CHAPTER 1: PURPOSE AND NEED

1.1 INTRODUCTION

The U.S. Department of the Interior (USDI), Bureau of Reclamation (Reclamation) has prepared this Environmental Assessment (EA) and subsequent Resource Management Plan Amendment (RMPA) to address future Federal leaseable (e.g., geothermal, oil, gas) minerals development on Reclamation-administered lands in Eddy County, New Mexico (Figure 1-1). The lands encumbered by the EA and RMPA are part of Reclamation's Carlsbad Project, which is authorized under the Reclamation Act of June 17, 1902, and the Brantley Project Acts of 1972 (P.L. 92-514) and 1980 (P.L. 96-375). In 1905 the Reclamation Service was authorized to purchase an existing storage and irrigation system, together with its water rights, in the Pecos River Basin. The original system was constructed by a series of private entities; however, private operation of the project ended in 1904 when a flood on the Pecos River destroyed most of those facilities. The original Carlsbad Project was authorized by the Secretary of the Interior on November 28, 1905. Since that time, project facilities have been rehabilitated, enlarged, and improved under subsequent authorizations which provide for irrigation, flood control, river regulation, fish and wildlife, recreation, and other beneficial uses.

The Minerals Leasing Act of 1920, as amended, provides the Secretary of the Interior with authority to issue leases on lands where the mineral rights are held by the Federal government. This authority has been delegated to the USDI, Bureau of Land Management (BLM), a Cooperating Agency for preparation of this RMPA and EA. The RMPA will amend Reclamation's 2003 Resource Management Plan for Brantley and Avalon Reservoirs (Reclamation 2003) and only affects those lands identified as containing existing ***Unleased Federal Minerals***, as well as any future unleased mineral estate. This EA, however, is not the final review upon which approval of all proposed mineral-leasing actions on Reclamation lands in Eddy County will be based. All future, site-specific actions will receive further environmental assessments that will be tiered from this EA and RMPA, as appropriate.

1.1.1 Location

Brantley and Avalon Reservoirs are located on the Pecos River, approximately 15 miles and 5 miles, (24 kilometers and 8 kilometers) respectively, upstream from the City of Carlsbad, New Mexico (Project Area). The Project Area includes Brantley Dam and Reservoir, Avalon Dam and Reservoir, the historic McMillan Dam (now breached) and the McMillan Dam Tender's Quarters, the original McMillan Reservoir area, and the section of the Pecos River between the two reservoirs, along with the lands subject to water inundation and a surrounding buffer of land at elevations higher than maximum reservoir storage (Figure 1-2). Avalon Dam and Reservoir, the historic McMillan Dam (now breached), the original McMillan Reservoir Area, and all associated buildings are listed on the National Register of Historic Places (NRHP). The Project Area is surrounded by a mosaic of mostly

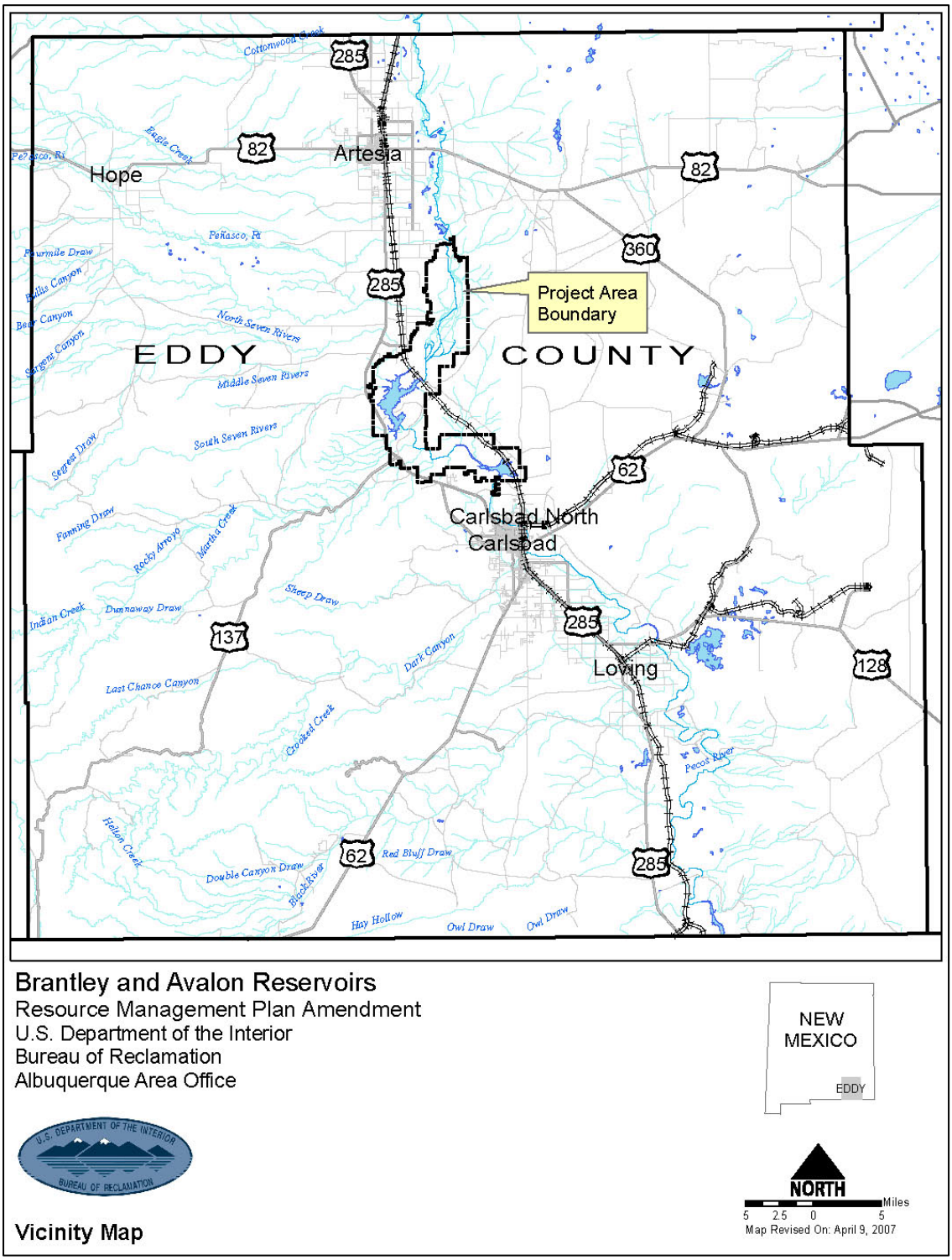

Figure 1-1. Brantley and Avalon Reservoirs Resource Management Plan Amendment (RMPA) Project Area Location Map.

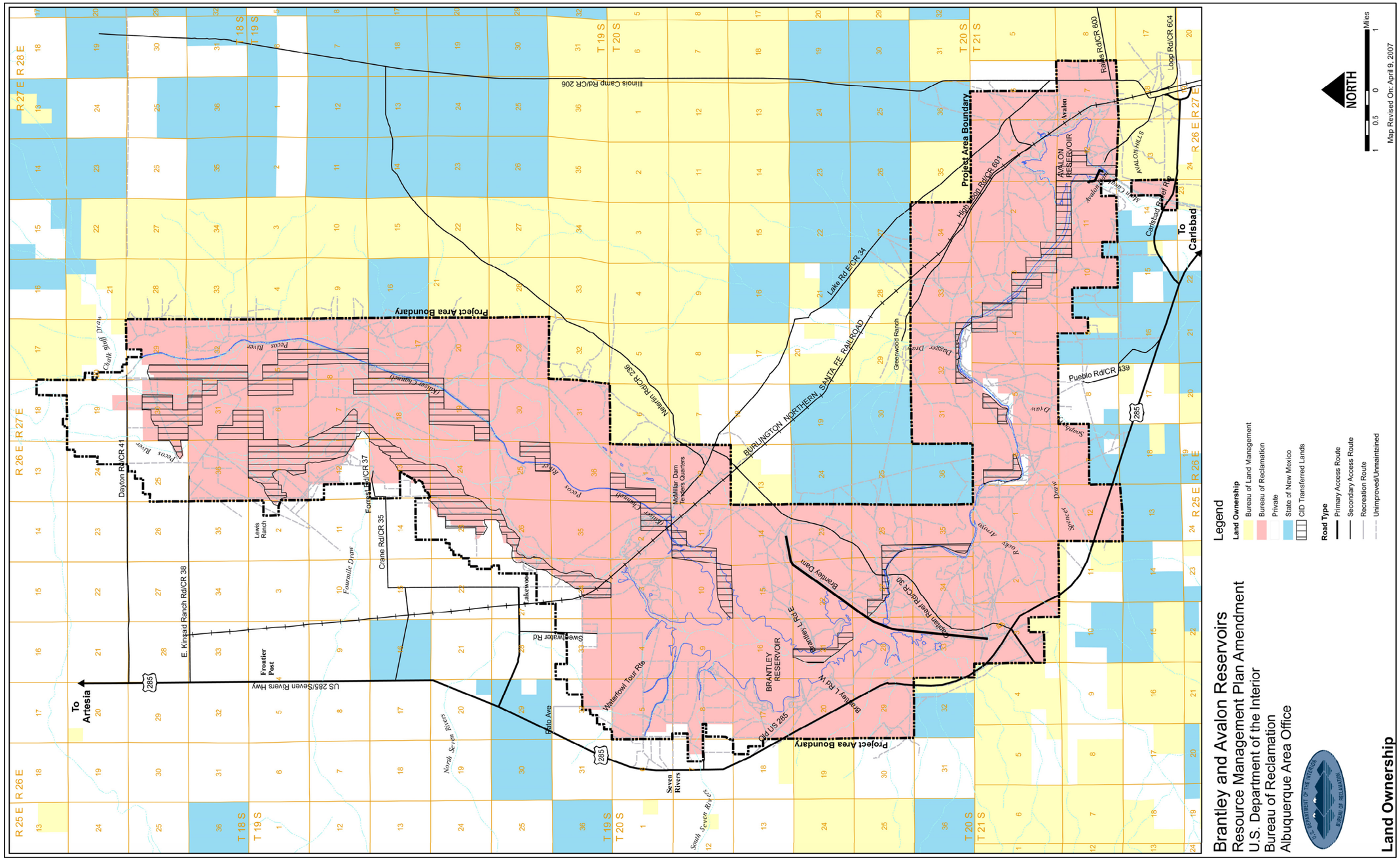

Figure 1-2. Brantley and Avalon Reservoirs Resource Management Plan Amendment (RMPA) Project Area Map.

BLM, State of New Mexico, and private lands. At Brantley Reservoir, the Project Area boundary encompasses almost 45,000 acres (18,211 hectares) of land that were acquired by Reclamation through fee purchase, condemnation, or withdrawal from public domain. At Avalon Reservoir the Project Area includes approximately 4,000 acres (1,619 hectares) of land that were acquired using similar methods. Within the Project Area boundary there are approximately 5,600 acres (2,266 hectares) of lands that were transferred to the Carlsbad Irrigation District (CID) in 2001.

1.1.2 Background

The two reservoirs are managed primarily for agricultural irrigation, but they also provide secondary flood-control, recreation, and fish and wildlife habitat benefits. Brantley Lake State Park, located on the east and west sides of Brantley Reservoir, is managed by the New Mexico State Parks Division and serves approximately 80,000 visitors annually by providing recreational activities such as camping, picnicking, boating, fishing, and swimming. Eddy County is responsible for managing lands surrounding Champion Cove at Brantley Reservoir for primitive recreational uses with no specific recreational facilities provided. The New Mexico Department of Game and Fish manages the remaining lands around Brantley Reservoir as a Wildlife Management Area, which provides hunting and fishing opportunities and improved habitat for fish and wildlife. The Seven Rivers Wildlife Management Area, located on the northwest side of Brantley Reservoir, is also managed by the New Mexico Department of Game and Fish. The lands surrounding Avalon Reservoir are managed by the CID, although there are no specific recreational facilities provided.

The oil and gas industry is a significant part of the State of New Mexico's economy, including Eddy County, and represents a major land use activity within the State. With the Project Area located above the Permian Basin, which is a rich resource for oil and gas reserves, increased interest has been expressed in exploration and production of these resources within the Project Area in recent years.

1.2 PROPOSED FEDERAL ACTION

Mineral leasing on Reclamation lands is administered by the BLM under provisions of Title 43, Subpart 3100 of the Code of Federal Regulations (CFR). Leasable minerals (e.g., oil and gas) are under discretionary authority, meaning that they are open to development through application and permitting by the BLM with concurrence by Reclamation. Except for those minerals and conditions meeting the provisions of Section 10 of the Reclamation Projects Act of 1939, leases for mineral and geothermal resources on all land acquired or withdrawn by Reclamation are issued by the BLM per an Interagency Agreement between Reclamation and BLM dated December 1982. Under this agreement the BLM will, in all issues involving mineral and geothermal leases, request that Reclamation determine whether leasing is permissible and, if so, provide any stipulations required to protect the interests of the United States. Reclamation's existing (2003) Oil and Gas Leasing Stipulations for the Project Area are presented in Appendix A.

Through the 1982 Interagency Agreement, Reclamation and the BLM agreed to coordinate on land use planning, land resource management, land conveyance and exchange, and cooperative services. The agreement brings coordinated agency efforts into compliance with existing laws and policies and provides that Reclamation will, when requested, provide expertise in the area of water resources conservation, development, and management, to be utilized by the BLM in preparing its RMPs. The agreement further provides that the BLM will, when requested, provide expertise in the areas of land, resource, forest, range, oil, gas, and mineral management, to be utilized by Reclamation when preparing its RMPs and in managing Reclamation-administered acquired or withdrawn public lands.

In further consideration of oil and gas activities on Federal lands, Section 365 of the Energy Policy Act of 2005 was signed by President George W. Bush on August 8, 2005, and a Memorandum of Understanding (MOU) executed to improve the efficiency of processing oil- and gas-use authorizations on Federal lands. The Energy Policy Act and MOU require the Secretary of the Interior and various Federal agencies to work together to further the objectives of Section 365 of the Energy Policy Act, with specific emphasis on developing measures to aid in the streamlining and coordinating of Federal permit processing for onshore oil and gas operations on Federal lands. In compliance with that requirement and to consider cumulative impacts, Reclamation is amending its existing RMP (Reclamation 2003) to appropriately evaluate future oil and gas leasing and development activities within the Project Area in order to comply with existing guidelines and laws. The proposed RMPA would affect only those lands currently identified as containing ***Unleased Federal Minerals***, or about 16 percent of the Project Area, as well as any lands within the Project Area that in the future would contain Unleased Federal Minerals (e.g., expired leases).

1.3 NEED FOR THE ACTION

Reclamation, in its 2003 RMP, evaluated the conditions for existing mineral leasing and development within the Project Area, developed additional oil and gas leasing stipulations, and recommended that such stipulations be adopted (Reclamation 2003). These recommended oil and gas leasing stipulations were consistent with the BLM's existing mineral leasing stipulations at the time. However, Reclamation did not evaluate the cumulative impacts of reasonably foreseeable future mineral leasing and development on Project Area resources in its 2003 RMP. The RMPA and the subsequent environmental review are needed to further evaluate recommended oil and gas leasing stipulations to ensure full consideration of requirements necessary to appropriately protect Project Area resources and to implement the alternatives.

1.4 PURPOSE FOR THE ACTION

In recent years the BLM has experienced a tremendous increase in interest from oil and gas development companies for new lease nominations throughout Eddy County, including the Project Area. At present the BLM is deferring new lease nominations for oil and gas development within the Project Area until the RMPA is completed. However, site-specific applications are being

considered on a case-by-case basis. Applications for oil and gas drilling activities on existing lease areas are reviewed on the ground and approved if negative effects to natural and cultural resources can be mitigated. Since Reclamation's 2003 RMP did not evaluate the cumulative impacts of reasonably foreseeable future mineral leasing and development of Project Area resources, the purpose of the RMPA is to develop appropriate guidance that will allow Reclamation and BLM to make informed decisions about oil and gas leasing and development on Reclamation-administered lands in order to comply with existing guidelines and laws.

The result of this planning process will be an RMPA that identifies the lands within the Project Area that will be subject to the proposed stipulations and made available for oil and gas development through leasing and what requirements or stipulations are needed to manage those lands and protect other resource values. Any lands identified for development will need to follow the Section 106 National Historic Preservation Act process before work begins. This includes all Federal mineral estates within the Project Area and future leases on lands conveyed to the CID in 2001. Stipulations that will be attached to future Federal mineral leases and future CID mineral leases may include, but are not limited to, controlled surface use, timing limitations, or no surface occupancy. The RMPA document also will identify the circumstances necessary for granting waivers, exceptions, or modifications to leasing stipulations.

This EA identifies the potential impacts that various alternatives for minerals leasing and subsequent development activities could have on the environment, and appropriate measures to mitigate those impacts. The primary purpose is to analyze and document the direct, indirect, and cumulative impacts of reasonably foreseeable future actions resulting from Federally authorized minerals activities. By law these impacts must be analyzed before an agency makes an irreversible commitment of resources. In the minerals program, this commitment occurs at the point of lease issuance. The purpose of preparing an EA in conjunction with the RMPA is to satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), and other associated regulations.

This EA, which is prepared to meet current requirements of the Federal minerals program, is not the final review upon which approval of all proposed actions on Reclamation lands in Eddy County will be based. Rather, the RMPA will identify lands within Reclamation's jurisdiction that are available for leasing and how those Federal minerals might be developed and managed for oil and gas activities. Decisions on all subsequent site-specific actions will be tiered from this EA. That is, additional compliance with all applicable laws and regulations, such as NEPA, Section 106 of the National Historic Preservation Act, the Clean Water Act, and the Endangered Species Act, will occur on site-specific lease/drilling proposals. However, the scope of the site-specific approval process will be streamlined and facilitated by the planning and programmatic evaluation of impacts in the RMPA and EA documents.

1.5 RELEVANT STATUTES AND REGULATIONS

A series of legal statutes establish and define the authority of the Secretary of the Interior to make decisions regarding Federal minerals leasing and development. These may be acts of authority, mandates and guidance for planning and environmental resource management, or New Mexico state statutes. The major statues relevant to this EA and the RMPA document are briefly described below.

1.5.1 General Mining Law of 1872

The General Mining Law of 1872 (30 USC 22-54) governs mining activity on public land. So many claims were filed under the General Mining Law that President William H. Taft issued a proclamation in 1909 withdrawing public land from such entry, pending the enactment of legislation to protect such lands. Protective legislation was not enacted until the Mineral Leasing Act of 1920, which established a leasing system for the acquisition of certain minerals (currently applies to coal, phosphate, sodium, potassium, oil, oil shale, gilsonite, and gas).

1.5.2 Mineral Leasing Act of February 25, 1920

This act is the primary authority under which the Federal government leases the majority of its onshore minerals. The BLM is currently responsible for leasing activities under the provisions of this act. Technical administration of leases and permits was originally the responsibility of the U.S. Geological Survey, as provided under this act. However, that responsibility was transferred to the BLM in 1982. Certain lands are closed to leasing in Section 43 (30 USC 226-3).

1.5.3 Mineral Leasing Act for Acquired Lands of August 7, 1947

The Mineral Leasing Act for Acquired Lands (Ch. 513, 61 Stat. 913; 30 USC 351, 352, 354, 359) provides that all deposits of coal, phosphate, oil, oil shale, gas, sodium, potassium, and sulphur that are owned or may be acquired by the United States and that are within its acquired lands may be leased by the Secretary of the Interior under the same conditions as contained in the leasing provisions of the mineral leasing laws. No mineral deposit covered by this section shall be leased except with the consent of the head of the Executive Department, independent establishment, or instrumentality having jurisdiction over the lands containing such deposit or holding a mortgage or deed of trust secured by such lands that is unsatisfied of record. Lessees are subject to such conditions as the Secretary of the Interior may prescribe to ensure the adequate use of the lands according to the primary purposes for which they were acquired or are being administered.

1.5.4 The Federal Onshore Oil and Gas Leasing Reform Act of December 22,1987

The 1987 Leasing Reform Act (30 USC 181, et seq.; P.L. 100-203) requires the BLM to competitively offer all public lands available for leasing prior to leasing them noncompetitively and adds environmental provisions to the leasing process. The act was a response to concerns about leasing lands at below-market rates and environmental protection. The act also provides for inspections and enforcement of regulations once operations have commenced.

1.5.5 The Migratory Bird Treaty Act of 1969

The Migratory Bird Treaty Act of 1918 (16 USC 703 et seq.) provides for the protection of migratory birds and prohibits their unlawful take or possession. In addition, Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, was signed by President William J. Clinton in 2001 and directs Federal agencies to include impacts to migratory birds in their NEPA analyses.

1.5.6 National Environmental Policy Act (NEPA) of 1969

This statute (40 USC 4331 et seq.) and its implementing regulations (40 Part 1500) apply to all Federal actions including oil and gas leasing. This statute requires the Federally authorized officers in Federal agencies to perform environmental analysis and disclose the effects of their decisions on the quality of the human environment. The law further requires the Federal officers to identify and describe the significant environmental issues associated with their decisions, the proposed action and alternatives to the proposed action (including the alternative of no action), and the effects of all alternatives on the environment. Federal officers must disclose the direct, indirect, and cumulative effects of their decisions, as well as adverse environmental effects that cannot be avoided, the relationship between short-term uses of the human environment and the maintenance of long-term productivity, and any irreversible or irretrievable commitments of resources made as a result of their decision. Development of Federal mineral leases is evaluated on a case-by-case basis as part of the NEPA process.

1.5.7 The Clean Air Act of 1970

The Clean Air Act (91 Stat. 685; 42 U.S.C. 7401 et seq.) provides that each state is responsible for achieving and maintaining air quality standards within its borders so long as such standards are at least as stringent as Federal standards established by the U.S. Environmental Protection Agency (EPA).

1.5.8 The Endangered Species Act of 1973

The Endangered Species Act (P.L. 93-204; 16 USC 15311, et seq.), as amended, requires special protection and management on Federal lands for threatened or endangered species. The U.S. Fish and Wildlife Service (USFWS) is responsible for administration of this act. Federal agencies proposing an action or processing an action proposed by a third party that "may affect" the existence of a species listed as threatened or endangered, or the existence of a species proposed for listing, or the existence of their habitat, must consult with the USFWS to determine if, and how, the proposed action would affect those species. Mitigation measures are developed through the consultation process and put forth as suggested conservation recommendations included in a formal USFWS Biological Opinion regarding whether the proposed action would jeopardize the continuous existence of any officially listed endangered or threatened species. Non-discretionary reasonable and prudent alternatives may be identified if the USFWS believes the proposed action has the likelihood of jeopardizing the continued existence of a listed species, or results in the destruction or adverse modification of critical habitat, or results in the incidental take of a listed species.

1.5.9 The Clean Water Act

The Federal Water Pollution Control Act Amendments (P.L. 92-500, 86 Stat. 816, as amended; 33 USC 1251, et seq.) establish national standards to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Upon passage of Environmental Quality Acts and adoption of water quality standards, State agencies are empowered to enforce water quality standards as long as those standards are at least as stringent as Federal standards established by the EPA. Also, Section 404 of the Clean Water Act, administered by the U.S. Army Corps of Engineers, requires that Waters of the United States, including intermittent streams, mud flats, and sand flats, be protected by permits prior to dredge or fill activities occurring in such areas. Wetlands that meet jurisdictional criteria of Section 404 of the Clean Water Act are partially protected by the requirement of a permit prior to any dredge or fill activity occurring in such areas.

1.5.10 National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966 declares that the historic and cultural foundations of the nation should be preserved to give a sense of orientation to the people of America. The preservation of this irreplaceable heritage is in the public interest. Section 106 of the National Historic Preservation Act (P.L. 89-665, 80 Stat. 915 [16 USC 470] as amended) requires that Federal agencies undertaking or funding projects consider the effects of proposal actions on historic resources eligible for listing or listed on the NRHP regardless of land status. Regulations for *Protection of Historic Properties* (36 CFR Part 800) defines the process for demonstrating such consideration through consultation with State Historic Preservation Officers, the Federal Advisory Council on Historic Preservation, and other interested parties.

1.5.11 Reclamation Recreation Management Act of 1992

The Reclamation Recreation Management Act of 1992 (Title 28 of P.L. 102-575, 106 Stat. 4690) is an amendment to the Federal Project Recreation Act of 1965, P.L. 89-72, that provides up to 50 percent Federal cost sharing for the planning, construction, and operation and maintenance of recreation facilities with non-Federal public entities. It also provides 75 percent Federal cost sharing with non-Federal partners for fish and wildlife enhancement and up to 50 percent of the operation and maintenance of such facilities. Non-Federal public entities that have agreed to manage developed facilities and lands at Reclamation projects are to work with local Reclamation offices to identify proposed projects for funding. Congressional funds are appropriated annually and distributed for selected sites. Section 7(c) of P.L. 89-72 also gives Reclamation clear authority to contract with other Federal agencies to manage Reclamation lands. Finally, Section 2805 of P.L. 102-575 provides authority for Reclamation to develop, maintain, and revise RMPs for Reclamation lands.

1.5.12 Carlsbad Irrigation Project Acquired Land Transfer Act of 2000

On June 21, 2000, the Carlsbad Irrigation Project Acquired Land Transfer Act became Public Law 106-220. The law authorized the Secretary of the Interior to convey all rights, title, and interest of the United States in certain lands within the Carlsbad Project, the irrigation and drainage system of the Carlsbad Project, and the Pecos River Flume, to the CID. In July 2001 Reclamation issued the Final EA and Finding of No Significant Impact for this transfer of some 6,000 acres (2,428 hectares) of land within and adjacent to the Project Area. The Quitclaim Deed executing the transfer was signed by Reclamation and the CID on July 18, 2001. The conveyed lands shall continue to be managed and used by the CID according to the purposes for which the Carlsbad Project was authorized, based on historic operations and consistent with the management of other adjacent Carlsbad Project lands. Those lands within the Project Area that were transferred are further depicted in Figure 1-2.

1.5.13 Energy Policy Act of 2005

Section 365 of the Energy Policy Act of 2005 (P.L. 109-58) establishes a Federal Permit Streamlining Pilot Project with the intent to improve the efficiency of processing oil and gas use authorizations on Federal lands. Through a subsequent MOU, Reclamation assigned a staff person to support the BLM Carlsbad Field Office in New Mexico. Reclamation is to work in an integrated manner to expedite the necessary consultation and coordination, and to work closely with participating agencies to identify efficiencies in processing oil and gas authorizations.

1.5.14 Federal Cave Resources Protection Act of 1988

The Federal Cave Resources Protection Act of 1988, 16 U.S.C. 4301-4310, requires Federal agencies to secure, protect and preserve significant caves on Federal lands for the perpetual use, enjoyment and benefit of all people. Regulations 43 CFR Part 37 further addresses the management of caves on public lands in the Department of the Interior.

1.5.15 New Mexico Oil and Gas Act

The New Mexico Oil and Gas Act (Chapter 70, Article 2 NMSA 1978) establishes procedures for leasing, royalties, and operations for the oil and gas industry. The act also created the Oil Conservation Commission and provided it with jurisdiction and authority over all matters relating to the conservation of oil and gas, and the prevention of potash waste as a result of oil and gas operations in the State of New Mexico. Permitting is administered through the Oil Conservation Division of the Energy, Minerals, and Natural Resources Department.

1.5.16 New Mexico State Cultural Properties Act of 1977

The New Mexico State Cultural Properties Act requires that survey work for archaeological sites be conducted prior to any development of State or Federal lands. The act provides the authority to grant archaeological permits to the State Archaeologist.

1.5.17 New Mexico Water Quality Act

The New Mexico Water Quality Act (Chapter 74, Article 6 NMSA 1978) allows for water pollution-control programs to be established by the Water Quality Control Commission. Permitting and other regulatory authority for these programs may fall under the jurisdiction of the Environmental Improvement Division of the New Mexico Health and Environment Department, the Oil Conservation Division, or the State Engineer's Office, depending on the nature of the water used and the method of discharge.

1.5.18 Executive Orders 11988 and 11990

Executive Orders 11988 and 11990 place restrictions on government approval of construction activities in wetlands and floodplains, and require consideration of wetland and floodplain impacts in all documents prepared in compliance with NEPA.

1.6 AGENCY AND PUBLIC SCOPING ACTIVITIES AND ISSUES

Issues to be addressed in this RMPA/EA were identified through the scoping process at the beginning of this planning process. Scoping and the RMPA/EA process began with publishing a

Public Notice for the Public Scoping Meeting in the *Carlsbad Current-Argus* newspaper on July 23 and July 26, 2006. The Public Scoping Meeting was conducted by Reclamation on July 26, 2006, from 6:00 to 8:00 p.m. at the Pecos River Village Conference Facility in Carlsbad, New Mexico. A total of 11 persons attended the meeting where Reclamation representatives made a brief project presentation and provided an opportunity for attendees to ask questions. Two comment letters were submitted to Reclamation by the scoping period deadline on the August 11, 2006. The relevant comments received during the scoping period addressed private minerals ownership within the Project Area and protection of resources such as visual quality and natural habitat.

Reclamation also corresponded with numerous agencies to identify issues to be addressed during the planning process. These include the two cooperating agencies for the project, the BLM and CID, as well as the USFWS, the New Mexico State Historic Preservation Office, and 19 Native American Tribes. Relevant issues within the Project Area identified by these agencies included oil and gas development within the 100-year Federal Emergency Management Agency (FEMA) floodplain, re-evaluating the maximum water surface elevation at Brantley Reservoir, the status of threatened or endangered species, discovery of cultural resources, Traditional Cultural Properties, no surface occupancy stipulations, and the impact stipulations may have on oil and gas well development potential and feasibility.