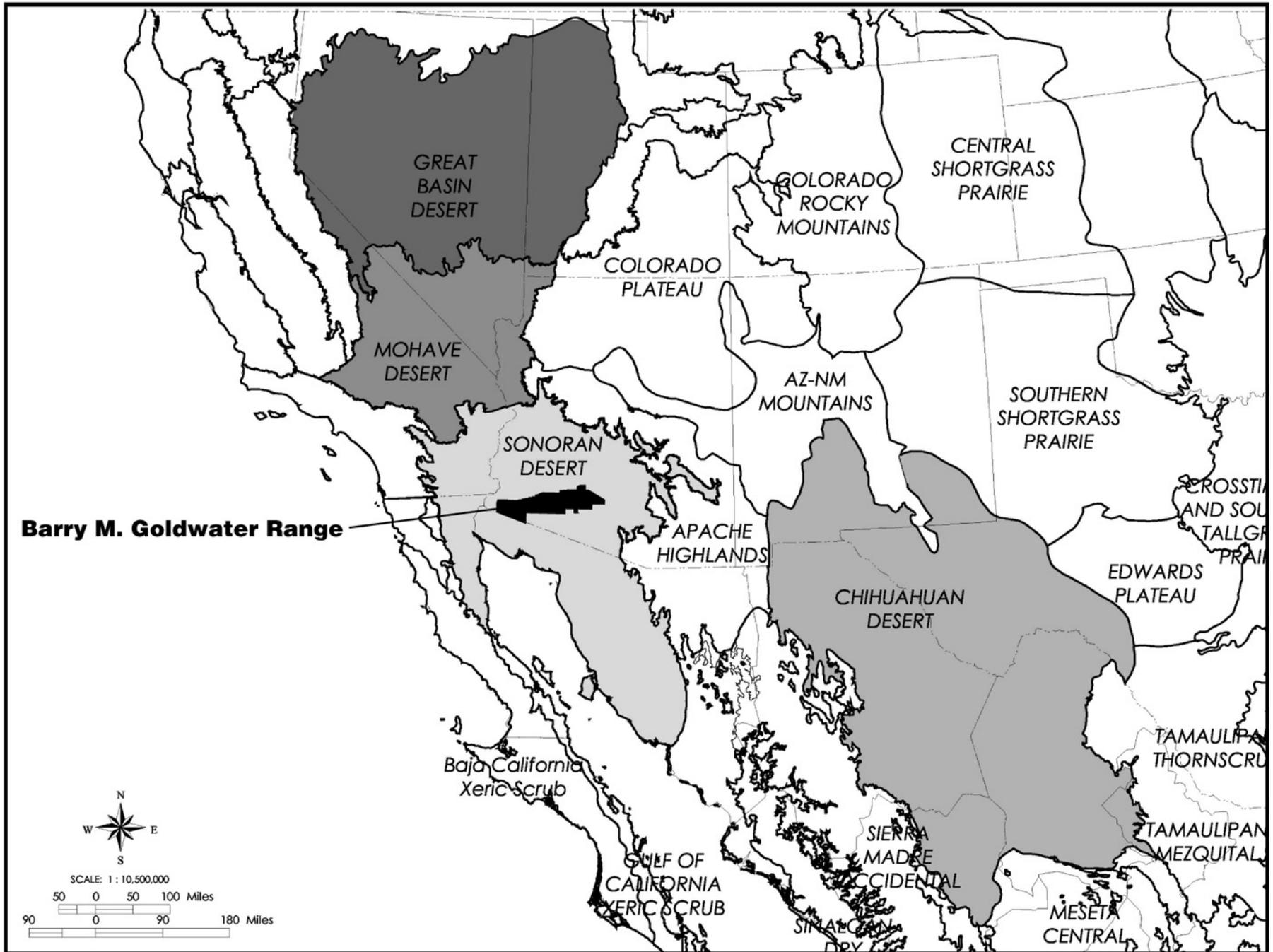
<sup>6</sup> Supporting air bases include MCAS Yuma, Luke AFB, Davis-Monthan AFB, Arizona Air National Guard Base, Papago Army Heliport, Silverbell Army Heliport, Naval Air Facility El Centro, MCAS Miramar, MCAS Camp Pendleton, and NAS North Island.

<sup>7</sup> The LEIS for the renewal of the BMGR land withdrawal as well as other documents incorporated in this EIS by reference are available for public review upon request. Such requests should be directed to the information contacts listed on the cover sheet, located just before the table of contents.

The Sonoran Desert Ecoregion encompasses 55 million acres (almost 86,000 square miles) in southern Arizona, southeastern California, Baja California, and northwestern Sonora (Figure 1-2). It is the most tropical of the three North American warm deserts (Chihuahuan, Mojave, and Sonoran) and displays the greatest numbers of plant communities. The ecoregion is especially rich in biological diversity and, as a result, was identified by researchers at the World Wildlife Fund as one of the top 233 ecoregions worldwide that deserved special conservation attention (Olson and Dinerstein 1998). In an ecological analysis of conservation priorities within the Sonoran Desert Ecoregion, the BMGR was within two of the landscape-scale conservation sites identified as conservation priorities (Marshall and others 2000). The Sonoran Desert harbors a high proportion of endemic plants, reptiles, and fish. More than 2,500 pollinator species have been documented (invertebrates, birds, and bats), including the highest known diversity of bee species in the world (Phillips and Wentworth Comus 2000). More than 500 bird species migrate through, breed, or permanently reside in the ecoregion—nearly two-thirds of all species that occur in northern Mexico, the United States, and Canada combined. The largest dune system in North America, the Gran Desierto, is contained within the Sonoran Desert and, as noted, is represented within the BMGR.

While the native biological species of the Sonoran Desert are well adapted to its extreme conditions and generally form robust communities within the BMGR, the Sonoran Desert is also vulnerable to physical disturbance and biological invasion. In many respects, its biodiversity is under siege. Since the end of World War II, the Sunbelt of the American Southwest and Northwest Mexico has been the setting for the largest in-migration in human history (Nabhan and Holdsworth 1999). In 1990, the Sonoran Desert Ecoregion contained 6.9 million residents, nearly double the population size in 1970. The population is expected to reach 12 million by 2020. Under such human growth pressure, the threats to Sonoran Desert biodiversity reported by Nabhan and Holdsworth (1999) will likely become more severe. Marshall and others (2000) report that the Sonoran Desert's biodiversity has historically been and, in some cases, continues to be threatened by conversion of natural habitat to urban, suburban, and agricultural areas; overuse of natural surface- and ground-water resources; increasing recreational use of the desert; historic grazing; and the spread of exotic, invasive plants and animals. Illegal border activities pose an additional threat as border crossings and associated law enforcement activities have increased in recent years. These actions may collectively result in ecosystem degradation and habitat loss leading to the decline or extirpation of some species.

In large part, the ecological health of the BMGR has been maintained or restored over the last 60 years because: (1) most land uses that would be severely disruptive to the environment have been excluded from the range in order to protect the safety of the public and military personnel and to prevent disruption of the military training operations; and (2) only a small percentage of the restricted land area is disturbed by military training activities. Safety requirements restrict both habitation and economic development of the range and specify that public visitation be directly controlled. Activities such as livestock grazing; mining; agricultural crop production; and residential, commercial, or industrial development—which have caused substantial ecological damage elsewhere within the BMGR region—have been legally excluded from the range since the World War II era. Some recreational use has been permitted where it is compatible with the safety requirements of the military mission, but most recreation activity has historically been dispersed and of low intensity in contrast to that experienced in some nearby off-range locations.



Source Data: ① The Nature Conservancy. ② Bailey, R.G. 1998. Ecoregions Map of North America: Explanatory note. Misc. Publ. 1548. U.S. Department of Agriculture, Forest Service. Washington, DC. 10 p.  
 Dinerstein E., D.M. Olson, D.J. Graham, A.L. Webster, S.A. Primm, M.P. Borkbinder, and G. Ledec. 1995. A conservation assessment of the terrestrial ecoregions of Latin America and the Caribbean. The World Bank, Washington, D.C.

## Sonoran Desert Ecoregion

Figure 1-2

Military activities have, of course, had some localized deleterious effects on the range environment. However, after six decades of military use, only about 2.5 percent of the current BMGR surface has been moderately to highly disturbed by these activities. Another 7.5 percent of the range surface has experienced low to moderate levels of disturbance.<sup>8</sup> Notably, military surface use has been distributed in such a way that most disturbance effects are widely scattered and native biological communities are generally unfragmented over the expanse of the BMGR. In other words, the long-standing withdrawal of the range for military purposes has had the side benefit of generally allowing natural processes to continue to dominate the course of the ecological landscape. As direct evidence of the ecological health of the range, all of the native wildlife species believed to be present when military use began in 1941 are also believed to still be present (U.S. Air Force 1999). In essence, the biological diversity of the range is believed to be undiminished from the levels present before the military range was established.

### **1.2.5 Cultural Resource Significance of the BMGR**

The same factors that have helped to preserve the ecological resources of the BMGR—exclusion of surface disturbing, non-military land uses and limited land disturbance by military activities—have also helped to protect cultural resources. As a result, well-preserved cultural remains within the BMGR provide a remarkable record of thousands of years of human habitation and use. These remains include sites and features such as prehistoric-period artifact scatters, clusters of fire-cracked rock, sleeping circles, intaglios or geoglyphs, rock art, rock shelters, rock cairns and shrines, large habitation and use sites and historic-period mines and smelters, ranches, and military training facilities (dating from World War II). Cultural resource inventories, conducted to date by the Air Force and Marine Corps principally within areas directly affected by military activities, have identified more than 1,200 archaeological sites and other cultural resource features. In addition to their archaeological value, many of these places and features are culturally significant to Native American tribes.

The interpretive significance of the archaeological record within the BMGR is greater than that of any of its individual features. The true significance of this record lies in the fact that the relatively undisturbed landscape of the range still harbors evidence of the aggregate spectrum of human activities that took place here through time. Both small and large sites—from individual prehistoric stone-working areas to village sites or individual historic mining prospects to well-developed mine complexes—are important components of this mosaic, and the loss of any individual component diminishes the ability of archaeologists and anthropologists to understand and interpret the whole. In addition, most tribes attach cultural significance to archaeological sites and consider the loss of even one small site an adverse effect that should be avoided. The Air Force and Marine Corps are responsible for protecting and managing the cultural resources within the BMGR in accordance with a suite of federal laws and regulations.

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<sup>8</sup> Because the MLWA of 1999 reduced the size of the BMGR by 934,179 acres, the percentage of surface disturbance is now higher than that reported in the Final LEIS for the renewal of the BMGR land withdrawal (U.S. Air Force 1999).

### 1.3 NATURAL AND CULTURAL RESOURCES MANAGEMENT RESPONSIBILITIES

Primary responsibilities for the management of natural resources within the BMGR fall within the purviews of three federal agencies and one state agency—Air Force, Marine Corps, USFWS, and AGFD. The Air Force and Marine Corps also have the primary responsibilities for the management of cultural resources within the range. A fifth agency, BLM, has reserve oversight roles but no direct resource management responsibilities. Pursuant to the MLWA of 1999, jurisdiction over land and interests in the lands of the BMGR were transferred from the Secretary of the Interior to the Secretaries of the Navy and Air Force for BMGR—West and BMGR—East, respectively [P.L. 106-65 §3031(a)(1) and (2)]. Surface management responsibility for the range lands, and hence natural and cultural resources, had been assigned to the Secretary of the Interior under the most recent previous Congressional authorization for the BMGR, the MLWA of 1986, [P.L. 99-606]. The current primary responsibilities for both properly managing and protecting the natural and cultural resources of the range and for using the range to support national defense purposes within its respective west and east subdivisions have been assigned to the Marine Corps and Air Force [P.L. 106-65 §3031(a)(1) and (2) and §3031(b)].

The Secretary of the Interior remains involved in the management of natural and cultural resources within the BMGR by virtue of provisions of the MLWA of 1999 and Sikes Act. The MLWA of 1999 [P.L. 106-65 §3031(b)(3)(A), (D), and (E)] directs the Secretaries of the Navy, Air Force, and Interior to jointly prepare an INRMP for the BMGR in accordance with the Sikes Act. In addition, the Sikes Act states:

The Secretary of a military department shall prepare each integrated natural resources management plan for which the Secretary is responsible in cooperation with the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, and the head of each appropriate State fish and wildlife agency for the State in which the military installation concerned is located [16 U.S.C. 670a (a)(2)].

This provision of the Sikes Act clarifies that the Director of the USFWS is the approval and management oversight authority representing the Secretary of the Interior in the preparation and implementation of the INRMP [see also Secretary of the Interior's Order 3222, Section 3(a)]. As stated, the Sikes Act also provides that each INRMP is to be prepared in cooperation with the head of the state fish and wildlife agency in the state in which the installation is located. The Sikes Act further stipulates that the INRMP “...shall reflect the mutual agreement of these parties concerning the conservation, protection, and management of wildlife resources” [16 U.S.C. 670a (a)(2)].

Nothing in the MLWA of 1999 either expands or diminishes the primary jurisdiction over resident wildlife management within the BMGR that is held by the State of Arizona. Primary jurisdiction for resident wildlife management is implemented on behalf of the State by the AGFD, except where pre-empted by federal law. In addition, AGFD is responsible for providing safe off-highway vehicle recreation for the State. The MLWA of 1999 also does not modify the responsibilities of the USFWS for administering compliance with the Endangered Species Act (ESA) of 1973 [16 U.S.C. 1531 et seq.] and Migratory Bird Treaty Act (MBTA) of 1918 [16 U.S.C. 703 et seq.] within the BMGR.

Participation by the BLM in the development of the INRMP for the BMGR is advantageous. Prior to November 2001, the BLM Phoenix and Yuma field offices served as the primary surface managers for BMGR—East and BMGR—West, under the MLWA of 1986. This tenure represents

the most recent 15 years of primary land management experience with the range. The BLM will also continue to serve limited roles with the BMGR under provisions of the MLWA of 1999, including (1) consulting in the resolution of disagreements on the contents of the INRMP or its subsequent amendments, (2) resuming management of BMGR lands should resource management authority be returned to the Secretary of the Interior under terms provided by the MLWA of 1999, and (3) consulting on any non-emergency closures of the range that are not specified in the forthcoming INRMP [P.L. 106-65 §3031(b)(3)(C), §3031(b)(1)(C) and (b)(7), and §3031(b)(2)(C), respectively]. The dispute resolution responsibility of the Secretary of the Interior is limited to consultation. The MLWA of 1999 provides that:

Any disagreement concerning the contents of [the INRMP], or any subsequent amendments to the plan, shall be resolved by the Secretary of the Navy for the West Range and the Secretary of the Air Force for the East Range, after consultation with the Secretary of the Interior through the State Director, Bureau of Land Management and, as appropriate, the Regional Director, United States Fish and Wildlife Service [P.L. 106-65 §3031(b)(3)(C)].

The State of Arizona would also have a consultation role in resolving disputes about the contents of the INRMP in accordance with the Cooperative Agreement among the U.S. Departments of the Air Force, Navy, and Interior and the State of Arizona for the implementation of the MLWA of 1999. The Cooperative Agreement includes a provision that states:

Any disagreements concerning the contents of the INRMP shall be resolved by the Secretary of the Air Force for the East Range and the Secretary of the Navy for the West Range, after consultation with the Secretary of the Interior through the State Director, BLM, and, the Regional Director, [USFWS], and the Governor of the State, who may delegate to the Director, AGFD... [Cooperative Agreement Section VII.1.]

The resumption of BLM management of the BMGR would only occur if the Secretary of the Interior determines, through written notice, that the Air Force and Marine Corps had failed to manage the withdrawn lands in accordance with the INRMP and only if such failure is resulting in significant and verifiable degradation of natural and cultural resources and the Secretaries of the Air Force and Navy fail to correct the management deficiencies identified by the Secretary of the Interior in his written notice [P.L. 106-65 §3031(b)(7)].

The Secretaries of the Air Force and Navy are ultimately accountable for the implementation of the INRMP; however, the mutual intent of the agencies participating in the preparation of this EIS and subsequent final INRMP document is to support development and implementation of the INRMP through continuing cooperative efforts that are facilitated by ongoing public involvement programs. The Secretary of the Air Force has delegated local command and control for BMGR—East and preparation of the range INRMP to the Commander of the 56th Fighter Wing (FW) at Luke AFB. Similarly, the Secretary of the Navy has delegated local command and control for BMGR—West and preparation of the range INRMP to the Commanding Officer of MCAS Yuma.

In reserving BMGR—West for use by the Secretary of the Navy (who, in turn, delegated authority for the use and management of the range to the Marine Corps) and BMGR—East for use by the Secretary of the Air Force, the MLWA of 1999 technically created two contiguous ranges that are administered through separate military departments and chains of command within DoD. These

administrative partitions reflect the long-standing patterns of military use at the range that are well-suited to the needs of the Air Force and Marine Corps. The Air Force has been the primary user of BMGR—East since 1941 and Marine Corps has been the primary user of BMGR—West since 1959. Although both the Air Force and Marine Corps make periodic use of the portion of the range that is not under their direct administrative control, the prognosis for the foreseeable future is that the Air Force and Marine Corps will continue to use BMGR—East and BMGR—West, respectively, as their primary areas for training operations.

The MLWA of 1999 includes two geographic options for preparing the INRMP for the BMGR [P.L. 106-65 §3031(b)(3)(A) and (B)]. The Act provides that a single INRMP may be prepared that addresses natural and cultural resources management for the entire range or may be prepared as two individual INRMPs that address the management of BMGR—West and BMGR—East separately. The Secretaries of the Navy, Air Force, and Interior, in cooperation with AGFD, have determined that effective management of the range will be best served by a single INRMP that is applicable to the entire range. Joint preparation of the INRMP by the Air Force, Marine Corps, BLM, USFWS, and AGFD expresses the commitment of these agencies not to fragment management of the BMGR ecosystem. The forthcoming INRMP will be applicable to the entire BMGR.

The MLWA of 1999 provides that the Secretaries of the Navy and the Air Force may enter into Memorandums of Understanding (MOUs) or Cooperative Agreements with the Secretary of the Interior or other appropriate federal, state, or local agencies, Indian tribes, or other public or private organizations or institutions for purposes of facilitating implementation of the INRMP should they find that such agreements would be favorable for facilitating management of the BMGR [P.L. 106-65 §3031(b)(4)(A)]. Pursuant to this provision of the MLWA of 1999, the Cooperative Agreement among the U.S. Departments of the Air Force, Navy, and Interior and the State of Arizona was placed in effect in January 2001 to facilitate joint preparation and implementation of an ecosystem-based INRMP for the BMGR by the parties to the agreement (see Table 1-2). This agreement neither adds to nor detracts from the individual agency responsibilities and authorities that have been assigned by the MLWA of 1999, Sikes Act, or other applicable law. Rather, the purpose of this agreement is to provide a framework for the Air Force, Navy (Marine Corps), Department of the Interior, and State of Arizona to work cooperatively in the implementation of the provisions of the MLWA of 1999.

In addition to the aforementioned Cooperative Agreement, a previously existing MOU that established the Barry M. Goldwater Range Executive Council (BEC) was amended, in accordance with the MLWA of 1999, in February 2001 for the purpose of "...providing a forum for collaboration by the statutory decisionmakers in the management of resources and their uses..." within the BMGR. The BEC was first formed in 1997 by the Air Force, Marine Corps, BLM, USFWS, and AGFD at the local management level as an informal ad hoc committee designed to facilitate better collaborative management of BMGR resources. The BEC was formally established in March 1998 through an MOU among the member agencies. The membership of the BEC was expanded, through the amended February 2001 MOU, to include the U.S. Border Patrol, and National Park Service (NPS) in addition to the original five members. The council membership consists of the senior functional manager of each agency's local unit(s). No single agency serves as the council lead. Rather, the organization operates to exchange information and provide recommendations to the agencies with primary responsibility for the particular needed action. These recommendations are intended to integrate long-term management plans across jurisdictional and administrative boundaries. Once the proposed INRMP is implemented, the BEC will also provide a forum for

involved agencies to discuss adaptive management proposals in accordance with the provisions of the plan.

The MLWA of 1999 includes two additional provisions that require the extension of an existing MOU pertaining to military use of the Cabeza Prieta NWR and the development of a new MOU to establish an intergovernmental executive committee (IEC). Pursuant to Section 3032(c) of the Act, the Secretaries of the Interior, Navy, and Air Force must extend the 1994 MOU, which supports continued military aviation training use of the Cabeza Prieta NWR, for the duration of the current withdrawal and reservation of the BMGR, which will expire on 5 October 2024. This MOU, however, does not affect natural or cultural resources management of the BMGR.

The IEC was to be established by the Secretaries of the Navy, Air Force, and Interior to provide a forum solely for the purpose of exchanging views, information, and advice relating to the management of the natural and cultural resources within the BMGR [P.L. 106-65 §3031(b)(6)]. The MOU establishing the IEC was placed in effect in December 2001 by Luke AFB, MCAS Yuma, and the USFWS as directed by the Secretaries of the Navy, Air Force, and Interior. Membership in the IEC is limited to those agencies (federal, state, and local) and Native American tribes that may have a direct responsibility for, potential impact upon, or direct interest in the lands or resources of the BMGR. The membership is comprised of selected representatives from interested federal agencies, as well as at least one elected officer (or other authorized representatives) from state government and from each local and tribal government as designated at the discretion of the Secretaries of the Navy, Air Force, and Interior. IEC meetings, which occur at least once every four months, are open to the public and provide non-IEC participants with periodic opportunities to present opinions regarding BMGR management policies and procedures to the IEC for discussion and possible action recommendations. The IEC meetings replaced the BMGR Partners meetings that previously served as a regularly scheduled forum for inter-governmental information exchange and ongoing public involvement pertaining to the management of natural and cultural resources within the BMGR. The IEC would also provide a forum for discussing proposed adaptive management provisions following implementation of the proposed INRMP.

The Navy/Marine Corps and Air Force are required to assume all costs for implementing the INRMP for the BMGR and will execute the plan subject to the availability of funds. This financial responsibility includes paying the Department of the Interior for costs incurred in providing goods or services on behalf of the Navy/Marine Corps or Air Force to assist in the implementation of the INRMP [P.L. 106-65 §3031(b)(8)].

## **1.4 PURPOSE OF AND NEED FOR THE PROPOSED INRMP**

### **1.4.1 Purpose of the Proposed INRMP**

The multifaceted purposes of the proposed INRMP are established by the MLWA of 1999 and Sikes Act. In accordance with the MLWA of 1999, the purposes of the INRMP are to provide for the:

... proper management and protection of the natural and cultural resources of [the range], and for sustainable use by the public of such resources to the extent consistent with the military purposes [of the range]... [P.L. 106-65 §3031(b)(3)(E)(i)].

The purposes of the natural resource management program that would be established under the Sikes Act are closely analogous to those specified in the MLWA of 1999. The Sikes Act provides that:

Consistent with the use of military installations to ensure the preparedness of the Armed Forces, the Secretaries of the military departments shall carry out [a natural resources management program] to provide for—

- (A) the conservation and rehabilitation of natural resources on military installations;
- (B) the sustainable multipurpose use of the resources, which shall include hunting, fishing, trapping and non-consumptive uses; and
- (C) subject to safety requirements and military security, public access to [the BMGR] to facilitate the use [16 U.S.C. 670a (a)(3)].

#### **1.4.2 Need for the Proposed INRMP**

The proposed INRMP is needed to comply with the provisions of the MLWA of 1999 and Sikes Act that require that an INRMP be prepared for the BMGR. Beyond these direct statutory requirements, development of a new management plan is also warranted to address changes in current and future military mission requirements, DoD management policies, and BMGR resource and public use conditions that have occurred since the most recent previous resource management plan was prepared for the range. The most recent resource management plan for the range is the Lower Gila South Resource Management Plan (RMP) Goldwater Amendment (hereafter Goldwater Amendment) that was prepared by the BLM. The Goldwater Amendment, which was placed into effect in 1990, was prepared under the purviews of the MLWA of 1986 and the Federal Land Policy Management Act (FLPMA) of 1976 (43 U.S.C. 1701 et seq.). The Goldwater Amendment is based on management planning and environmental assessments that were completed during the early to late 1980s. The key needs that the proposed INRMP resource management program must address include:

- ***A resource management program based on the current conditions and knowledge of BMGR resources and resource uses.*** The proposed INRMP must consolidate, update, and summarize useful and relevant plans, documents, and data, and provide a single comprehensive source of up-to-date information pertinent to natural and cultural resource management on the BMGR. The proposed INRMP must also appropriately support the current and anticipated requirements of: (1) the military mission; (2) natural and cultural resource protection, conservation, and rehabilitation; and (3) sustainable multipurpose public use.
- ***A resource management program that reflects current and future military mission requirements and the current and anticipated needs and activities of non-military agencies.*** There have been some changes in military land use and safety and security requirements within the BMGR since the Goldwater Amendment was prepared. In addition, some future changes in these requirements can be anticipated. Past and emerging changes in nonmilitary agency missions and land use activities are also relevant to the future management of natural and cultural resources within the range. The proposed INRMP needs to accurately reflect these mission requirements and land-use patterns.

- ***Resources management based on ecosystem management and protection of biological diversity.*** DoD has shifted its land management focus over about the last 10 years from protection of individual species to ecosystem management. The two principal reasons for this shift are (1) the emphasis of the Sikes Act on promoting effective wildlife and habitat protection, conservation, and management, and (2) a concern that management attention in the past was disproportionately placed on managing the needs of individual high-profile species to the possible expense of underlying ecosystem functions. It is now the policy of DoD that its lands should be administered through an ecosystem management approach implemented through installation INRMPs. The goal of DoD ecosystem management is to maintain and improve the sustainability and native biological diversity of ecosystems while supporting human needs, including the DoD mission. This goal is reflected in DoD Instruction 4715.3, Environmental Conservation Program; AFI 32-7064, Integrated Natural Resources Management; and Marine Corps Order P5090.2A, Environmental Compliance and Protection Manual. Ecosystem management and protection of biological diversity must consequently be important guiding elements of the BMGR INRMP.
- ***A framework for adapting management to changing conditions.*** Ecosystems are recognized as open, changing, and complex systems. Managing the BMGR ecosystem through the INRMP requires the flexibility to adapt to changing military mission requirements, changing ecosystem conditions, and emerging information about the ecosystem. MLWA of 1999 and Sikes Act requirements to support sustainable multipurpose public use of the range, consistent with the military mission of the BMGR, also require that management tools be in place that can readily regulate public access to reflect changes in military activities or resource management requirements.
- ***A framework for promoting continued interagency management cooperation/collaboration.*** The proposed INRMP must continue the practice of working across administrative boundaries through the BEC, the IEC, and other perimeter land use and encroachment programs.
- ***A framework for promoting continued effective ongoing public involvement.*** The proposed INRMP must continue to provide a means for the public to be involved in and have a meaningful opportunity to comment on plan amendments and ongoing management activities and public access opportunities.

### **1.4.3 Decision to be Made and the Decision Makers**

This EIS supports agency decision making regarding the selection of a resource management program that will best fulfill the statutory missions and responsibilities of the decision-making agencies, and that will properly protect, conserve, and rehabilitate the natural and cultural resources of the BMGR and provide for sustainable multipurpose public use. The provisions of the selected resources management program must also support and sustain the requirements of the military mission of the range with no net loss in the capability of BMGR lands to support that mission. Public use of the BMGR must be consistent with the military purposes of the range including safety and security requirements.

Five alternative management strategies for protecting, conserving, and rehabilitating the natural and cultural resources of the BMGR and for providing opportunities for sustainable multipurpose public use are addressed in this EIS. These alternatives were developed based on two categories of resource management goals—policy-based goals and resource-specific goals. The policy-based

goals were derived from statutory and regulatory requirements. The resource-specific goals were designed to provide natural and cultural resources management guidance that is consistent with the policy-based goals and reflects the military use requirements, environmental conditions, and public access opportunities of the BMGR. The policy-based and resource-specific management goals for the BMGR are presented in Section 3.2. Based on the policy-based and resource-specific goals, 17 resource and public use categories, or resource management elements, that require management attention in the proposed INRMP were identified. These resource management elements include:

- Resource monitoring
- Special natural/interest areas
- Motorized access and unroaded area management
- Camping and visitor stay limits
- Recreation services and use supervision
- Rockhounding (surface removal only)
- Wood cutting, gathering, and firewood use, and collection of native plants
- Hunting
- Recreational shooting
- Utility/transportation corridors
- General vegetation, wildlife, wildlife habitat, and wildlife waters
- Special status species
- Soil and water resources
- Air resources
- Visual resources
- Wildfire management
- Perimeter land use, encroachment, and regional planning

Each of the five alternative management strategies addressed in this EIS includes these 17 resource management elements. The relative environmental effects of these alternative strategies are assessed in this EIS. The decision to be made involves selecting among these alternative strategies to establish a resource management program that will best support and sustain the military requirements of the range; protect, conserve, and rehabilitate natural and cultural resources; and support sustainable multipurpose public use to the extent that it is consistent with the military purposes of the range. The Secretaries of the Air Force, Navy, and Interior are responsible for determining which of the EIS alternatives are most appropriate for the BMGR. These determinations will be made in cooperation with the Director of AGFD. The decision on a program for the conservation, protection, and management of wildlife to be incorporated in the final INRMP must reflect the mutual agreement of the Secretaries of the Air Force, Navy, and Interior and the Director of the AGFD (see Table 1-2).

## **1.5 STUDY AREA, TIME HORIZON, AND UPDATE SCHEDULE FOR THE EIS AND PROPOSED INRMP**

### **1.5.1 Land Area Affected by the Proposed INRMP**

The proposed INRMP will be applicable to the lands within the BMGR land withdrawal established by the MLWA of 1999. This Act reduced the withdrawn area of the BMGR by approximately 35 percent by no longer including five separate tracts of land in the range (see Figure 1-1). These five tracts collectively encompass 934,179 acres (Table 1-3).

**TABLE 1-3  
LAND AREAS NOT RENEWED BY THE MLWA OF 1999**

Land Area	Size	
	Acres	Square Miles
Cabeza Prieta NWR	822,000	1,284
Sand Tank Mountains Area	83,554*	131
Sentinel Plain Area	24,756	38.7
Ajo Airport Area	2,779	4.3
Interstate 8 Vicinity	1,090	1.7

\*Although the MLWA of 1999 identifies the Sand Tank Mountains Area as covering 83,554 acres, the actual size of this parcel is 77,957 acres. The southwest boundary is a stair-step pattern that follows section lines rather than a straight line and the stair-step boundary reduces the size of the parcel.

Although the MLWA of 1999 states that the new withdrawn area of the BMGR is approximately 1,650,200 acres (2,578 square miles), the full area of the range is actually 1,733,921 acres (2,709 square miles). The range includes the 1,650,200 acres of withdrawn public lands referenced in the MLWA of 1999 plus 83,721 acres of former state and private lands within the range boundary that were previously purchased by the DoD.

### 1.5.2 Study Area

The area studied during preparation of this EIS differed for the various resource elements assessed. This allowed for the adequate examination of both the local and regional factors that may influence the BMGR environment as well as those that may, in turn, be affected by the proposed management actions. Potential effects on individual natural communities and special status species were assessed at scales that included their contiguous distribution both on and off of the range. The study area for earth and water resources included the Basin and Range Physiographic Province (in which the Sonoran Desert is situated) at its largest extent and selected individual geologic and soil features and principal surface water drainages within the BMGR at its most refined scale. The air resource analysis examined the airshed that contributes to the quality of air overlying the BMGR. Study areas for land use and utility/transportation corridor analyses included both the interior of the range and an area surrounding the BMGR perimeter extending to at least five miles from the range boundary. The socioeconomic study area included the communities within the perimeter area surrounding the range as well as the Phoenix and Tucson areas. Outdoor recreation management and effects were evaluated at two scales: outward from the range in terms of alternative recreation opportunities in the BMGR vicinity and within the range in terms of locations where recreation is compatible with military use. The assessment for the range road network, public health and safety, visual resources, hazardous materials and waste, and noise were all confined to the BMGR or its immediate contiguous border area. Assessments of law enforcement focused principally on issues within the BMGR but also included recognition of concerns and activities associated with the international border. Cultural resource concerns were also evaluated at several geographic scales ranging from the greater cultural region from which the contextual significance of resources within the BMGR might be surmised to the sites within the range in which such resources are located. These same study areas were considered in the cumulative effects analysis of past, present, and reasonably foreseeable future activities with the potential to have additive or interactive impacts with the proposed INRMP.

### **1.5.3 Time Horizon**

The time horizon, or functional period, of the proposed INRMP extends to 2024. As specified in the MLWA of 1999, the duration of the new BMGR withdrawal and reservation is 25 years from the date of the enactment of the Act. Consequently, authorization for the range will expire on 5 October 2024 unless Congress acts once again to grant authorization for continuing military use.

In order to provide for effective resource management over the course of the next 19 years, the proposed INRMP must address both long- and short-term planning horizons. To properly manage natural and cultural resources over a long period of time, planning time horizons must be as long as practicable, particularly if the goal is to effectively protect and conserve the indigenous qualities of such resources. The Secretaries of the Air Force and Navy will likely hold jurisdiction for the BMGR lands for at least the duration of the new range withdrawal.<sup>9</sup> Consequently, the logical long-term planning horizon for the proposed INRMP also extends to 2024. While some of the long-term goals for protecting, conserving, and rehabilitating natural or cultural resources or for maintaining sustainable multipurpose public use are presented in this INRMP without specific time-frame references, managers would like to achieve or maintain these goals over the course of the 25-year withdrawal for the BMGR.

### **1.5.4 INRMP Review and Amendment**

The Sikes Act provides that INRMPs are to be reviewed on a regular basis, but not less than every five years [16 U.S.C. 670a (b)(2)]. This requirement reflects the fact that military activities, natural resource protection and conservation needs, and public access opportunities and patterns are likely to change over time and that there must be a mechanism for adapting an INRMP to changing conditions if the plan is to provide for effective management. The MLWA of 1999 reinforces this point by stipulating that the INRMP for the BMGR shall

...include procedures to ensure that the periodic reviews of the plan under the Sikes Act are conducted jointly by the Secretary of the Navy, the Secretary of the Air Force, and the Secretary of the Interior, and that affected States and Indian tribes, and the public, are provided a meaningful opportunity to comment upon any substantial revisions to the plan that may be proposed...and...provide procedures to amend the plan as necessary. [P.L. 106-65 §3031(b)(3)(E)(ix) and (x)].

The MLWA of 1999 further stipulates that a public report, which may be combined with any reports required by the Sikes Act, is required concurrent with each review of the INRMP. The report is to describe changes in the condition of the lands withdrawn and reserved for the BMGR. Additional requirements of the public report include: (1) a summary of current military use of the lands, (2) any changes in military use of the lands since the previous report, and (3) efforts related to the management of natural and cultural resources and environmental remediation of the lands during the previous five years [P.L. 106-65 §3031(b)(5)(A)(i) and (ii)].

This section of the EIS outlines procedures for the periodic review of the INRMP and the concurrent public report in accordance with the preceding stated requirements of the Sikes Act and MLWA of 1999. The public report will be used to:

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<sup>9</sup> There is a provision in the MLWA for early termination of the withdrawal and reservation if either Secretary or both determines that there is no longer a continuing military need for the range [P.L. 106-65 §3031 (f)(1)].

- provide the required five-year periodic update on the environmental conditions of the BMGR, current military use and changes in that use, and natural and cultural resources management and environmental remediation efforts
- serve as a vehicle for conducting the five-year review and amendment, if required, of the INRMP
- document the findings of the review and planned amendments to the INRMP.

The mandated report preparation and the Sikes Act INRMP review will commence concurrently at five-year intervals following from the date of publication of the final INRMP document, which will closely follow publication of the ROD for this EIS. Updates may occur more frequently, as needed, but are mandated to occur at least every five years. Preparation of the five-year report and the INRMP review will be conducted jointly by the Secretaries of the Navy, Air Force, and Interior and the Director of AGFD [P.L. 106-65 §3031(b)(5)(A)(i) and Cooperative Agreement Section V.1.b]. The Secretaries of the Navy and Air Force will act locally through the Commanding Officers of MCAS Yuma and Luke AFB. The Secretary of the Interior will act locally through the Manager of the Cabeza Prieta NWR. It is anticipated that the BEC and IEC will be used as forums to discuss intergovernmental viewpoints as well as proposed revisions that may be appropriate for the five-year updates on the INRMP.

The five-year report will be prepared in two parts in order to facilitate the review of the INRMP and to provide ample opportunities for meaningful public comment on both the report and proposed revisions to the INRMP. The purpose of the first part of the report will be to provide information on the status of the BMGR (at the time of the report). The first part of the report will include:

- a summary of current military land use
- changes in military land use since the previous report
- changes in land and environmental conditions since the previous report
- changes in public access opportunities since the previous report
- a summary of natural and cultural resources management efforts since the most recent report
- a summary of environmental remediation activities since the most recent report
- a summary of public involvement programs since the most recent report
- proposed INRMP amendments and changes to resources management practices.

The first part of the five-year report will be made available for review and comment by the public and state and local governments before the second part is prepared. Consultations with affected Indian tribes on the first part of the five-year report will also precede preparation of the second part of the report. A Notice of Availability will be placed in the Federal Register announcing the release of the report and identifying opportunities for public comment. The availability of the report may also be publicized through news releases or newsletters, agency web pages, and IEC meetings. There will be appropriate public involvement measures to support the review of the first part of the report and consultations on the report with affected Indian tribes as well as state and local governments.

The second part of the five-year report will be prepared following the close of the public comment period and completion of tribal consultations. The second part of the report, will identify proposed amendments to the INRMP and changes to natural and cultural resources management practices that would be implemented during the subsequent five-year period. The public, state and local governments, and Indian tribes will have an opportunity to comment on a draft of the second part of the report.

If warranted, proposed management decisions regarding INRMP amendments and changes to management practices will be reviewed under the auspices of the NEPA before being implemented. Otherwise, the second part of the five-year report will be revised to incorporate comments on the draft and then be made available to the public, government, and tribes before implementing the proposed amendments and management practice changes.

In addition to preparing the five-year report, the Air Force and Marine Corps will track their progress in implementing the INRMP on an ongoing basis and will conduct an annual informal review of this progress. DoD guidance provides that the annual reviews shall verify that:

- current information on all conservation metrics is available
- all "must fund" projects and activities have been budgeted for and implementation is on schedule
- all required trained natural resource positions are filled or are in the process of being filled
- projects and activities for the upcoming year have been identified and included in the INRMP (an updated project list does not necessitate revising the INRMP)
- all required coordination has occurred
- all significant changes to the installation's mission requirements or its natural resources have been identified

Measurable goals, which will be established for all INRMP implementation projects and activities, will be assessed on an annual basis as a benchmark for gauging implementation progress.

### **1.5.5 INRMP Implementation Activities and Schedule**

DoD installations prepare schedules to carry out the management actions prescribed by their INRMPs. The year in which each project or activity is planned for implementation and the priority of each is identified in the schedule. High priority projects and activities are those that are necessary to meet the fundamental management goals established by the INRMP. Lower priority items are those projects and activities that would further management of the installation's natural and cultural resources but may not be necessary to achieve the basic goals of the INRMP. The actual implementation of each item identified in the annual list of management action priorities is dependent on the availability of funding and manpower; thus, some lower priority action items may not be carried out as scheduled or, possibly, at all. The actions included in the implementation schedule must be consistent with and provide progress towards meeting the objectives of the INRMP. Although INRMP implementation schedules are prepared for five-year budget planning cycles, as identified in Section 1.5.4, they are updated each year to keep action plans up to date with ongoing progress, emerging management needs, budget constraints, and new INRMP amendments.

The schedules of management projects and activities and action priorities that will be planned by the Air Force and Marine Corps to implement the INRMP for BMGR—East and BMGR—West during the initial five-year period of the plan will be identified in the stand-alone INRMP document. These action items, which may define specific management tasks or could identify requirements for the development of additional sub-plans for managing a specific resource or activity, will be based on and consistent with the management alternative selected for the BMGR in the ROD for this EIS. Although specific action items will be identified after the final INRMP management alternative is selected, certain categories of actions will be necessary to implement the forthcoming stand-alone INRMP regardless of which alternative management strategy is selected from this EIS to comprise that document. These categories of actions include:

- establishing Air Force and Marine Corps regulations for the BMGR that are needed to govern government and public activities on the range in accordance with the provisions of the selected alternative management strategy
- posting signs within the BMGR to signify roads that are designated by the selected alternative management strategy as either open or closed for vehicle use or that are designated open but restricted to government use only
- preparing BMGR public entry permit and educational materials—including (1) maps that depict areas of the range authorized for public entry, roads authorized for government/public or government only use, and other features important to public safety and (2) regulations governing public use of the range—as prescribed by the provisions of the selected alternative management strategy
- implementing Air Force and Marine Corps law enforcement activities to regulate public use of the range in accordance with the provisions of the selected alternative management strategy
- preparing and implementing a natural and cultural resources inventory and monitoring plan, in accordance with the provisions of the selected alternative management strategy, to provide guidance for adapting management as needed to meet the goals of the INRMP
- preparing and implementing a limits-to-acceptable change monitoring plan to regulate public use of the range, in accordance with the provisions of the selected alternative management strategy, to ensure that these activities remain consistent with the military mission and safety and security requirements of the range and to ensure that the level of these activities do not exceed sustainable use of range resources
- conducting an assessment of wildlife water developments, in accordance with the provisions of the selected alternative management strategy, and monitoring, constructing, repairing, maintaining, or removing artificial wildlife waters in recognition of the assessment findings

The year in which each action item will be planned for implementation and the priority assigned to each action will be identified in the stand-alone INRMP. Some planned actions, such as the potential construction of new wildlife waters, may require further review under the regulations of environmental laws, such as the NEPA, ESA, or National Historic Preservation Act (NHPA) of 1966 [16 U.S.C. 470 et seq.], before being implemented. These requirements will also be identified in the stand-alone INRMP.

## **1.6 RELATIONSHIP OF THE INRMP TO THE INTEGRATED CULTURAL RESOURCES MANAGEMENT PLAN**

The MLWA of 1999 specifies that the INRMP for the BMGR is to include provisions for the proper management and protection of cultural as well as natural resources and for sustainable use by the public of those resources to the extent consistent with the military purposes of the range [P.L. 106-65 §3031(b)(3)(E)(i)]. The MLWA of 1999 also directs that the INRMP be prepared and implemented in accordance with the Sikes Act [P.L. 106-65 §3031(b)(3)(D)]. The scope of the Sikes Act, however, is limited to the conservation and management of natural resources on DoD lands and does not include guidance for the management and protection of cultural resources. The guidance of these two Acts raises two important questions regarding cultural resources management including:

- To what extent should cultural resources management and protection provisions be addressed in the proposed INRMP?

- What constitutes sustainable public use of cultural resources?

With regard to the first question, DoD agencies typically prepare separate INRMPs and ICRMPs for the management of natural and cultural resources on military reservations. As indicated, the Sikes Act provides guidance for the management of natural resources. Authority and guidance for cultural resources management on DoD lands is derived from a number of other individual federal laws, federal regulations, executive orders and memoranda, federal guidelines, and military requirements (Table 1-4).

<b>TABLE 1-4</b>	
<b>FEDERAL LAWS, FEDERAL REGULATIONS, EXECUTIVE ORDERS AND MEMORANDA, FEDERAL GUIDELINES, AND MILITARY REQUIREMENTS FROM WHICH AUTHORITY AND GUIDANCE FOR THE MANAGEMENT AND PROTECTION OF CULTURAL RESOURCES ON DOD LANDS IS DERIVED</b>	
<b><i>Federal Laws</i></b>	
Military Lands Withdrawal Act of 1999, P.L. 106-65	
Antiquities Act of 1906, P.L. 59-209, 16 U.S.C. 431-433	
Historic Sites Act of 1935, as amended, P.L. 74-292, 16 U.S.C. 461-467	
National Historic Preservation Act of 1966, as amended, P.L. 89-665, 16 U.S.C. 470-470M	
National Environmental Policy Act of 1969, P.L. 91-190, 42 U.S.C. 4321 et seq.	
American Indian Religious Freedom Act of 1978, P.L. 95-341, 42 U.S.C. 1996	
Archaeological Resources Protection Act of 1979, as amended, P.L. 96-95, 16 U.S.C. 470aa-470mm	
Native American Graves Protection and Repatriation Act of 1990, P.L. 101-601, 25 U.S.C. 3001-3013	
<b><i>Federal Regulations</i></b>	
32 CFR Part 229, Archaeological Resources Protection Act of 1979; Final Uniform Regulations	
36 CFR Part 60, National Register of Historic Places	
36 CFR Part 63, Determinations of Eligibility for Inclusion in the National Register of Historic Places	
36 CFR Part 65, National Historic Landmarks Program	
36 CFR Part 68, Secretary of Interior's Standards for Historic Preservation Projects	
36 CFR Part 78, Waiver of Federal Agency Responsibilities under Section 110 of the National Historic Preservation Act	
36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections	
36 CFR Part 800, Protection of Historic Properties	
43 CFR Part 3, Preservation of American Antiquities	
43 CFR Part 10, Native American Graves Protection and Repatriation Act Regulations	
<b><i>Executive Orders/Memorandum</i></b>	
Executive Order 11593, 13 May 1971, Protection and Enhancement of the Cultural Environment	
Executive Memorandum, 29 April, 1994, Government-to-Government Relations with Native American Tribal Governments	
Executive Order 13007, 24 May 1996, Indian Sacred Sites	
Executive Order 13084, 6 November, 2000, Consultation and Coordination with Indian Tribal Governments	
<b><i>Federal Guidelines</i></b>	
Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines	
The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings	
Guidelines for Federal Agency Responsibilities under Section 110 of the National Historic Preservation Act	
Guidelines for Restricting Information on the Location of National Register Properties	
Consultation with Native Americans Concerning Properties of Traditional Religious Cultural Importance, Advisory Council on Historic Preservation, 1993	
Guidelines for Evaluating and Documenting Traditional Cultural Properties, 1994	
<b><i>Military Requirements</i></b>	
DoD Directive 4710.1, Archeological and Historic Resources Management, 21 Jun 1984	
DoD Instruction 4715.3, Environmental Conservation Program, 3 May 1996	
DoD American Indian and Alaska Native Policy, 20 October 1998	
Air Force Instruction 32-7065, Cultural Resources Management, 13 June 1994	
Interim Guidance: Treatment of Cold War historic Properties for U.S. Air Force Installations	
Secretary of the Navy Instruction 4000.35, Department of the Navy Cultural Resources Program, 1992	
Marine Corps Environmental Compliance and Protection Manual	

DoD has developed cultural resources management policies for properties under its jurisdiction based on the collective directives and guidance established by these legal instruments. These policies are incorporated in DoD Instruction 4715.3, Environmental Conservation Program, which establishes policies for the management of both natural and cultural resources on DoD lands. Among others, key DoD policies on cultural resources management, defined in DoD Instruction 4715.3, include:

- Cultural resources under the control of DoD shall be identified, protected, curated, and interpreted through a comprehensive program that complies with legally mandated requirements and results in sound and responsible cultural resources stewardship (DoD Instruction 4715.3, Section 4.3.1).
- DoD installations shall develop a program to preserve the historic character and function of military properties in a cost-effective manner that supports the military mission and protects the health and safety of the occupants and employees (DoD Instruction 4715.3, Section 4.3.2).
- ICRMPs shall be prepared, maintained, and implemented for all lands and waters under DoD control that contain cultural resources (DoD Instruction 4715.3, Section 4.3.3).

Because the authority and guidance for natural and cultural resources management programs on military installations are derived from separate sets of legislation and regulatory requirements, INRMPs and ICRMPs are often developed as separate management documents. In accordance with DoD Instruction 4715.3, which calls for the development of separate INRMP and ICRMP management documents, each branch of the armed services has developed instructions for implementing the required natural and cultural resources management programs. Guidance for preparing ICRMPs for Air Force and Marine Corps installations are found in AFI 32-7065, Cultural Resources Management, and Marine Corps Order P5090.2A, Environmental Compliance and Protection Manual.

Work on the development of an independent ICRMP for the BMGR was under way by the time the MLWA of 1999 was enacted. In order to comply with the MLWA of 1999, which requires that the INRMP for the BMGR provide for the proper management and protection of both natural and cultural resources, the preliminary cultural resource management goals identified in the ICRMP have been adopted in this EIS for the INRMP. The ICRMP goals, in no particular order of priority, include:

- Goal 1. Support military operations through proactive management of cultural resources
- Goal 2. Fulfill legal obligations for protection of historic properties
- Goal 3. Address Native American concerns, including disposition of cultural items

The natural resources management goals adopted for the proposed INRMP (see Section 3.2) are compatible with these cultural resources management goals as are the management alternatives studied for implementing the natural resources management goals.

The question of what constitutes sustainable public use of cultural resources on the BMGR raises an issue that is of direct relevance to the proposed INRMP. The Sikes Act provides that INRMPs must support sustainable multipurpose public use of natural resources—including hunting, fishing, trapping, and non-consumptive uses—to the extent that such use is consistent with the use of military installations to ensure the preparedness of the Armed Forces [16 U.S.C. 670a (a)(3)]. The concept of sustainable consumptive use of natural resources (such as wildlife, timber, water, or agricultural harvests) is based on the premise that these resources are generally renewable and can

be managed to provide an annual or periodic yield of goods, services, and direct and indirect benefits into perpetuity (DoD Instruction 4715.3, Subparagraph E3.1.26). Cultural resources, however, are not renewable, are in finite supply, are often readily susceptible to damage or loss, and, except in rare circumstances, cannot be recovered or restored once damaged. Because of these characteristics, the broad body of federal laws, regulations, and other forms of guidance addressing management of cultural resources on military installations and other federal lands has stressed the need to protect, curate, and interpret rather than use these resources (see Table 1-4). The concept of sustainable consumptive use has not been recognized as being compatible with cultural resource management requirements.

Non-consumptive use of cultural resources is also a problematic concept because of the vulnerability of these resources to physical damage, loss of historic information potential, or damage to or desecration of their cultural or religious values. In general, use of culture resources on federal lands has been permitted only in terms of the public benefits that can be derived from non-consumptive viewing and interpretation of these resources in place. In some cases, exceptional prehistoric or historic sites, such as Casa Grande NM or the Yuma Territorial Prison State Historic Park, are developed to provide a protective interpretive setting that encourages and sustains non-consumptive public enjoyment of these cultural resources without causing further deterioration of the site.

Park or park-like development and interpretation are not appropriate, however, for most of the cultural resource artifacts and sites found in backcountry settings such as the BMGR. Interpretive development is also a management application of limited usefulness because such developments may harm the historic context in which many cultural resources are found and, thus, diminish their overall quality or value. In addition, such developments are expensive to establish and maintain, and may be more likely to diminish rather than promote the security of artifacts or a site. Interpretive development may also be out of place with the undeveloped context of many backcountry settings.

Public use of culture resources in most public land locations, including the BMGR, is limited to non-consumptive viewing of artifacts or sites that may be encountered and recognized. The public is informed, however, that culture resources are protected by law from collection or intentional damage and are not to be disturbed in any way that disrupts the condition or setting in which the resources are found. These limits generally represent the extent to which public use of cultural resources may be sustained on the BMGR. There are instances where interpretation of historic military, ranching, and mining sites may be compatible with public use of the BMGR. In the majority of cases, cultural resources within the range may be sensitive or vulnerable to such a degree that they cannot be sustained without special protections from typical public use. Access to the affected cultural resource location may have to be limited or restricted in these circumstances.

## **1.7 RESPONSIBILITIES OF THE SECRETARIES OF THE NAVY AND AIR FORCE RELATIVE TO INDIAN TRIBES**

The MLWA of 1999 requires that the INRMP for the BMGR:

be developed in consultation with affected Indian tribes and include provisions that address how the Secretary of the Navy and the Secretary of the Air Force intend to—

- (I) meet the trust responsibilities of the United States with respect to Indian tribes, lands, and rights reserved by treaty or Federal law affected by the withdrawal and reservation;

- (II) allow access to and ceremonial use of sacred sites to the extent consistent with the military purposes for which such lands are withdrawn and reserved; and
- (III) provide for timely consultation with affected Indian tribes [P.L. 106-65 §3031(b)(3)(E)(ii)].

The steps that are being taken for consulting with Indian tribes on the development of the INRMP are described in Section 1.8. This section provides an overview of how the Secretaries of the Navy and Air Force intend to meet the trust responsibilities of the United States relative to Indian tribes, lands, and treaty rights; allow tribal access to the BMGR; and provide for timely consultations with affected tribes. These issues are addressed in detail in the ICRMP that was separately prepared and reviewed and that will be incorporated by reference in the proposed INRMP, as described in Section 1.6.

The DoD has developed an American Indian and Alaskan Native Policy that establishes principles for DoD components to follow when interacting and working with federally-recognized American Indian and Alaskan Native governments (DoD American Indian and Alaska Native Policy, 1998). The preamble to the policy states:

These principles are based on tribal input, federal policy, treaties, and other federal statutes. The DoD policy supports tribal self-governance and government-to-government relations between the federal government and tribes. Although these principles are intended to provide general guidance to DoD components on issues affecting tribes, DoD personnel must consider the unique qualities of individual tribes when applying these principles, particularly at the installation level. These principles recognize the importance of increasing understanding and addressing tribal concerns, past, present, and future. These concerns should be addressed prior to reaching decisions on matters that may have the potential to significantly affect protected tribal resources, tribal rights, or Indian lands.

Among other principles, the policy declares that DoD will meet its trust responsibilities to tribes and that DoD will annually review the status of its relationship with tribes to ensure that DoD is fulfilling its federal responsibilities and addressing tribal concerns related to protected tribal resources, tribal rights, or Indian lands. To the extent consistent with the military purposes for which the BMGR lands were withdrawn and reserved, the Secretaries of the Navy and Air Force intend to fully implement the aforementioned DoD policy by protecting tribal resources; supporting tribal access to and ceremonial use of these resources; and maintaining and, as appropriate, expanding existing consultation programs with affected tribes.

The Air Force and Marine Corps recognize that many plants, animals, topographic features, water sources, and other aspects of the natural environment of the BMGR may be of cultural value to native people of the region. Proper management and protection of culturally important plant and animal species are a part of the ongoing natural resources program for the BMGR and would be continued through the proposed INRMP. Specific projects or sub-plans that may be needed for the management and protection of these species and other culturally important natural resource features or places during the first five years of implementation of the proposed INRMP have not been defined at this time, but such projects and sub-plans will be identified as appropriate in the final INRMP (see Section 1.5.5). Consultations with tribes regarding the draft ICRMP and the draft and final EISs for the proposed INRMP will offer tribes opportunities—in addition to opportunities

afforded through other consultation programs—to identify species, other natural resource features, or places within the BMGR that are culturally significant. The Air Force and Marine Corps intend to continue consultation efforts to continue to identify and address tribal concerns for culturally significant resources through the life of the INRMP. Places of cultural importance, for example traditional gathering areas, would also be treated in the ICRMP as potential historic properties. The Air Force and Marine Corps will protect information about such resources in accordance with the appropriate regulations and statutory authority.

The Air Force and Marine Corps are committed to allowing affected Indian tribes to access sacred places and traditional use areas on BMGR to the fullest extent compatible with the military mission. Requests for access within BMGR—East should be directed to the Luke AFB, 56 RMO Native American Liaison. Requests for access within BMGR—West should be directed to MCAS Yuma, Director, Range Management Department. Visits to certain military use areas within the range may be restricted to times when no hazardous training or training support activities are scheduled. Air Force or Marine Corps staff may be required to escort tribal members within these areas because of safety or security issues associated with military activities conducted within the BMGR. Specific access procedures would be developed in consultation with interested tribes.

The Air Force and Marine Corps are also committed to continuing existing consultation programs with affected Indian tribes and expanding these programs as appropriate to address emerging issues of concern to tribes. Consultations are and will continue to be initiated as early as possible in Air Force and Marine Corps planning processes. Specific guidance for these consultation programs is included in the ICRMP. Several tribal representatives have recommended shifting the emphasis of existing consultation programs from specific projects to long-range plans and programs as one means of soliciting more meaningful tribal input. A recent example of such an approach is initial consultations by the Air Force with tribes about potential improvements to BMGR—East, identified in the BMGR Mission Support Plan, to support military aircrew training. That plan identifies several weapons range upgrades and other improvements that might be needed to support anticipated pilot training objectives over the next five to seven years. Most of the recommended improvements were (and still are) at the early proposal stage when consultation was initiated and could be described in only the most general terms; project-specific consultation would be required as individual proposals are refined and other required planning steps are undertaken preceding any decisions to implement proposed improvements.

As described in Section 1.3, the IEC was established in accordance with the MLWA of 1999 to provide a forum solely for the purpose of exchanging views, information, and advice relating to the management of the natural and cultural resources within the BMGR. Membership in the IEC is limited to those agencies (federal, state, and local) and Native American tribes that may have a direct responsibility for, potential impact upon, or direct interest in the lands or resources of the range. Fifteen tribes have been invited to join the IEC and, as of March 2005, six have accepted the offer of membership.

In addition to the IEC, consultation with Indian tribes is facilitated on a frequent basis by the participation of Air Force and Marine Corps range management staff in local and regional meetings held or attended by tribal representatives in order to share information about the BMGR. For example, Air Force cultural resource staff often attends meetings of the Inter-Tribal Council of Arizona's Cultural Resource Working Group to update members on the status of surveys, proposed

field trips, and other issues. Such informal avenues are an important means of information sharing; as such, they support but do not substitute for formal consultation.

## 1.8 PUBLIC INVOLVEMENT, NATIVE AMERICAN CONSULTATIONS, AND ENVIRONMENTAL ISSUES FOR THIS EIS

### 1.8.1 Public Scoping Notification and Issues Identified

A Notice of Intent (NOI) to prepare this EIS to evaluate the effects of implementing an INRMP for the BMGR was published in the *Federal Register* on 21 July 2000 (Volume 65, Number 141, page 45361) and is included in Appendix A. The NOI provided names, addresses, and telephone numbers for points of contact at Luke AFB, MCAS Yuma, BLM, and AGFD; a brief statement regarding what the draft EIS would address; and the dates, times, and locations of public scoping meetings.

In addition to the NOI, several methods were used to invite comments from potentially affected federal, state, and local agencies, Native American Tribes, and interested non-governmental organizations and persons during the public scoping period. These methods included news releases to newspapers, radio and television stations, and magazines; newspaper display advertisements announcing the public scoping meetings; and a newsletter to about 330 individuals who expressed interest in the INRMP planning process. Public scoping meetings were held in the Arizona communities of Phoenix, Tucson, Yuma, Gila Bend, Ajo, and Sells. Additional newsletters have been periodically mailed to nearly 500 persons as the INRMP planning process has continued.

During the formal 30-day public scoping period, a total of 65 persons provided comments. About half of the comments were received from persons who attended the public scoping meetings. Some persons submitted comments more than once, which resulted in a total of 74 written and oral responses received during the scoping period. While most of the comments were brief, many of them addressed multiple issues. From the 74 written and oral responses, a total of 381 individual issue-specific comments were identified. Issue-specific comments were catalogued into categories, then further divided into subcategories (Table 1-5). The subcategories of wildlife management, recreation/permits, roads, roadless areas, plan management, off-highway vehicles, archaeology, Sonoran pronghorn/threatened and endangered species, and funding accounted for two-thirds of all the issue-specific comments.

**TABLE 1-5  
SUMMARY OF COMMENTS RECEIVED DURING PUBLIC SCOPING OR THE PUBLIC WORKSHOPS**

Comment Category	Sub-Category	Summary of Comments
Atmospheric Resources	Air Resources	<ul style="list-style-type: none"> <li>• Control excessive fugitive dust on heavily traveled roads.</li> <li>• Protect mountain vistas from visual intrusions.</li> <li>• Protect the visual quality of lands adjacent to El Camino del Diablo.</li> </ul>
	Visual Resources	
Earth and Water Resources	Mining	<ul style="list-style-type: none"> <li>• Allow continued recreation access to inactive mine sites.</li> <li>• Close inactive mines because they are too dangerous.</li> <li>• Prohibit human disturbance of mines that provide habitat for bats.</li> </ul>
	Rockhounding	

**TABLE 1-5  
SUMMARY OF COMMENTS RECEIVED DURING PUBLIC SCOPING OR THE PUBLIC  
WORKSHOPS**

<b>Comment Category</b>	<b>Sub-Category</b>	<b>Summary of Comments</b>
	Soils	<ul style="list-style-type: none"> <li>Evaluate soils to determine if BMGR activities are contributing to subsidence.</li> </ul>
	Water Resources	<ul style="list-style-type: none"> <li>Complete a watershed study of BMGR to determine the impacts to groundwater.</li> </ul>
<b>Perimeter Land Use, Encroachment, and Regional Planning</b>	Development	<ul style="list-style-type: none"> <li>Evaluate how development in the area along Interstate 8 might infringe upon the mission of the military.</li> </ul>
	Environmental Justice	<ul style="list-style-type: none"> <li>Include an environmental justice component that addresses effects on the residents from the farming communities adjacent to the BMGR.</li> </ul>
	Flight Patterns	<ul style="list-style-type: none"> <li>Keep the aircraft from flying (and refueling) over Ajo.</li> </ul>
	Immigration/Border Patrol	<ul style="list-style-type: none"> <li>Address the environmental effects associated with illegal immigrants.</li> </ul>
	Noise	<ul style="list-style-type: none"> <li>Evaluate the impacts of noise from BMGR activities on wildlife and the humans in nearby communities.</li> </ul>
	Non-withdrawn Lands	<ul style="list-style-type: none"> <li>Do not make the land surrounding the Ajo Airport a part of the Indian Reservation.</li> </ul>
	Tribal Issues	<ul style="list-style-type: none"> <li>Keep any cultural sites identified by agencies and tribal members confidential.</li> </ul>
<b>Motorized Public Access and Unroaded Area Management</b>	Off-Road Vehicles	<ul style="list-style-type: none"> <li>Prohibit off-road vehicle travel and ban off-highway vehicles and all-terrain vehicles.</li> <li>Limit off-road motorized vehicle access to major washes because this will minimize the destruction of most other natural resources.</li> <li>Allow off-road motorized public access only in major washes (nowhere else) because this will minimize the destruction of most other natural resources.</li> <li>Take archaeological sites into consideration when allowing motorized public access.</li> </ul>
	Roads	<ul style="list-style-type: none"> <li>Preserve public access to existing roads.</li> <li>Designate a road system that is the minimum necessary to achieve military purposes.</li> <li>Close redundant, unnecessary, or damaging travel routes.</li> <li>Do not reduce the road network to one or two roads because it will cause destruction of resources.</li> </ul>
	Roadless Areas	<ul style="list-style-type: none"> <li>Protect roadless and wilderness characteristics to protect the ecological health and biological diversity of the Sonoran Desert.</li> </ul>
<b>Recreation Services and Use Supervision</b>	Hunting	<ul style="list-style-type: none"> <li>Do not allow hunting of any kind.</li> <li>Preserve existing hunting access and rights.</li> <li>Address hunting of non-game species. Restrict or prohibit collection of lizards and snakes, especially rosy boas, to help prevent the degradation of wildlife habitat.</li> </ul>
	Law Enforcement	<ul style="list-style-type: none"> <li>Provide the funds necessary to train enforcement officers and to enforce management standards.</li> <li>Post signs to keep people out of safety hazard areas if off-road vehicle use is allowed.</li> </ul>
	Public Access	<ul style="list-style-type: none"> <li>Continue to allow public access on El Camino del Diablo and provide historical interpretive sites.</li> <li>Do not limit existing public access anywhere on the range.</li> </ul>

**TABLE 1-5  
SUMMARY OF COMMENTS RECEIVED DURING PUBLIC SCOPING OR THE PUBLIC  
WORKSHOPS**

<b>Comment Category</b>	<b>Sub-Category</b>	<b>Summary of Comments</b>
	Public Education	<ul style="list-style-type: none"> <li>• Develop interpretive sites at Tinajas Altas for public education.</li> <li>• Partner with Yuma County and other public agencies on funding for projects.</li> <li>• Offer public education activities or presentations regarding natural resources on the range to schools in the area.</li> </ul>
	Firewood	<ul style="list-style-type: none"> <li>• Prohibit wood collecting because there is so little wood on the range. Snags are naturally beautiful. Require recreationists to bring their own wood for campsites.</li> <li>• Allow some woodcutting, particularly for campfires in the backcountry.</li> </ul>
	Recreation/Permits	<ul style="list-style-type: none"> <li>• Maintain a permit system for recreational access.</li> </ul>
	Camping	<ul style="list-style-type: none"> <li>• Consider allowing vehicle-based camping within 100 feet of existing roads designated as open to public access.</li> <li>• Consider allowing camping in one location for 31 days to coincide with the duration of the bighorn sheep hunting season.</li> <li>• Limit camping in one location to 14 days.</li> <li>• Do not designate camping areas as this would concentrate too much activity in one area and destroy natural resources.</li> <li>• Designate certain roads as acceptable for off-road camping and prohibit off-road camping along other roads.</li> <li>• Prohibit the dumping of human waste from campsites on the range.</li> </ul>
	Recreational Shooting	<ul style="list-style-type: none"> <li>• Provide opportunities for recreational shooting on the range.</li> </ul>
<b>General Vegetation, Wildlife, Wildlife Habitat, and Wildlife Waters</b>	Conservation Biology	<ul style="list-style-type: none"> <li>• Incorporate and adopt conservation management concepts.</li> </ul>
	Fire Management	<ul style="list-style-type: none"> <li>• Do not over-manage by suppressing all fires.</li> <li>• Evaluate the threat of invasive plants for elevating the risk of catastrophic wild fires.</li> </ul>
	Livestock	<ul style="list-style-type: none"> <li>• Remove/prevent trespass livestock.</li> </ul>
	Predator Control	<ul style="list-style-type: none"> <li>• Institute predator control measures only where essential to conserve or recover endangered or declining species.</li> </ul>
	Sonoran Pronghorn and Threatened and Endangered Species	<ul style="list-style-type: none"> <li>• Consider designating seasonal refuges for Sonoran Pronghorn by limiting recreational and military activities in such areas.</li> </ul>
	Vegetation	<ul style="list-style-type: none"> <li>• Control invasive, non-native plant species, particularly buffel grass and Sahara mustard.</li> </ul>
	Wildlife Management	<ul style="list-style-type: none"> <li>• Implement wildlife management activities (including the construction of artificial water developments) only where supported by the best available science.</li> <li>• Ensure water for bighorn sheep survival.</li> <li>• Develop new water catchments in the future.</li> <li>• Conduct studies to verify whether artificial water developments are beneficial to wildlife.</li> <li>• Evaluate the potential for spreading non-native species before allowing the establishment of artificial water developments because non-native species compete with native species for survival.</li> <li>• Allow for natural population fluctuations, as this may be appropriate for the health of the ecosystem.</li> </ul>

**TABLE 1-5  
SUMMARY OF COMMENTS RECEIVED DURING PUBLIC SCOPING OR THE PUBLIC  
WORKSHOPS**

<b>Comment Category</b>	<b>Sub-Category</b>	<b>Summary of Comments</b>
<b>Miscellaneous</b>	Cultural Resources	<ul style="list-style-type: none"> <li>• Fully consider cultural resource protection and management requirements in the development of alternatives for all other resources.</li> <li>• Protect archaeological resources and inventory known sites.</li> </ul>
	Data	<ul style="list-style-type: none"> <li>• Use the best available scientific data and modern management principles relating to landscape ecology and conservation biology.</li> </ul>
	Designated Areas	<ul style="list-style-type: none"> <li>• Continue to protect areas currently designated as areas of critical environmental concern (ACECs).</li> </ul>
	Ordnance	<ul style="list-style-type: none"> <li>• Identify the impacts of ordnance on natural and cultural resources.</li> </ul>
	Plan Management	<ul style="list-style-type: none"> <li>• Develop alternatives that are consistent with the goals and management prescriptions of other federal land management in the region.</li> <li>• Identify any discrepancies, incompatibilities, and/or potential conflicts with existing land management plans for this area</li> </ul>
	Targets	<ul style="list-style-type: none"> <li>• Reevaluate the need for various targets and remove those that are no longer needed.</li> </ul>

**1.8.2 Public Workshops**

Two public workshops were conducted after the formal scoping period had closed to obtain further public input into the continuing development of the goals and alternatives for the INRMP. The first workshop was held on 18 November 2000 and the second on 20 January 2001. Both of these one-day workshops were held at the Gila Bend Air Force Auxiliary Field (AFAF) in Gila Bend, Arizona. These workshops provided considerable opportunities for discussion about resource management issues between the public attendees and the agencies responsible for natural and cultural resources on the BMGR.

The November 2000 workshop was attended by 23 members of the public together with 14 persons affiliated with the INRMP Core Planning Team agencies and their consultants. One purpose of this workshop was to review with the attendees changes that have been made to the policy-based and resource-specific management goals as a result of input during public scoping and to receive their comments on this issue. The Core Planning Team finalized the goals following the November workshop.

The primary purpose of the November workshop was to present draft alternative strategies for the management of the BMGR to the attendees and to obtain their comments on whether or not the range of alternatives presented included their personal viewpoints on how the range should be managed. The consensus from the workshop was that each individual found that his or her opinion about range management was represented by the strategies offered, although some people liked some components of one strategy for some resource management elements and components of a different strategy for other management elements. The public attendees were also asked to identify resource management elements that they felt were not included in the draft alternative strategies. As a result of this input, a resource management element regarding perimeter land use, encroachment, and regional planning was added to the list for which alternative management strategies were

needed. The Core Planning Team revised the draft alternative management strategies based on the public input received at the November workshop.

The January 2001 workshop was attended by 39 persons from the public and 19 persons affiliated with one of the Core Planning Team agencies or their consultants. This workshop had two purposes. First, the alternative management strategies that had been revised based on input from the first public workshop were presented. Alternative strategies for managing wildlife water developments had not been discussed during the November workshop, so this issue was presented and discussed with the attendees for the first time. The Core Planning Team completed final revisions to the alternative management strategies based on the public input following this workshop.

The second purpose of the January workshop was to conduct an interactive exercise with the public attendees concerning their interests in public road access within the BMGR and the implications of roads within the range for resource protection and conservation. The increasing extent and density of the road network within the BMGR had become a major resource management issue identified by the public both in scoping for the proposed INRMP and in previous BMGR management documents. The workshop was designed around maps, prepared by the Core Planning Team, that presented four draft alternative strategies for managing the road network within the range. All four strategies were based on the existing range road network but varied in terms of the extent of the network that would be retained under the final INRMP for public and agency use. At one end of the spectrum was a strategy representing the minimum road network that the Core Planning Team identified as necessary to support the ongoing military, resource management, and law enforcement missions on the range. This strategy would provide the least amount of public road access within the BMGR. The perceived trade-off of a reduced road network was a potential increase in resource protection. At the other end of the spectrum was a strategy that would retain the entire existing road network. This network would exceed current agency access but would provide the greatest degree of vehicle travel opportunities to the public. This strategy would presumably preclude some opportunities for increased resource protection by minimizing the restrictions on vehicle access to the interior of the range. The public attendees at the workshop were asked to review the four alternative strategies, provide recommendations on how the strategies might be revised to provide better balance between public access needs and resource protection requirements, and voice their support for or opposition to one or more of the strategies. The consensus among the attendees was that the four road network strategies generally represented the range of concerns about public access and resource protection. The Core Planning Team made final adjustments to the four road network strategies after reviewing both public input from the January workshop and their own agency needs for vehicular access. A summary of the public comments provided at both workshops is incorporated in Table 1-5.

### **1.8.3 Newsletters and Internet Information**

During the course of the project, newsletters were mailed to individuals and organizations expressing interest in the INRMP and EIS process. The initial newsletter was mailed to about 330 persons and the mailing list has grown as persons who attended project meetings or expressed interest in some other way were added.

The first newsletter, published in July 2000, introduced the plan to develop an INRMP and invited the public to attend one of the six public scoping meetings to provide their input to the planning process.

In early November, the second newsletter was published and provided the results of the public scoping process, explained which agencies were involved in the planning process, described some of the Marine Corps training and the recreational opportunities within BMGR—West, and invited the public to participate in a workshop to help define project alternatives.

The third newsletter was issued in January 2001. It reported the issues discussed during the November workshop and invited the public to participate in a second workshop that would primarily focus on the road network for each alternative management strategy as well as the future approach to wildlife water developments. In addition, the third newsletter introduced that The Nature Conservancy (TNC) would be providing technical support in the planning process and contributing to the protection of biodiversity within a regional context. A few of the recent and ongoing biological studies were also highlighted.

In March 2002, a fourth newsletter announced that the release of the draft EIS for the development of the INRMP had been delayed because of a lawsuit regarding the Sonoran pronghorn. It was explained that the lawsuit resulted in the need to re-evaluate certain elements of several Biological Opinions and NEPA documents, including some that directly affected the BMGR. As a result of the new Biological Opinions, the agencies proposing activities or having management responsibilities for lands within Sonoran pronghorn habitat agreed to limit recreational access within the BMGR region from 15 March through 15 July. The newsletter included a map showing these seasonal access limitations and also explained why a permit would still be required to access the portion of the Sonoran Desert NM that had once been part of the BMGR.

A fifth newsletter, released in Spring 2003, announced the release of the draft EIS for the INRMP, provided a discussion of the proposed action and its potential impacts on public access and recreation, and provided information about the public hearings on the draft EIS.

A sixth newsletter, released in Fall 2004, provided an update on the finalization of the EIS for the INRMP. The newsletter explained that the delays in the release of the final EIS were due to the decision that the Core Planning Team made to republish the entire final EIS rather than issue an “errata sheet style” final EIS. Additionally, that the Core Planning Team determined that the review of the potential impacts of the preferred alternative on cultural resources, as required under Section 106 of the NHPA should be completed before the agencies sign a ROD to conclude the NEPA process. The newsletter provided an overview of the NHPA Section 106 process reviewing the implementation of the proposed INRMP, including consultation with agencies and tribes and opportunities for public comment, and results of the review (see Section 1.10). In addition, information regarding the BMGR and the INRMP planning process is maintained and updated on various Internet web sites. The Luke AFB web site provides the most comprehensive information about the BMGR (available at [www.luke.af.mil](http://www.luke.af.mil) by clicking on Barry M. Goldwater Range). Information available at this site includes an overview of the BMGR physical setting, range renewal, archaeological resources, public outreach, range operations, natural resources, and range history. Copies of certain documents are also available at this Internet site and include the community report summarizing the LEIS for the renewal of the BMGR land withdrawal, the MLWA of 1999, a primer on the purpose of and process of developing an INRMP, the alternative strategies for future BMGR management as presented at the 20 January 2001 public workshop, and other related EAs. Information about public meetings regarding BMGR management is also announced on the Luke AFB BMGR web page.

Some summaries regarding BMGR-related meetings are available on the BLM's Phoenix Field Office web site along with the BLM's report to Congress for the BMGR non-renewed parcels study. The web site for MCAS Yuma also provides information about the BMGR including how to obtain a range access permit and the rules for BMGR visitors.

#### **1.8.4 Native American Consultation**

Potentially interested Native American tribes and groups throughout Arizona, as well as tribes in California and New Mexico with a stated interest in the BMGR, were provided with information about the proposed INRMP development process and invited to participate. INRMP newsletters were sent to tribal representatives. Before the first scoping meeting, 56 RMO sent letters to tribal leaders informing them that the Air Force and Marine Corps were beginning the process of soliciting input and developing an INRMP and inviting them to participate in the preparation of the INRMP. One of the scoping meetings was held in Sells, Arizona on the Tohono O'odham Nation. Later, tribal leaders were invited to attend or send representatives to workshops and also were asked to identify other avenues, such as briefings to tribal councils or other bodies or field visits to places of interest or concern on BMGR, that would facilitate their participation in the process.

Because the Air Force and Marine Corps recognize that many plants, animals, topographic features, water sources, and other aspects of the natural environment have cultural value for the native people of the region, a series of questions were posed in a effort to identify issues of concern, including particular resources, resource management, and access to places of importance on the BMGR. These questions and issues included:

- Identify plant or animal species, natural features, areas, or environmental zones that are of particular concern to your community or tribe.
- Do you have specific concerns about past natural resource management activities, including public use of or impacts to natural resources on BMGR?
- Please describe any resource management or land-use/access practices you wish to recommend. These may apply to the entire BMGR or may be resource-specific.
- Identify areas of BMGR to which your tribe or community needs access for traditional practices (such as traditional plant gathering areas). How should arrangements for access be made?
- How would you/your community like to participate in natural resource management programs on BMGR in the future? Some examples are: participating in monitoring programs, reviewing proposals for natural resource projects, and participating in project-related field work.

A summary of comments received as a result of Native American consultation are:

- Continue efforts to preserve and protect cultural resources and, in particular, continue to involve tribes in the cultural resource aspects of the plan
- Prohibit off-road vehicular travel, particularly because such activity damages resources
- Ensure DoD maintains adequate cultural and biological staffing to address the complexity of the BMGR and the associated management issues
- Control recreational access to protect natural and cultural resources
- Coordinate with and involve tribes in range management activities
- Concern for tinajas and other natural water sources on the range and their development as wildlife waters

### **1.8.5 Review of the Draft EIS and Three Volume Construction of the Final EIS**

The draft EIS for the proposed INRMP for the BMGR was distributed to the public at the end of February 2003. The Notice of Availability was published in the *Federal Register* on 7 March 2003, which started the public review and comment period. This final EIS consists of three volumes. Volumes I and II remain contextually the same as the draft EIS for the INRMP. However, in accordance with 40 CFR 1503.4, some analytical supplements, improvements, or modifications and factual corrections have been made to Volumes I and II in response to comments on the draft EIS. Volume III contains a description of the public review process and participation therein, comments and responses to comments on the draft EIS, and the appendices.

When combined, the three volumes make up the final EIS. Volume I includes Chapter 1 on the descriptions of the purpose and need; Chapter 2 on the military mission and resource management setting; Chapter 3 on the proposed action, alternative management strategies, and no-action alternative; and Chapter 4 on the affected environment. Volume II includes Chapter 5, which describes the potential environmental consequences of the proposed action and alternatives on earth resources, water resources, climate and air resources, general vegetation, general wildlife and wildlife habitats, protected species, wildfire management, grounds maintenance, public utilities and transportation corridors, special management areas, outdoor recreation, public health and safety, law enforcement, perimeter and transboundary land use, camping and visitor stay limits, cultural resources, visual resources, hazardous materials and waste, socioeconomics, noise, and environmental justice. Volume II also includes Chapter 6 on cumulative effects, Chapter 7 on persons consulted, Chapter 8 on the distribution of the draft EIS, Chapter 9 on the preparers of the EIS, and Chapter 10 on references cited.

## **1.9 RESOURCE CATEGORIES TO BE CONSIDERED**

Resource categories analyzed in this EIS were determined through a consideration of the resources on the BMGR that would be affected by the proposed INRMP, the results of public scoping and public workshops, and regulatory requirements. The environmental and natural resources management elements analyzed include earth resources, water resources, climate and air resources, vegetation, wildlife and wildlife habitats, protected species, wildfire management, grounds maintenance, public utility/transportation corridors, special management areas, outdoor recreation, public health and safety, law enforcement, perimeter land use, cultural resources, visual resources, hazardous materials and waste, socioeconomics, noise, and environmental justice.

## **1.10 REQUIRED LICENSES, PERMITS, OR ENTITLEMENTS**

This EIS was prepared in accordance with the NEPA (42 U.S.C. 4321-4347, as amended), CEQ regulations for implementing the procedural provisions of the NEPA (40 CFR Parts 1500-1508), the Air Force Environmental Impact Analysis Process (32 CFR Part 989, as amended), and Marine Corps Order 5090.2A. In addition to meeting these requirements generated by the NEPA, it may be necessary for the Air Force and Marine Corps to meet additional federal compliance requirements in order to implement the plan. Those identified include the following:

- In accordance with Section 7(a)(2) of the Endangered Species Act, the Air Force and Marine Corps must consult with the Secretary of the Interior (USFWS) to ensure that

implementation of the INRMP is not likely to jeopardize the continued existence of any federally threatened or endangered species or result in the destruction or adverse modification of any habitat determined to be critical to threatened or endangered species.

- Section 106 of the NHPA requires all federal agencies to take into account the effects of their actions on properties listed or eligible for inclusion on the National Register of Historic Places and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those actions and their potential effects. Implementing the proposed INRMP is an action subject to Section 106 review. In accordance with the ACHP's implementing regulation (36 CFR Part 800), the Air Force and Marine Corps are required to consult with the Arizona State Historic Preservation Officer, concerned Native American tribes, and others, about this plan and its potential effects on eligible properties. The Air Force and Marine Corps have concluded, and the State Historic Preservation Office has agreed, that implementation of the INRMP has the potential to affect properties eligible for the National Register of Historic Places. These parties have agreed that given the extent of the affected area and the available information about historic properties, it is appropriate for the Air Force and Marine Corps to demonstrate compliance with Section 106 of the NHPA by implementing a programmatic agreement. The agreement will include a phased strategy for taking into account potential impacts on historic properties and provisions for monitoring the effectiveness of this strategy and revising it as needed.

## **1.11 PROGRAMMATIC NATURE OF THE INRMP**

Because of the particular context in which the proposed INRMP must be developed, the Core Planning Team determined that the proposed plan needs to provide a long-term strategic, rather than detailed, framework from which specific management objectives and measures may be derived and adapted over the next 19 years. Thus, the proposed INRMP is intended to be largely programmatic in nature. That is, it is generally of broad-scope, as is appropriate for a plan and program for natural and cultural resources management on the BMGR extending through the range renewal period (to 2024). While some site-specific actions may be identified, most of the proposed INRMP actions are goal-oriented protocols for resource management. This programmatic makeup supports the adaptive management approach on which the proposed INRMP is based. In this EIS, the potential environmental impacts of these proposed INRMP actions are identified and assessed in context of the individual and cumulative impacts of ongoing and reasonably foreseeable future actions at the BMGR. Further site-specific environmental analysis may be needed prior to the implementation of some of the actions covered under the selected management program as identified in Section 1.5.5.

In view of the provisions of the MLWA of 1999 and Sikes Act, the first question addressed by the Core Planning Team was to determine the level of detail and management specificity required in the proposed INRMP to guide natural and cultural resources management and sustainable public use over a planning horizon of 19 years and beyond. Important factors in the team's consideration of this question included:

- (1) the current status of the BMGR as a relatively well protected, large, principally natural area that would require protection and conservation of its various resources, some resource rehabilitation, but not major resource or ecosystem restoration programs (other than endangered species recovery);
- (2) the guidance for the proposed INRMP provided by the MLWA of 1999 and Sikes Act;

- (3) DoD ecosystem management policies and principles;
- (4) scientific differences of opinion (both inside and outside of the Core Planning Team) on what would constitute proper management and protection, including resource conservation and rehabilitation, of resources and sustainable public use;
- (5) scientific differences of opinion on what constitutes ecosystem management and specific ecosystem management requirements at the BMGR;
- (6) ongoing resource management issues at the BMGR;
- (7) the long-standing levels of public access to and use of the range; and
- (8) the Sikes Act requirement for interagency—meaning Air Force, Marine Corps, USFWS, and AGFD—concurrence.

In consideration of these factors, the consensus judgment of the Core Planning Team was that the proposed INRMP should:

- (1) provide a strategic framework that establishes prudent long-term management policies and goals for protecting, conserving, and rehabilitating natural and cultural resources and for supporting sustainable public use of those resources;
- (2) provide the flexibility necessary for adapting management to changing conditions over the next 19 years;
- (3) provide a protective and supportive framework within which the dynamic management requirements of endangered/threatened species recovery could proceed with a minimum of encumbrances over the next 19 years;
- (4) resolve specific ongoing management issues—such as regulating the road network—where action is supported by available information, resource data, and interagency consensus;
- (5) establish guidance/approaches for resolving certain management issues—such as wildlife water development—about which uncertainty/disagreement over a clear direction remains; and
- (6) maintain and promote interagency management collaboration and cooperation.

A plan based on these precepts would include a combination of both programmatic and specific management goals and objectives. Input received during scoping verified that the Core Planning Team's overall view of the proposed INRMP was an appropriate and pragmatic approach for complying with the requirements of the MLWA of 1999, Sikes Act, and other applicable laws, and for incorporating meaningful public input as to appropriate management goals and methods.