
5-MILE ZONE PROTECTIVE AND REGULATORY PUMPING UNIT RESOURCE MANAGEMENT PLAN/ ENVIRONMENTAL ASSESSMENT

YUMA COUNTY, ARIZONA



PREPARED FOR

BUREAU OF RECLAMATION
LOWER COLORADO REGION
YUMA AREA OFFICE
YUMA, ARIZONA

PREPARED BY

BUREAU OF RECLAMATION
TECHNICAL SERVICE CENTER
DENVER, Colorado

April 2004

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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REGULATORY PUMPING UNIT
RESOURCE MANAGEMENT PLAN/
ENVIRONMENTAL ASSESSMENT**

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Finding of No Significant Impact

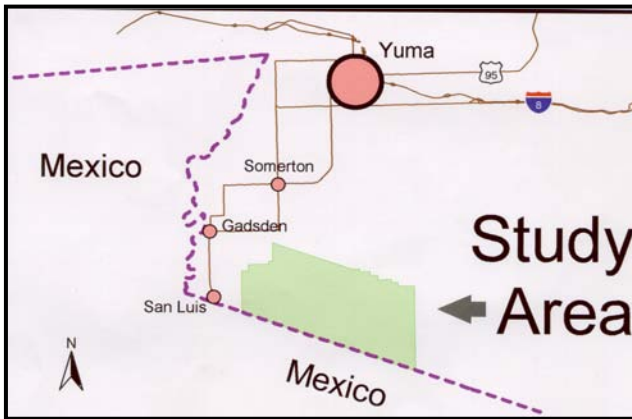
5-Mile Zone Protective and Regulatory Pumping Unit Resource Management Plan Yuma, Arizona

INTRODUCTION

This finding of no significant impact (FONSI) describes the Bureau of Reclamation's (Reclamation) environmental conclusions regarding a proposal to implement a resource management plan (RMP) in the 5-mile-zone. Reclamation prepared the *5-Mile Zone Protective and Regulatory Pumping Unit Resource Management Plan/Environmental Assessment* (RMP/EA) to evaluate the potential environmental effects of four alternatives, including a no action alternative in accordance with the provisions of the National Environmental Policy Act (NEPA). This FONSI is a separate companion document to the final RMP/EA.

Because the alternatives developed for the RMP portion of the document are general in nature, the environmental assessment (EA) portion of the document (NEPA portion) is programmatic in nature. Thus, Reclamation will complete site-specific NEPA compliance that is tiered to the final RMP/EA and this FONSI before implementation of any ground-disturbing actions covered under the RMP.

The 5-mile zone is a 5-mile-wide, 13-mile-long strip of land about 10 miles south of Yuma, Arizona, in the extreme southwestern part of the State. In 1944, the United States and Mexico signed a treaty (Treaty) requiring the United States to annually deliver 1.5 million acre-feet of Colorado River water to Mexico. In August 1973, to resolve salinity problems, the two countries reached a permanent solution in the form of Minute No. 242 of the International Boundary and Water Commission (IBWC Minute 242). IBWC Minute 242 includes the provision that the United States shall deliver approximately 140,000 acre-feet of water to Mexico annually at the southern international boundary to partially satisfy its Treaty obligations and that each country shall limit groundwater pumping within 5 miles of the international boundary near San Luis, Arizona, to 160,000 acre-feet annually. In June 1974, the Congress passed the Colorado River Basin Salinity Control Act, Public Law (P.L.) 93-320, to enable the United States to comply with its obligations under IBWC Minute 242. Section 103(a) of this act authorized the United States to construct, operate, and maintain well fields within the 5-mile zone that are capable of providing sufficient water to Mexico. These well fields are located on Reclamation lands commonly called Reclamation's 5-mile zone Protective and Regulatory Pumping Unit (PRPU).



Location and Boundary of the Study Area.

The study area includes those lands within the 5-mile zone that are east of Avenue H and are under the jurisdiction of Reclamation. Other lands within the 5-mile zone are owned or managed by the Bureau of Land Management, State of Arizona, city of San Luis, or private landowners and are not considered in this RMP/EA.

PURPOSE AND NEED

The purpose of the RMP is to establish a 10-year plan detailing the management framework to conserve, protect, enhance, develop, and use the natural and cultural resources within the study area.

The RMP is needed to provide decisionmakers with consistent direction and guidance ensuring that management of the natural and cultural resources within the study area is compatible with the authorized purposes of Title I of the Colorado River Basin Salinity Control Act of 1974, P.L. 93-320, as amended by P.L. 96-336 and IBWC Minute 242. Further, the RMP is needed to provide decisionmakers and planners with consistent direction and guidance in resolving land and water use issues and concerns within the study area related to conflicts between the need to accommodate development in San Luis, Arizona, address increasing public demand, and the management of cultural and natural resources.

ALTERNATIVES CONSIDERED

Reclamation developed three action alternatives (i.e., alternatives that prescribe a change in resource management in the study area). In addition to the action alternatives, Reclamation also formulated a No Action Alternative, as required by the Council on Environmental Quality regulations implementing NEPA. The No Action Alternative describes the management of the study area if Reclamation does not implement an RMP for the 5-mile zone.

Four alternatives were considered in detail: the No Action Alternative (Alternative A), Natural Resources Conservation/Protection Alternative (Alternative B), Recreation, Community, and Commercial Development Alternative (Alternative C), and Natural Resources Conservation/Protection with Limited Recreation, Community, and Commercial Development (Alternative D).

Preferred Alternative

The Natural Resources Conservation/Protection with Limited Recreation, Community, and Commercial Development (Alternative D) was selected as the preferred alternative. Under the preferred alternative, Reclamation resource management policies and practices within the study area would change. Reclamation will authorize limited use and consider limited land exchanges/transfers within the study area to accommodate limited recreation, community, and commercial activities. These uses will be limited to maintain Reclamation's capability to meet water deliveries to Mexico, in accordance with Treaty obligations, and conserve flat-tailed horned lizard habitat, pursuant to the *2003 Flat-Tailed Horned Lizard Rangewide Management Strategy*. Chapter IV of the RMP/EA provides a detailed description of Alternative D.

ENVIRONMENTAL COMMITMENTS

Because the EA portion of the RMP is programmatic in nature, Reclamation recognized the difficulty of establishing site- or project-specific environmental commitments to avoid and mitigate, as appropriate, potential impacts to cultural and natural resources in the study area that may be associated with implementation of the RMP under Alternative D. Therefore, Reclamation developed and included comprehensive guidance and principles for establishing environmental commitments for inclusion in site- or project-specific NEPA documents that will be tiered to the final RMP/EA. Details pertaining to environmental commitments are included as a separate section in the RMP/EA and includes guidance specific to the following resource areas.

- ❖ Implement control measures to minimize impacts on **Air Quality**.
- ❖ Prevent **Soil** erosion related to proposed projects.
- ❖ Implement controls, limit **Land Use** conflicts, and avoid adverse impacts to cultural and natural resources.
- ❖ Monitor **Groundwater** levels and quality and establish best management practices, as needed, to avoid over withdrawals and degradation.
- ❖ Implement measures to support protection and recovery of the **Flat-Tailed Horned Lizard** and other **Special Status Species**, including consultation under the provisions of the **Fish and Wildlife Coordination Act** and the **Endangered Species Act**.
- ❖ Consider carrying capacity, strict design criteria, potential user conflicts, and bilingual concerns prior to development of **Recreation** facilities.
- ❖ Consult with the State Historic Preservation Officer and Indian tribes, and conduct **Cultural Resources** surveys prior to implementation of project specific activities.
- ❖ Based on consultation, determine measures to avoid impacts to **Indian Sacred Sites** and avoid, mitigate, or compensate for any adverse impacts to **Indian Trust Assets**.

SCOPING AND PUBLIC REVIEW

Throughout the development of this RMP/EA, Reclamation made a concerted effort to involve interested parties, including agencies, Indian tribes, special interest groups, and individuals, in the planning for the environmental, land, recreation, and wildlife resources within the study area.

The public scoping process for this RMP/EA included individual agency meetings and several open house forums. Press releases announcing the open houses were sent to local media. Bilingual assistance was available at the open houses, and Spanish documentation was provided during the public scoping process, when requested.

At each open house, Reclamation provided pertinent information to the public and solicited public issues and concerns about the existing and future management of the study area. Reclamation used the input garnered from public and interested agencies to formulate the four alternatives considered. Once the alternatives were developed, Reclamation sent descriptions to those on the mailing list and held an open house to seek further input. Reclamation considered all comments received during initial scoping and development of the alternatives.

On August 25, 2003, the draft RMP/EA was sent to those on the mailing list for review and comment. A detailed description of the public scoping process and proceedings are described in chapter 1, and copies of comment letters are included as an appendix to the RMP/EA. Comments received on the draft RMP/EA were considered in preparing the final RMP/EA. The final RMP/EA will be available on the internet and mailed to those on the distribution list. A news release announcing its availability will be sent to local media.

Reclamation will provide for future public involvement opportunities associated with implementing some of the management actions in the RMP through the PRPU study area working group and public involvement activities associated with future RMP-related NEPA compliance requirements.

COORDINATION

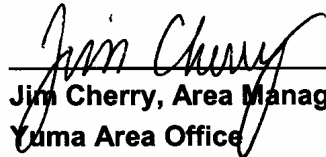
In the course of preparing the RMP/EA, Reclamation conducted consultation and coordination in accordance with the following laws and requirements. Chapter I of the RMP/EA provides detailed information pertaining to specific coordination efforts.

- ❖ National Historic Preservation Act of 1966, as amended
- ❖ Fish and Wildlife Coordination Act of 1958, as amended, and Endangered Species Act of 1973, as amended
- ❖ Indian Trust Assets
- ❖ Adjacent Landowners

FINDING

Reclamation analyzed, and the EA portion of the RMP/EA documented, the potential environmental and social impacts of the proposed action on the following: air quality, noise, soils, land use and transportation, groundwater, vegetation and wildlife, special status species, recreation, visual resources, economics, cultural resources, Indian sacred sites, Indian trust assets, and environmental justice. The results of the analysis determined that implementation of the 5-Mile Zone Protective and Regulatory Pumping Unit Resource Management Plan, as described under the Natural Resources Conservation/Protection Alternative (Alternative D), would not have significant impacts on the human and natural environment.

Approved:

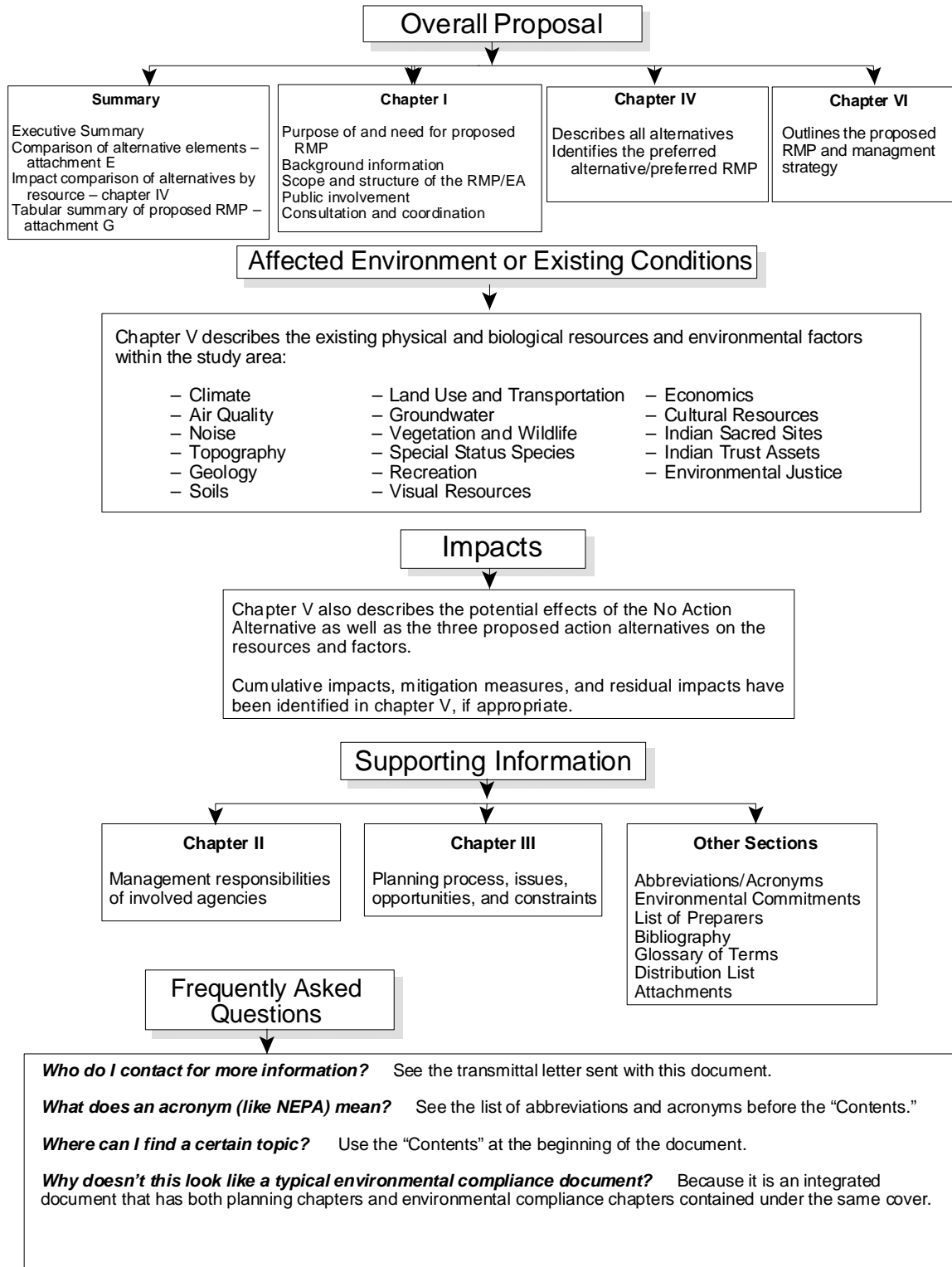


Jim Cherry, Area Manager
Yuma Area Office

3-18-04
Date

How to Read This Resource Management Plan/ Environmental Assessment

This resource management plan (RMP)/environmental assessment (EA) is an integrated planning and National Environmental Policy Act compliance document. The schematic below will help you locate the information you are most interested in.



Executive Summary

The Bureau of Reclamation (Reclamation) prepared this resource management plan and environmental assessment (RMP/EA) for certain Reclamation lands within the 5-mile zone, a 5-mile-wide, 13-mile-long strip of land about 10 miles south of Yuma, Arizona, in the extreme southwestern part of the State. The Southerly International Boundary (SIB) between the United States and Mexico forms the 5-mile zone's southern boundary. The 5-mile zone's northern boundary parallels its southern boundary. From its western boundary, formed by the limitrophe section of the international boundary,¹ the 5-mile zone extends 13 miles southeast to the boundary of the Barry M. Goldwater Range.

Specifically, this planning effort addresses those lands within the 5-mile zone that are east of Avenue H and are under the jurisdiction of Reclamation (study area). The study area is commonly called Reclamation's Protective and Regulatory Pumping Unit (PRPU) and encompasses approximately 30,200 acres. Other lands within the 5-mile zone are owned or managed by the Bureau of Land Management (BLM), State of Arizona, city of San Luis, or private landowners. The city of San Luis is located in the southwestern portion of the 5-mile zone.

BLM will address, in a separate resource management plan, the Reclamation lands that it manages along the Colorado River.

PROPOSED FEDERAL ACTION

Preparation and implementation of an RMP is a Federal action that is intended to direct the management of resources within the study area to maximize overall public and resource benefits for the next 10 years. The National Environmental Policy Act (NEPA) requires Federal agencies to consider the potential effect(s) of a Federal action on the environment before implementing the proposed action. Therefore, Reclamation used a planning process and an appropriate level of environmental analysis to develop this RMP/EA. Once Reclamation adopts the RMP/EA, it will be used as the framework to manage lands within the study area.

PURPOSE OF AND NEED FOR ACTION

The purpose of this RMP is to establish a 10-year plan detailing the management framework to conserve, protect, enhance, develop, and use the natural and cultural resources within the study area.

¹ "Limitrophe" refers to the international boundary between the United States and Mexico formed by the Colorado River.

The RMP is needed to do the following:

- ~ Provide decisionmakers with consistent direction and guidance to successfully manage the natural and cultural resources within the study area.
- ~ Ensure management of the natural and cultural resources are compatible with the authorized purposes of Title I of the Colorado River Basin Salinity Control Act of 1974, Public Law 93-320, as amended by Public Law 96-336.
- ~ Resolve land and water use issues and concerns within the study area related to the growth of the city of San Luis, Arizona, and surrounding area.
- ~ Address the increasing demand for public use of the resources within the study area while protecting and enhancing the natural and cultural resources.

AUTHORITY

Title 28 of Public Law 102-575, Section 2805 (106 Statute 4690, Reclamation Recreation Management Act of October 30, 1992) provides Reclamation with authority to prepare resource management plans.

PUBLIC INVOLVEMENT

Throughout the development of this RMP/EA, Reclamation made a concerted effort to involve interested parties, including agencies, special interest groups, and individuals, in planning for the environmental, land, recreation, and wildlife resources within the study area.

CONSULTATION AND COORDINATION

Reclamation also conducted agency consultation and coordination in the course of developing this document, including consultations required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations; the Fish and Wildlife Coordination Act of 1958, as amended; and the Endangered Species Act of 1973, as amended. Reclamation also consulted with the Bureau of Indian Affairs and area tribes about Indian trust assets within the study area. In addition, Reclamation contacted several adjacent landowners and gathered information about existing and future uses of those lands.

RESPONSIBILITIES OF DIFFERENT MANAGEMENT ENTITIES IN THE STUDY AREA

Reclamation maintains primary jurisdiction of the lands and associated resources within the study area; however, other entities may have some limited involvement in managing the study area. Some of these entities include the following.

International Boundary and Water Commission

The International Boundary and Water Commission (IBWC) is responsible for the demarcation of all international boundaries and any water or boundary issues. The IBWC is responsible for annual reports that address the amount of water pumped from Reclamation wells within the study area, as well as the amount of water pumped from wells by other entities and individuals within the study area.

United States Border Patrol

The primary mission of the United States Border Patrol is the detection and apprehension of illegal aliens and smugglers of aliens at or near the international land boundary.

Arizona Game and Fish Department

The Arizona Game and Fish Department (AGFD) has management authority of the State's wildlife, which is held in trust for the citizens of the State of Arizona.

Yuma Area Water Resources Management Group

The Yuma Area Water Resources Management Group (YAWRMG) includes representatives from major water entitlement holders, suppliers, and managers in the greater Yuma area. The group includes irrigation districts, municipalities, and governmental agencies, such as Reclamation. YAWRMG's objective is to more effectively manage and use the water resources available to the greater Yuma area while meeting treaty water quality and salinity requirements with Mexico.

Flat-Tailed Horned Lizard Interagency Coordinating Committee

This committee developed a Flat-Tailed Horned Lizard Management Strategy (Rangewide Management Strategy) (last revised in May 2003) for the flat-tailed horned lizard in the United States. Reclamation manages the approximately 16,000 acres of flat-tailed horned lizard critical habitat (Yuma Desert Management Area) within the study area pursuant to this Rangewide Management Strategy.

ADJACENT LAND USES

Federal, State, and local government entities manage lands adjacent to and near the study area. BLM, the U.S. Air Force, and the U.S. Navy administer Federal lands adjacent to and near the study area. BLM manages the lands for multiple use and is responsible for managing a wide variety of renewable and nonrenewable resources. As an agency, some of the resources it manages are soils, water, grazing, minerals, wildlife species and habitat, recreation, off-highway vehicles, and heritage resources. The Air Force and the Navy administer lands that primarily support national defense purposes. They administer other lands to manage and protect natural and cultural resources.

The State of Arizona administers several sections of lands adjacent to or within the study area. These lands are used primarily for open space, recreation activities such as hunting, and for agriculture through leases with private parties.

Local government entities, such as the city of San Luis, city or county of Yuma, or private nonprofit organizations, such as the Greater Yuma Port Authority, manage other lands adjacent to the study area. These lands are used primarily for residential and industrial uses while maintaining adequate open space for public recreation.

LAND USE PLANNING PROCESS

Reclamation followed an established land use planning process to prepare this RMP/EA. This process focuses on resolving issues that arise over the use and management of public lands and resources. A planning issue can be defined as an unrealized opportunity, an unresolved conflict or problem, an effort to implement a new management program as a result of new initiatives or laws and regulations, or a resource or public use value being lost. Not all issues are related to resource management; therefore, an RMP/EA cannot resolve all issues; some must be resolved administratively.

For this RMP/EA, Reclamation identified issues concerning the conflicting demands for consumptive and non-consumptive uses of the land. The primary challenge is to protect natural and cultural resources while allowing uses that have a minimum effect on these resources. Reclamation used three areas of investigation to identify planning issues, opportunities, and constraints:

- ~ Public involvement
- ~ Collection and evaluation of existing resource data
- ~ Review of its internal programs and policies

Similar issues were grouped into issue categories. This RMP/EA addresses the following seven issue categories:

- ~ Land use

- ~ Water use
- ~ Partnerships
- ~ Natural and cultural resources management
- ~ Public information and education
- ~ Recreation management
- ~ Health and safety

MANAGEMENT OPPORTUNITIES

Management opportunities exist within the study area to protect, enhance, and interpret the natural resources; to provide a range of recreation opportunities and facilities, while not adversely affecting existing natural resources; and to evaluate, protect, and interpret cultural resources for public education and enjoyment. Partnership, interpretation, and cost-share funding opportunities are also available.

MANAGEMENT CONSTRAINTS

When agencies address management changes and other actions, they are constrained by their respective legislative authorities, budgets, personnel, current policies, and environmental limitations. The ability of land management agencies to manage environmental and recreational resources will always depend on maintaining sufficient personnel and on the ability of the agencies to obtain adequate funding to operate and maintain facilities and programs, as well as to protect and enhance existing opportunities and resources.

ALTERNATIVES

Reclamation developed three action alternatives (i.e., alternatives that prescribe a change in resource management in the study area). In addition to the action alternatives, Reclamation also formulated a No Action Alternative, as required by the Council on Environmental Quality regulations implementing NEPA. The No Action Alternative describes the management of the study area if an RMP were not implemented.

Under Alternative A (No Action Alternative), Reclamation resource management policies and practices within the study area would not change. Management actions to implement programs and policies would occur on a case-by-case basis to meet Federal, State, and local laws and regulations. Reclamation's capability to meet its water delivery obligations to Mexico would be maintained. Land use authorizations, such as licenses, leases, and permits, would be issued, as currently, on a case-by-case basis.

Under Alternative B (Natural Resources Conservation/Protection Alternative), Reclamation resource management policies and practices within the study area would change. Management actions would be implemented that would protect and enhance natural and cultural resources within the study area. In particular, flat-tailed horned lizard habitat protection would be maximized, pursuant to the 2003 Flat-Tailed Horned Lizard Rangewide Management Strategy. Reclamation's capability to meet its water delivery obligations to Mexico would be maintained. Existing second-party land uses would be scrutinized and eliminated when possible. Public access and recreational use within the study area would be limited to benefit natural and cultural resources. Recreational off-highway vehicle (OHV) use would be eliminated.

Under Alternative C (Recreation, Community, and Commercial Development Alternative), Reclamation resource management policies and practices within the study area would change. Public access and recreational use within the study area would be maximized. Opportunities for nature study, hiking, wildlife observation, camping and day use, and OHV use would be provided to the greatest extent possible, while adhering to the guidance and direction contained in the 2003 Flat-Tailed Horned Lizard Rangewide Management Strategy. Reclamation's capability to meet its water delivery obligations to Mexico would be maintained. Licenses, leases, permits, and other land use authorizations would be issued when compatible with public use of Reclamation lands. Areas deemed appropriate for community expansion, such as utility corridors, transportation routes, community open space, airport, landfills, sewage disposal sites, and recreation and leisure facilities, would be accommodated, as appropriate. Land exchanges or transfers within the study area would be encouraged.

Under Alternative D (Natural Resources Conservation/Protection with Limited Recreation, Community, and Commercial Development), Reclamation resource management policies and practices within the study area would change. Land use authorizations would be issued on a limited basis for recreation, community, and commercial developments while maintaining Reclamation's capability to meet its water delivery obligations to Mexico, protecting the natural and cultural resources, and conserving flat-tailed horned lizard habitat, pursuant to the 2003 Flat-Tailed Horned Lizard Rangewide Management Strategy. Land exchanges or transfers within the study area would be considered on a limited basis either to protect or enhance the natural or cultural resources in the eastern portion of the study area or to accommodate recreation, community, or commercial developments in the western portion of the study area.

EFFECTS OF THE ALTERNATIVES

No Action Alternative (Alternative A)

Under Alternative A (No Action Alternative), existing air quality conditions would continue. Continued unrestricted OHV use and new developments (roads and facilities) could lead to increased noise and increased wind erosion of soils.

Land use authorizations would continue to be issued on a case-by-case basis, which could lead to conflicting land uses; allow social, physical, environmental, or facility carrying capacities to be exceeded; adversely affect natural or cultural resources, or adversely affect Reclamation's ability to protect PRPU project purposes. Unrestricted OHV use would result in continued adverse effects. Construction of primary roads would be limited to those already under consideration and would meet the public's need and demand for access.

Under Alternative A, if groundwater were used to meet the water needs of new developments, the aquifer could be lowered. However, the quantities needed should not adversely affect Reclamation's ability to meet its water delivery obligations to Mexico, unless total pumpage for the 5-mile zone approaches 160,000 acre-feet per year, the limit stipulated by Minute No. 242 of the International Boundary and Water Commission. Moreover, if the water supply is obtained from outside the study area, groundwater within the study area should not be affected.

Wildlife and vegetation would continue to experience habitat loss and degradation, and special status species would continue to experience direct injuries, habitat loss, and degradation.

Public demand for developed and urban recreation facilities and opportunities would go unmet. Additionally, the quality of the recreational experience for those visitors seeking solitude and nature study most likely would decline, and opportunities to interpret the desert environment to further the appreciation and protection would go unrealized. Visual quality could be expected to gradually degrade. New development would continue to foster economic growth.

Adverse effects on cultural resources that might be occurring under existing, largely unregulated land uses would continue. Under normal circumstances, Indian sacred sites would not be affected. However, unauthorized public use would still have the potential to adversely affect these sites. Indian trust assets would not be affected.

Existing environmental justice conditions in the area would continue.

Natural Resources Conservation/Protection (Alternative B)

Alternative B would provide the maximum benefits for air quality among all the alternatives because of increased vegetative cover, fewer roads, and less development, leading to fewer airborne particulates. Noise levels would decrease because recreational OHV use would be eliminated and less development would be allowed.

The effects on soils would be the same as under Alternative A, except that eliminating recreational OHV use would decrease wind erosion of soil in denuded areas.

Fewer overall land uses would be allowed, and the community need for land uses and recreation would be less accommodated than under the other alternatives. Authorized land uses would be compatible with natural and cultural resources and should not adversely affect them.

Alternative B would provide for no secondary road construction and maintenance, and public demand for access would be minimally met.

Effects on groundwater availability would be similar to Alternative A. If the Hillander "C" tract were to be exchanged or transferred and removed from agricultural production, groundwater quality in the area would improve.

Alternative B would provide maximum benefits for vegetation and wildlife because of improved habitat protection and restoration, and the factors that cause mortalities and injuries of special status species would be reduced because of habitat protection and enhancement measures.

Public demand for developed, dispersed, and urban recreation facilities and opportunities, including OHV use, would go unmet. Many recreation users could be displaced to other areas. Interpretation and management of natural and cultural resources would emphasize proper use of the resources and protect resources by restricting access. This alternative would best protect the visual quality of the study area.

Land transfers or exchanges could result in decreased agricultural production and, thus, could adversely affect the agricultural sector of the economy. Eliminating existing land use authorizations could adversely affect the regional economy, depending on the type of authorization.

Alternative B would benefit cultural resources and Indian sacred sites because eliminating recreational OHV use would reduce unauthorized incursions onto the land. Intensive surveys for cultural resources also would be required. Indian trust assets would not be affected.

Any decrease in agricultural production could adversely affect minority farm workers. Water stations could benefit illegal immigrants, as well as others needing water in the study area.

Recreation, Community, and Commercial Development (Alternative C)

Alternative C would result in the greatest potential adverse effect on air quality among all the alternatives because of development of more unsurfaced roads and parking areas and increased industrial and vehicular emissions.

Alternative C also would have the greatest adverse effect on noise levels among all the alternatives because of development of new facilities and increased vehicle use of new and existing roads and OHV areas.

The effects on soils would be the same as under Alternative A; in addition, increased protection would be needed to prevent soil erosion during construction of facilities.

The comprehensive land use strategy under Alternative C would maximize recreation, community, or commercial development, which would provide the maximum benefit to nearby communities. Less land would be protected for natural and cultural resources. Primary and secondary road development would be allowed within the study area, which would allow public demand and need for access to be fully met.

If new developments rely on groundwater, groundwater availability potentially could decrease, and groundwater quality could be adversely affected. However, if the Hillander "C" tract were to be exchanged or transferred and removed from agricultural production, groundwater quality in the area would improve.

Vegetation and wildlife would be adversely affected under Alternative C because the factors that cause mortalities, injuries, habitat loss, and degradation would significantly increase.

Public demand for all types of recreation facilities and opportunities, including urban recreation and open space, would be most fully met. However, users seeking solitude, OHV users, and hunters could be displaced to other areas. Carrying capacities may be exceeded to the point that user conflicts may increase. This alternative would have the greatest adverse effect on visual quality among all the alternatives.

The comprehensive land use strategy would encourage commercial development but provide management guidance, which would provide more security for would-be investors than Alternative A and would benefit the commercial and recreation services sectors of the economy. Land transfers or exchanges and new land use authorizations could adversely affect the agricultural sector of the economy. However, these adverse effects could be offset by gains to the commercial and recreation services sectors of the economy.

Although regulated, OHV use still could result in incursions onto the land which could adversely affect cultural resources and Indian sacred sites. However, these adverse effects could be offset by intensive surveys for cultural resources and an OHV use plan. Effects on Indian trust assets would be the same as under Alternative A.

Effects on environmental justice would be similar to those under Alternative B. In addition, there would be potential for short-term employment for minority or low-income individuals.

Natural Resources Conservation/Protection with Limited Recreation, Community, and Commercial Development (Alternative D) (Preferred Alternative)

Alternative D would have a greater adverse effect on air quality than Alternative B but a less adverse effect than Alternative C. Alternative D would provide for less construction

of unsurfaced roads for recreational access and community and commercial development than Alternative C but more than for Alternative B. Limited development also would mean that adverse effects on noise levels would be less than under Alternative C.

The effect on soils would be the same as under Alternative C except that eliminating recreational OHV use would decrease wind erosion of the soil in denuded areas.

The comprehensive land use strategy under Alternative D would emphasize limited recreation, community, and commercial development throughout the study area, which would benefit nearby communities slightly less than Alternative C but more than Alternative B.

Construction of primary roads and the effects of this construction would be the same as under Alternatives A and B. Secondary roads would be constructed to provide access to campgrounds, day use facilities, and trailheads. Therefore, the environmental effects resulting from the construction of secondary roads would be greater than under Alternatives A or B and the same as under Alternative C. Public demand and need for access would be met.

The effects on groundwater availability would be less than under Alternative C and greater than under Alternatives A and B. The effects on groundwater quality would be the same as under Alternatives B and C.

Alternative D would substantially improve habitat protection and enhancement and would substantially reduce the factors that cause mortalities and injuries, as well as habitat loss and degradation.

Public demand for most types of recreation facilities and opportunities would be partially met, including the demand for urban recreation and open space. Some recreationists could be displaced. Alternative D would have less of an adverse effect on visual resources than Alternative C because fewer recreation and land use facilities would be developed, resulting in fewer intrusions on the natural landscape but a greater adverse effect than Alternatives A or B. Rehabilitation of closed OHV use areas would enhance visual quality.

The effect of Alternative D on the economy of the study area would be similar to that of Alternative C, except that net gains in the commercial and recreation service sectors of the economy may be less.

The effect on cultural resources and Indian sacred sites would be the same as under Alternative B. The effects on Indian trust assets would be the same as under Alternative A.

The effects on environmental justice would be the same as under Alternative C.

PLAN SELECTION

Reclamation followed a formal planning process in preparing this planning and environmental compliance document. After analyzing the four alternatives (or management plans), Reclamation selected Alternative D (Natural Resources Conservation/Protection with Limited Recreation, Community, and Commercial Development) as the preferred management plan. The management actions should be implemented within the 10-year planning period of the RMP; however, implementation depends on, among other things, cooperation of other involved entities, cost-sharing efforts, available funding, and the success of the proposed study area working group in resolving conflicts and providing valuable input to Reclamation in its effort to prioritize the actions for funding and implementation.

Reclamation has the primary stewardship responsibility to manage the lands under its jurisdiction in accordance with existing laws, regulations, policies, and guidelines. A primary step in the planning process was to identify goals and objectives and associated management actions needed to resolve identified problems, as well as to identify actions and opportunities that would not conflict with existing laws, regulations, policies, and guidelines. In addition, many of the goals and objectives and actions were formulated in response to basic land management principles and concepts.

The basic challenge was to select those combinations of goals, objectives, and management actions that were widely accepted by the public and agency personnel, and that could be implemented without serious conflicts, within the environmental resource limitations, within the planning life of the RMP, and consistent with existing laws, regulations, policies, and guidelines, as well as with PRPU project purposes.

The RMP assumes that Reclamation will follow existing and future Federal laws, regulations, and Executive orders when managing lands within the study area.

Acronyms and Abbreviations

Act	Colorado River Basin Salinity Control Act of 1974, as amended	mg/L	Milligrams per liter
ADEQ	Arizona Department of Environmental Quality	MLWA	Military Lands Withdrawal Act
ADOT	Arizona Department of Transportation	NAFTA	North American Free Trade Agreement
AGFD	Arizona Game and Fish Department	NEPA	National Environmental Policy Act
APE	Area of potential effect	NHPA	National Historic Preservation Act
ASH	Area Service Highway	OHV	Off-highway vehicle
BIA	Bureau of Indian Affairs	OIG	Office of the Inspector General
BLM	Bureau of Land Management	O&M	Operation and maintenance
BMGR	Barry M. Goldwater Range	P.L.	Public Law
Border Patrol	U.S. Border Patrol	ppm	Parts per million
CA	Conservation Agreement	PRPU	Protective and Regulatory Pumping Unit
CD	Compact disc	Rangewide Management Strategy	2003 Flat-Tailed Horned Lizard Rangewide Management Strategy
CEQ	Council on Environmental Quality	Reclamation	Bureau of Reclamation
CFR	Code of Federal Regulations	RMP/EA	Resource management plan/ environmental assessment
CSP	Commercial Services Plan	Service	U.S. Fish and Wildlife Service
DHS	Department of Homeland Security	SHPO	State Historic Preservation Officer
District	Hillander "C" Irrigation District	SIB	Southerly International Boundary
DM 613	<i>Departmental Manual 613</i>	SIP	State Implementation Plan
EPA	Environmental Protection Agency	SR195	State Route 195
ESA	Endangered Species Act	Stat.	Statute
FWCA	Fish and Wildlife Coordination Act	study area	Protective and Regulatory Pumping Unit
GIS	Geographic Information System	TDS	total dissolved solids
GSA	General Services Administration	TEA-21	Transportation Equity Act for the 21 st Century
GYPA	Greater Yuma Port Authority, Inc.	team	A Reclamation interdisciplinary team
IBWC	International Boundary and Water Commission	toolbox	Toolbox for the Great Outdoors
IBWC 242 Minute	Minute No. 242 of the International Boundary and Water Commission	treaty	1944 Water Treaty
INA	Immigration and Nationality Act	T&E	Threatened and endangered
Land Use Plan	Lower Colorado River Land Use Plan	U.S.C.	United States Code
MA	Management area	YAWRMG	Yuma Area Water Resources Management Group
MCAS	Marine Corps Air Station	YMPO	Yuma Metropolitan Planning Organization

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Environmental Commitments

AIR QUALITY

- Paving or surfacing primary and secondary roads and parking areas to prevent dust will help reduce airborne particulates throughout the study area. Additionally, requiring dust abatement measures during construction activities and revegetating disturbed areas, including areas disturbed by off-highway vehicle (OHV) use, will reduce airborne particulates.

SOILS

- Plant native vegetation to prevent soil erosion of disturbed areas caused by construction activities. Consider soil characteristics and suitability when planning developments

LAND USE

- All land use permits will contain specific stipulations to protect existing resources, decrease potential conflicts with adjacent landowners, and prevent land use conflicts within the study area. Additionally, any developments within the Yuma Desert Management Area will require special mitigation to avoid adverse effects or loss of unique desert habitat and mitigate for habitat losses and/or impacts to flat-tailed horned lizard habitat.

GROUNDWATER

- Careful monitoring of groundwater levels and groundwater quality will be needed to evaluate current impacts and to project or estimate future groundwater levels and quality. If projected groundwater levels or groundwater quality approach unacceptable limits, appropriate mitigation will be to find an alternate surface water supply to replace all, or at least a sufficient portion of, the pumped groundwater to prevent an unacceptable drop of groundwater levels or degradation of groundwater quality.

FLAT-TAILED HORNED LIZARD AND OTHER SPECIAL STATUS SPECIES

The following environmental commitments (from the mitigation section of the Flat-Tailed Horned Lizard Rangelwide Management Strategy [Rangelwide Management Strategy]) apply specifically to protection and recovery of the flat-tailed horned lizard, but they also benefit a wide range of Sonoran Desert plant and wildlife species. This includes consultation under the provisions of the Fish and Wildlife Coordination Act and the Endangered Species Act.

- ❖ To the extent possible, surface-disturbing projects shall be located outside of the Yuma Desert Management Area, and shall be timed to minimize mortality. If a project must be located within the Yuma Desert Management Area, effort shall be made to locate the project in a previously disturbed area or in an area where habitat quality is poor. A survey of the project site shall be conducted prior to construction in order to assist in locating the project.
- ❖ Prior to project initiation, an individual shall be designated as a field contact representative. This person shall have the authority to ensure compliance with protective measures for the flat-tailed horned lizard and will be the primary agency contact dealing with these measures. The field contact representative shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
- ❖ All project work areas shall be clearly flagged or similarly marked at the outer boundaries to define the limit of work activities. All construction and restoration workers shall restrict their activities and vehicles to areas that have been flagged to eliminate adverse impacts to the flat-tailed horned lizard and its habitat. All workers shall be instructed that their activities are restricted to flagged and cleared areas.
- ❖ Within flat-tailed horned lizard habitat, the area of disturbance of vegetation and soils shall be the minimum required for the project. If possible, a maximum disturbance allowable should be specified based on project specifics. Vegetation clearing and grading shall be minimized. Equipment and vehicles shall use existing surfaces or previously disturbed areas wherever possible. Disturbance of shrubs and surface soils due to stockpiling shall be minimized.
- ❖ Existing roads shall be used for travel and equipment storage wherever possible.
- ❖ Where possible, newly created access routes shall be restricted by constructing barricades, erecting fences with locked gates at road intersections and/or by posting signs. The project proponent shall maintain, including monitoring, all control structures and facilities for the life of the project and until habitat restoration is completed.
- ❖ A biological monitor, authorized by Arizona Game and Fish Department, shall be present in each area of active surface disturbance throughout the work day

from initial clearing through habitat restoration, except where the project is completely fenced and cleared of flat-tailed horned lizards by a qualified biologist authorized by Arizona Game and Fish Department. The monitor shall perform the following functions:

- ' Develop and implement a worker education program. Wallet-cards summarizing this information shall be provided to all construction and maintenance personnel. The education program shall include the biology and status of the flat-tailed horned lizard; protection measures designed to reduce potential impacts; flag designated work areas; follow reporting procedures if flat-tailed horned lizards are encountered; and emphasize importance of exercising care when commuting to and from the project area to reduce mortality of flat-tailed horned lizards.
 - ' Ensure that all project-related activities comply with these measures. The biological monitor shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
 - ' Examine areas of active surface disturbance periodically (at least hourly when surface temperatures exceed 85 degrees Fahrenheit) for the presence of flat-tailed horned lizards. All hazardous sites such as open pipeline trenches, holes or other deep excavations shall be inspected for flat-tailed horned lizards prior to backfilling.
 - ' Work with the project supervisor to take necessary steps to avoid disturbance to flat-tailed horned lizards and their habitat. If avoiding disturbance to a flat-tailed horned lizard is not possible, or if a flat-tailed horned lizard is found trapped in an excavation, the affected lizard shall be captured by hand and relocated.
- ❖ Sites of permanent or long-term (more than 1 year) projects in the Yuma Desert Management Area where continuing activities are planned and where flat-tailed horned lizard mortality could occur, may be enclosed with flat-tailed horned lizard barrier fencing to prevent lizards from wandering onto the project site where they may be subject to collection, death or injury. Barrier fencing should be in accordance with the standards outlined in Appendix 7 of the Rangewide Management Strategy.
 - ❖ The project proponent shall develop a project-specific habitat restoration plan to be approved by Reclamation. The plan shall consider and include as appropriate the following methods: replacement of topsoil, seedbed preparation, fertilization, seeding of native species, noxious weed control and additional erosion control (see Habitat Rehabilitation, page 69 of the Rangewide Management Strategy). The objective of restoration is to return the disturbed areas to a condition that will perpetuate previous land use. Restoration shall include eliminating any hazards to flat-tailed horned lizards created by construction, such as holes and trenches in which lizards might become trapped. Disturbance of existing perennial shrubs during restoration shall be minimized, even if such shrubs have been crushed by construction activities.

- ❖ Construction of new paved roads shall include a lizard barrier fence on each side of the road that is exposed to occupied flat-tailed horned lizard habitat. Exceptions may occur in accordance with the following evaluation, to be applied separately to each side of the road. This prescription may also be applied to canals or other fragmenting projects.
- ❖ Side is made nonviable for flat-tailed horned lizards even if connected to the other site:
 - ' Compensate for the entirety of the fragmented parcel.
- ❖ Side is viable only if connected to the other site:
 - ' Compensate for entirety of fragmented parcel, or
 - ' Provide fencing and effective culverts or underpasses that will maintain connectivity.

Specifications for barrier fences is provided in Appendix 7 of the Rangewide Management Strategy. The flat-tailed horned lizard interagency coordinating committee will make the determination of flat-tailed horned lizard population viability based on the size, configuration and habitat condition of the isolated parcel, threats from adjacent lands and existing scientific evidence of edge effects on flat-tailed horned lizard.

Compensation

Pursuant to Title 43 Code of Federal Regulations and the Federal Land Policy and Management Act of 1976, actions that result in flat-tailed horned lizard habitat loss may be permitted. To mitigate such losses both within and outside MAs, compensation is charged if residual effects would occur after all reasonable on-site mitigation has been applied. Guidance for determining when compensation is required and determining compensation is in the Rangewide Management Strategy, pages 62 to 66.

Measures for Other Special Status Species

- ❖ Surveys for special status plants and animals that may potentially occur on the Yuma 5-mile zone, as listed in table V-1, shall be conducted in the proposed project area prior to authorizing any ground disturbing activities.
- ❖ Every effort shall be made to avoid disturbance to any special status species or habitat that may be located. Consultation with the U.S. Fish and Wildlife Service should be initiated.

RECREATION

- ' Recreation facility development will complement the surrounding landscape as much as practical and will follow strict design and construction criteria, guidelines, and standards.

- ~ Carrying capacity limits and user demand will be properly determined before major facilities are developed.
- ~ Bilingual regulatory and informational signage will be posted throughout the study area to inform the public of the rules and regulations governing the use of the federally owned lands within the study area.
- ~ Visitor use will be monitored to identify potential user conflicts and corrective actions to be taken if conflicts are identified.

CULTURAL RESOURCES

Reclamation will do the following:

- ~ In consultation with the State Historic Preservation Officer and area Indian tribes—and based on the Class I survey—develop a research design for conducting Class II or III surveys (1) to determine areas of high or low potential for cultural resources, including traditional cultural properties, (2) to determine sources of impacts, and (3) to define additional investigation or protective actions appropriate for each site. The plan will serve to support requests for funding to implement necessary actions.
- ~ Conduct intensive surveys of areas with high potential for cultural resources and/or any areas scheduled for ground-disturbing or potentially ground-disturbing activities to locate cultural resources. During ground-disturbing activities, Reclamation will make every effort to avoid significant cultural resources.
- ~ During construction, if cultural resources are discovered, ensure that work in the immediate areas ceases until a qualified archeologist evaluates the site, takes appropriate measures, and consults with the State Historic Preservation Officer.
- ~ Ensure that any project-specific agreements regarding cultural resources are included as specifications in construction contracts and inform construction contractors about the presence of cultural resources within or near the project area and about their protection under Federal and State laws.
- ~ When granting easements on or across Reclamation-owned lands, review the proposal for potential effects on cultural resources and ensure that the entity receiving the easement complies with all applicable cultural resource laws for any activities within the boundaries of the easement.

Specific mitigation cannot be identified until the intensive surveys are completed to determine if cultural resources are present that are eligible for the *Federal Register*. The following mitigation strategies presume that one or more archeological sites or traditional cultural properties will be determined eligible for the *Federal Register* and will be affected by the proposed action. The exact nature of mitigation will be determined in consultation with the State Historic Preservation Officer and others, as appropriate, and documented in a memorandum of agreement with the consulting and interested parties.

- ~ Periodically monitor *Federal Register*-eligible or unevaluated sites to assess impacts and the need for investigative or protection action.
- ~ Place protective materials over portions of sites affected by erosion or trail construction or use to prevent additional disturbance.
- ~ Recover site data through systematic surface collection or excavation and provide resulting reports to the professional community and interested public.
- ~ Further consult with area tribes about appropriate actions to protect endangered traditional cultural properties sites and implement those actions where reasonable and feasible.
- ~ Incorporate information about cultural resources into brochures and other educational materials created for use in the study area.

INDIAN SACRED SITES

Executive Order 13007 does not authorize agencies to mitigate for the impact of their actions on Indian sacred sites. However, it does direct agencies to avoid adverse impacts when possible. If consultations determine that adverse impacts will occur from implementation of the proposed action, then Reclamation will seek means to avoid these adverse impacts.

INDIAN TRUST ASSETS

If consultations determine that adverse impacts will occur from implementation of the proposed action, Reclamation will seek means to avoid these impacts. If adverse impacts cannot be avoided, then Reclamation will provide appropriate mitigation or compensation.

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Glossary

5-mile zone: The 5-mile-wide, 13-mile-long strip of land about 10 miles south of Yuma, Arizona, in the extreme southwestern part of the State.

5-mile zone study area: Those lands within the 5-mile zone that are east of Avenue E and under the jurisdiction of Reclamation.

acre-foot: Amount of water needed to cover 1 acre with 1 foot of water.

Affected environment: Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as the result of a proposed human action.

Air quality: Measure of the health-related and visual characteristics of the air, often derived from quantitative measurements of the concentrations of specific injurious or contaminating substances.

Aquifer: Underground water-bearing geologic formation or structure.

Archaic: In American archeology, a cultural stage following the earliest known human occupation in the New World (about 5,500 B.C. to A.D. 100). This stage was characterized by a generalized hunting and gathering lifestyle and seasonal movement to take advantage of a variety of resources.

Artifact: A human-made object.

Climate: Average conditions of the weather over a number of years.

Cone of influence (cone of depression): The depression, roughly conical in shape, produced in the water table by the pumping of water from a well.

Cooperative Agreement: Formal document that states the obligations of Reclamation to one or more other parties.

Corridor: Narrow strip of land reserved for location of transmission lines, pipelines, and service roads.

Council on Environmental Quality (CEQ): Establishes regulations for implementing the procedural provisions of the National Environmental Policy Act.

Crime Witness Protection Program: A program originally created by the Bonneville Power Administration (BPA) to protect transmission systems, substations, facilities, property, and personnel. The BPA administers the Bureau of Reclamation's program through an agreement signed in October 1998. The program offers cash awards up to \$1,000 for information leading to the arrest and conviction of persons committing crimes. Signs posted at facilities direct informants to call a toll-free number to report suspicious or criminal activity.

Cultural resource(s): Any building, site, district, structure, or object significant in history, architecture, archeology, culture, or science.

Desired Future Condition: The future condition of the study area that results from achieving the goals and objectives identified in the Resource Management Plan.

Environment: All biological, chemical, social, and physical factors to which organisms are exposed. The surroundings that affect the growth and development of an organism.

Environmental analysis: Systematic process for consideration of environment factors in land management actions.

Environmental assessment (EA): A National Environmental Policy Act compliance document used to determine if an action would have a significant effect on the human environment. If not, a finding of no significant impact is written. If so, an environmental impact statement is written

Erosion: Surface displacement of soil caused by weathering, dissolution, abrasion, or other transporting.

Executive order: A written directive of the President of the United States.

Finding of no significant impact (FONSI): A National Environmental Policy Act compliance document which affirms that an environmental assessment found that alternatives were evaluated and a proposed action would have no significant impact on the human environment.

Geographic Information System: A digital geographic database used to analyze and store data.

Geology: The science that deals with the physical history of the earth, the rocks of which it is comprised, and the physical changes which the earth has undergone or is undergoing.

Goal: A brief statement describing the end result of implementing a management action or series of actions. A goal can also be considered a desired future condition which the Bureau of Reclamation wishes to achieve within the management area.

Groundwater: Generally, all subsurface water as distinct from surface water; specifically, that part of the subsurface water in the saturated zone where the water is under pressure greater than atmospheric.

Habitat: The area or type of environment in which a plant or animal normally lives or occurs.

Groundwater mound: A portion of an unconfined aquifer with a water table elevated above that of the surrounding aquifer. It is often the result of a relatively high rate of recharge (for example, from infiltrating irrigation water) to the aquifer at the location of the mound.

Objective: A brief statement or series of statements that briefly describe an action that will achieve a specific goal identified in a Resource Management Plan.

Protective and Regulatory Pumping Unit (PRPU): The well field authorized by Section 103(a) of Public Law 93-320.

Qualitative: Having to do with quality or qualities. Descriptive of kind, type or direction as opposed to size, magnitude, or degree.

Quantitative: Having to do with quantity, capable of being measured. Descriptive of size, magnitude, or degree.

Right-of-way: A vested property right given to another entity for the use of a specified piece of land for specific purposes.

Sacred site: Any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred.

Site: In archeology, any location of past human activity.

Total dissolved solids (TDS): A quantitative measure of the residual mineral dissolved in water that remains after the evaporation of a solution. Usually expressed in milligrams per liter or parts per million. Total amount of dissolved material, organic and inorganic, contained in water.

Unconfined aquifer: An aquifer with continuous layers of materials of relatively high permeability extending from the land surface to the base of the aquifer. The upper surface of an unconfined aquifer is the water table.

Well field: Area containing one or more wells that produces usable amounts of water.

Xeriscape: Landscaping that does not require a lot of water.

Yuma Desert Management Area: 16,000 acres within the 5-mile zone study area that Reclamation manages for the flat-tailed horned lizard and as described in the 2003 Flat-Tailed Horned Lizard Management Strategy.

Distribution List

CONGRESSIONAL DELEGATION

U.S. Senators

John Kyl

John McCain

U.S. Representative

Raul Grijalva, Arizona District 7

ARIZONA STATE LEGISLATURE

Senator Robert Cannell, District 24

Representative Amanda Aquirre, District 24

Representative James R. Carruthers, District 24

All locations are in the State of Arizona, unless otherwise indicated.

INDIAN TRIBES

All locations are in the State of Arizona, unless otherwise indicated.

Ak-Chin Indian Community, Maricopa

Campo Band of Mission Indians, Campo, California

Chemehuevi Tribal Council, Lake Havasu, California

Cocopah Indian Community, Somerton

Colorado River Indian Tribes, Parker

Fort McDowell Mohave-Apache Community, Fountain Hills

Fort Mojave Indian Tribe, Needles, California

Fort Yuma Quechan Tribe, Yuma

Gila River Indian Community, Sacaton

Hopi Indian Tribe, Kykotsmovi

Hualapai Indian Tribe, Peach Springs

Pueblo of Zuni, Zuni, New Mexico

Salt River Pima-Maricopa Indian Community, Scottsdale

San Carlos Apache Tribe, San Carlos

Tohono O=Odham Nation, Sells
Viejas Tribal Council, Alpine, California
Yavapai Prescott Indian Tribe, Prescott

FEDERAL, STATE, AND LOCAL AGENCIES

Federal

Department of Agriculture

Natural Resource Conservation Service, Phoenix, Yuma

Department of the Interior

Bureau of Indian Affairs, Yuma

Bureau of Land Management, Yuma

Fish and Wildlife Service, Phoenix

Geological Survey, Tucson, Yuma

Drug Enforcement Administration, Yuma

Department of Homeland Security

Immigration and Naturalization Service, Laguna Niguel, California

Border Patrol, Yuma,

Marine Corps

Marine Corps Air Station, Yuma

Treasury Department

Customs Service, Tucson,

San Luis Port-of-Entry, San Luis

State of Arizona

Department of Corrections, Phoenix, Yuma

Department of Environmental Quality, Phoenix

Department of Game and Fish, Yuma

Department of Transportation, Phoenix, Yuma

Department of Water Resources, Phoenix

State of California

Colorado River Board, Glendale, California

State of Nevada

Colorado River Commission, Las Vegas, Nevada

Yuma County

Board of Supervisors, Yuma

Department of Development Services, Yuma

Department of Public Works, Yuma

Planning and Zoning Commission, Yuma

City of San Luis

City Administrator

Economic Development Commission

Public Works Department

Police Department

City of Somerton

Administrator

City of Yuma

Department of Community Development

Department of Economic Development

Department of Parks and Recreation

Department of Public Works

Office of the City Administrator

Libraries

San Luis Branch Library, San Luis

Somerton Branch Library, Somerton

Yuma Library, Yuma

Interested Organizations and Individuals

Arizona Public Service Company, Yuma

Barkley Family Liquidating Trust, Yuma

Border Ranches LLC, Yuma

Citizens Title and Trust, Yuma

Colvin, John, Yuma

Cuming Farms Inc., Yuma

Duran, Robert C. and Barbara, Somerton,
George, Terri, Yuma
Griffin Family Ltd. Partnership, Somerton
Griffin Ranches Inc., Somerton
Harrison, William and Leslie, Yuma,
Hawk, Michal Marie and Tim, San Diego, California
Hillander "C" Irrigation District, Yuma
Hughes, Earl and Ima, Gadsden
Hughes, Kelly E. and Sharon C., Gadsden
Kaffer, Mary, Yuma
Loo, David, New York, New York
McDonald, Herbert and Lois, Somerton
Morris, Clinton and Vera, Yuma
Natural Resource Conservation Districts, Yuma
Peach, John J., Yuma
Power Engineers, Boise, Idaho
Quintero, Enrique, San Luis
Redger, Steven, Yuma
Requena, Leonard A., Inverness, Florida
Rodriguez, Pedro, San Luis
Sam Group Investment Co., Yuma
San Luis Port LLC, Yuma
Schafer, Robert, Yuma
Seven Star Ltd. Corp., Yuma
Simpkins, Jennifer, Phoenix
United States International Boundary and Water Commission, Yuma, and El Paso, Texas
Vasquez, Pedro M., Yuma
Von Verde Ltd., Yuma
Von Verde Ltd Partnership, Yuma
Von Verde Packing House Ltd., Yuma
Mrs. West, Yuma
Yuma County Water Users' Association, Yuma
Yuma Mesa Irrigation and Drainage District, Yuma
Yuma Metropolitan Planning Organization, Yuma
Yuma Natural Resource Conservation District, Yuma