Chapter 1. Purpose and Need

THIS Final Environmental Impact Statement (FEIS) documents the analysis of the potential environmental consequences of a proposed long-term miscellaneous purposes contract ("long-term miscellaneous purposes contract") and any related contracts in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA). Reclamation and the Carlsbad Irrigation District (CID) propose to enter into a long-term miscellaneous purposes contract to use Carlsbad Project water for purposes other than irrigation. Reclamation and CID have entered into three previous short-term miscellaneous purposes contracts; this FEIS addresses the effects of a longterm miscellaneous purposes contract. This FEIS also addresses Reclamation's proposed review of any third-party contracts between the New Mexico Interstate Stream Commission (NMISC) and the CID to use Project water for purposes other than irrigation. In this FEIS, "the long-term miscellaneous purposes contract" refers to the proposed long-term miscellaneous purposes contract between Reclamation and the CID; "thirdparty contract" refers to any related proposed

contracts between NMISC and CID, and review by Reclamation, providing for NMISC to use Carlsbad Project water.

The analysis in this FEIS complies with the provisions of NEPA and Reclamation's draft NEPA Handbook (2000). Based on a review of the Proposed Action, Reclamation and NMISC determined that the action may likely "significantly affect the quality of the human environment" as defined by NEPA, and concluded that an EIS should be prepared.

This chapter describes the purpose and need of the Proposed Action, and provides pertinent background information leading to the Proposed Action. Consultations or approvals that would be necessary to implement the Proposed Action are also discussed in this chapter.

1.1 LEAD AGENCIES

Reclamation and NMISC are the joint lead agencies in preparing this FEIS. The joint lead agencies are responsible for all decisions involving preparation of the FEIS and issues arising during

the NEPA process. Reclamation is the lead federal agency and responsible for the Record of Decision.

The Secretary of the Interior authorized the Carlsbad Project for the single purpose of irrigation in 1905. Reclamation diverts to storage and delivers Carlsbad Project water to CID. Reclamation also owns Sumner, Brantley, and Avalon Dams. The CID operates the dams and reservoirs under an operation and maintenance contract and a repayment contract with Reclamation.

NMISC oversees interstate stream compacts and interstate stream litigation, and cooperates in the planning of Federal water projects. The New

Mexico Office of the State Engineer (NMOSE) administers the water rights in State, including the apportionment, measurement, and distribution of Together, NMISC and water. NMOSE conduct investigations of water supply, and protect, conserve, and develop the underground and stream systems of the State. NMISC is responsible for ensuring that the State of New Mexico meets its water delivery requirements Texas to measured at the state line in order to ensure compliance with the

1948 Pecos River Compact and the 1988 Texas v. New Mexico U.S. Supreme Court Amended Decree (485 U.S. 388).

1.2 PURPOSE AND NEED

This section describes the purpose of and need for the Proposed Action. The purpose of the Proposed Action is to allow for the use of Project water for purposes other than irrigation. As a member of CID, the NMISC needs to use Project water for purposes other than irrigation to maintain long-term compliance with the Pecos River Compact (Compact) and the United States Supreme Court Amended Decree in *Texas* v. *New Mexico*. For readers not familiar with the Proposed Action, the *Background* section (Section 1.3) provides a history of water use in the Pecos River basin, and describes the activities that led to the need for the Proposed Action.

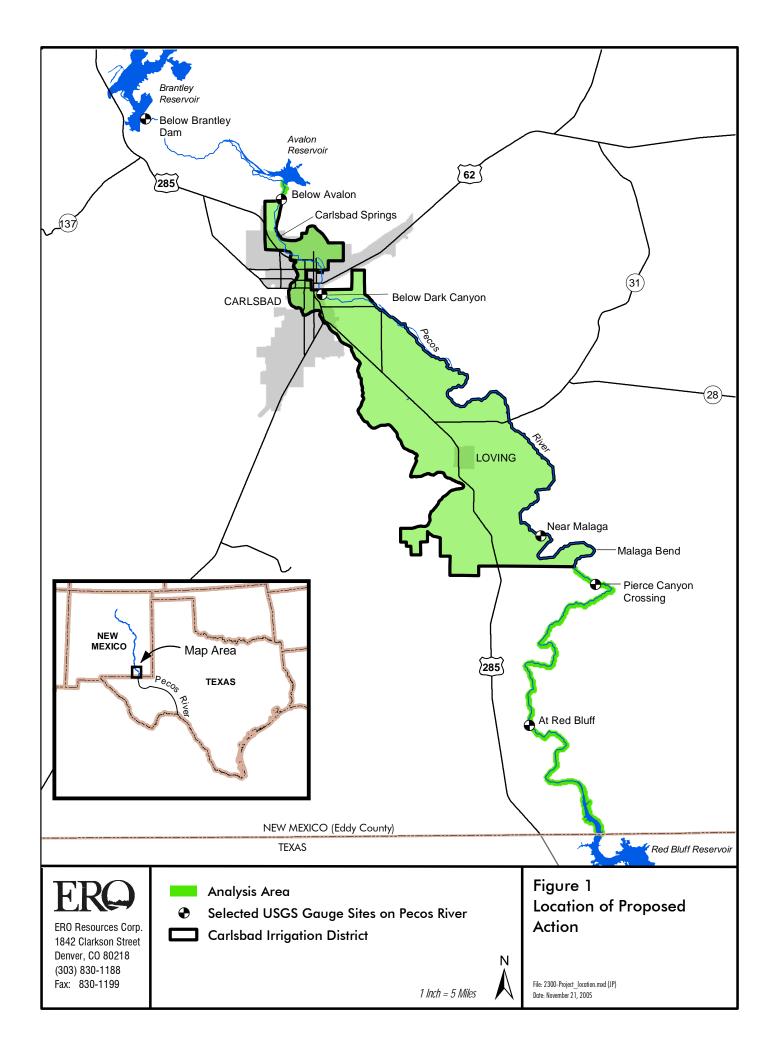
1.2.1 Purpose

The Carlsbad Project is a federal Reclamation irrigation project located predominantly west of the Pecos River in southeastern New Mexico about 25 miles north of the New Mexico-Texas state line

(Figure 1). The long-term miscellaneous purposes contract would allow the NMISC to use up to 50,000 acre-feet per year of Project water for purposes other than irrigation. Project water includes water appurtenant to lands located within the boundaries of the CID. This long-term conversion delivery includes but is not limited to: 1920 Sale of Water for Miscellaneous Purposes Act Contract, subsequent third-party contracts. CID membership agreements and any tool or

agreement for the conversion and delivery of Project water for NMISC purposes. This FEIS analyzes the effects of a long-term conversion and delivery of Project water for Pecos River Compact purposes, as required by the Settlement Agreement executed to resolve some of the water rights issues (*Lewis Case*-Carlsbad Project Phase) in the Pecos River basin. The litigation is continuing to adjudicate (determine through the court system) the

The Pecos River Compact, entered into in 1948 by Texas and New Mexico, established that Texas was due the same amount of water it received from New Mexico under 1947 hydrologic conditions. In 1988, the U.S. Supreme Court issued an Amended Decree, ending a lawsuit initiated in 1974 by Texas for under delivery of water. The Amended Decree established a method to verify flows and water delivery obligation due to Texas.



elements of water rights, such as priority date and authorized uses, of the Pecos River Basin (State of

New Mexico ex rel. State Engineer v. L.T. Lewis, Nos. 20294 and 22600 Consolidated).

CID would release the water to the Pecos River from Avalon Dam to maintain compliance with the Compact and the United States Supreme Court Amended Decree in Texas v. New Mexico. The Compact is discussed in greater detail in Section 1.3.2, Pecos River Compact and Amended Decree.

Project water that would be used for delivery to the state line would be 1) water allotted to lands owned by the NMISC, 2) allotment water leased by the

NMISC from other members of CID (fallowed land water leases) or 3) unused water that remains after any single irrigation season (undelivered allotment water leases). The leasing program is described in detail in Section 1.3.3, NMISC's Leasing Program.

Use of Project water for state line delivery is considered a miscellaneous purpose under the Sale of Water for Miscellaneous Purposes Act of 1920 (Appendix A). The Sale of Water for Miscellaneous Purposes Act authorizes Reclamation to enter into contracts to convert use of water from irrigation to miscellaneous purposes. The proposed long-term miscellaneous purposes contract would replace an existing short-term miscellaneous

> purposes contract that will expire 2009. The long-term miscellaneous purposes contract would have a term of 40 years; and any related third-party contracts would not exceed the term of the long-term miscellaneous purposes contract. The contracts would not preclude future use of the water for irrigation of lands within the CID.

What is the Settlement Agreement?

The Settlement Agreement is an agreement among the NMOSE, NMISC. Reclamation, CID, and PVACD that resolves litigation and lays out a plan for delivery of water to both CID and the state line. Two NMISC actions in the Settlement Agreement are land acquisition and development of an augmentation well field. This EIS is one of the "conditions precedent" for the Settlement Agreement, and partially completes the Agreement's requirement to "complete Federal contracts and environmental compliance." The Settlement Agreement is detailed in *Section* 4.1.2.

1.2.2 Need

The proposed long-term miscellaneous purposes contract and third-party contract would address three primary needs along the Pecos River. The NMISC needs to:

- Maintain long-term compliance with the Pecos River Compact and the United States Supreme Court Amended Decree in Texas v. New Mexico
- Use up to 50,000 acre-feet per year of Project water for purposes other than irrigation, specifically for state line delivery to maintain compliance with the Pecos River Compact
- Partially fulfill requirements of the Settlement Agreement which the NMISC, CID and Reclamation, and other parties executed in 2003.

Between 1987 and the present, New Mexico has satisfied its water delivery obligations to Texas under the Compact and Amended Decree. In some years, New Mexico has over-delivered water to the state line and in other years it has under-delivered. New Mexico currently maintains a small delivery credit at the state line. New Mexico has been able to satisfy its Compact obligations in large part because of its leasing program and the fallowing of irrigated land within CID. The leasing program within CID has operated under an existing shortterm miscellaneous purposes contract since 1992; the short-term contract allows irrigation water to be released to the state line on behalf of the NMISC. The amount of Project water released to the state line from NMISC leases ranged from 5,700 acrefeet in 2003 to 44,600 acre-feet in 1997 (see Sections 1.3.2 and 1.3.3, and Table 1).

In 2003, NMOSE, NMISC, Reclamation, CID, and the PVACD entered into a Settlement Agreement that resolves water issues (Lewis Case-Carlsbad Project Phase), implements a plan to ensure delivery of water to the CID and state line, and settles many water management issues on the Pecos River. The Settlement Agreement requires Reclamation and the CID to enter into a long-term miscellaneous purposes contract that would allow the NMISC to use Project water for miscellaneous purposes, specifically delivery to the state line. A long-term miscellaneous purposes contract, with or without the Settlement Agreement, would allow the NMISC to continue using Project water for longterm Compact compliance. As described in greater detail in the following Background section, the water users in the lower Pecos River basin have determined the most effective, long-term solution to ensure Compact compliance is to continue using Project water for state line delivery.

In attempting to comply with the Compact without a long-term miscellaneous purposes contract, the New Mexico State Engineer In attempting to comply with the Compact without a long-term miscellaneous purposes contract, the New Mexico State Engineer is more likely to be forced to issue a priority call. A priority call is the curtailment of water use by priority date of the water right. The priority call would be issued to avoid an imminent shortfall, or to correct a net shortfall in accordance with the Pecos River Master's approved plan. A basin-wide priority call would likely have substantial adverse economic effects in the Pecos River basin (Whittlesey et al. 1993). A long-term miscellaneous purposes contract would assist the achieving long-term Compact NMISC compliance and avoiding a basin-wide priority call (see the last paragraph under Section 1.3.2, Pecos River Compact and Amended Decree, for additional information on priority calls).

Table 1. Accumulated state line credit with Project water releases.

Year	Releases of Project Water to State Line (acre-feet)	State Line Over-or Under- delivery (acre-feet)	Accumulated State Line Credit (acre-feet)
1992	15,100	10,900	22,000
1993	18,000	6,600	28,600
1994	18,200	5,900	34,500
1995	16,600	(14,100)	20,400
1996	23,600	(6,700)	13,700
1997	44,600	6,100	19,800
1998	21,900	1,700	21,500
1999	15,700	1,400	22,900
2000	14,900	(12,300)	10,600
2001	6,900	(700)	9,900
2002	6,900	(3,000)	6,900
2003	5,700	2,000	8,900
2004	26,400	8,300	17,200

Source: Various Pecos River Master Reports; on file with the NMISC.

Water volumes rounded to the nearest 100 acre-feet. Note: Amount of water released to the state line in Table 1 (column 2) varies slightly from the total leased in Table 3 (column 6) because of CID release operations.

1.3 BACKGROUND

This background section describes the history of Pecos River water use and Reclamation's development of the Carlsbad Project. Section 1.3.2 on the Pecos River Compact and Amended Decree describes the obligations of New Mexico to deliver a portion of the flows of the Pecos River to Texas. These continuing obligations led to the development of a Consensus Plan, created by agencies, representatives and water users with interests in the Pecos River basin. The Consensus Plan ultimately lead to the Settlement Agreement, which incorporated many elements of the Consensus Plan.

1.3.1 History of Water Use in the Lower Pecos River Basin

The Lower Pecos River basin includes the Carlsbad, Roswell, Artesia, and Fort Sumner areas, which are described below. Additional information about the area's hydrology and other environmental resources is found in Chapter 3.

1.3.1.1 Carlsbad Area Water Use

Water use in the Carlsbad area has a long history. Settlers from Eastern states moved west and established themselves in the southeastern portion of New Mexico, supported by ranching and agriculture. Water in the Carlsbad area is found as either surface water from the Pecos River and its tributaries, or from ground water sources. Ground water is pumped from deep and shallow wells to the north of Carlsbad, and shallow alluvial wells in the Carlsbad area. Water development started with

surface water sources in the late 19th century, followed by the development of deep wells.

In 1888, a large ranch started the first large-scale surface water irrigation in the Carlsbad area. In the late 1890s, the Pecos Irrigation Company, and its predecessor, the Pecos Irrigation and Improvement Company, built irrigation facilities that diverted Pecos River water. The irrigation facilities included McMillan Dam for water storage, Avalon Dam for storage and diversion, the Carlsbad Main Canal, and a distribution system of canals and laterals. Private operation of the project ended in 1904 when a flood in the Pecos River destroyed much of the irrigation system, including Avalon Dam (Reclamation 2004a).

What is the Carlsbad Project?

The Secretary of the Interior authorized the Carlsbad Project for the purpose of irrigation in 1905. Reclamation diverts to storage and delivers Carlsbad Project water to CID. Within the CID, 25,055 acres of land are authorized for irrigation, with about 70 to 80 percent actively irrigated each year. Reclamation owns the Carlsbad Project dams and reservoirs, and CID operates the dams and reservoirs.

In 1905, the Secretary of the Interior authorized what was then called Reclamation Service to purchase the facilities from the Pecos Irrigation Company and construct the Carlsbad Project. By 1907, the irrigation was repaired system extended to allow for irrigation of about 25,000 acres. In 1905, the Pecos Irrigation Company was reorganized as the Pecos Water Users Association, which became the Carlsbad Irrigation District in 1932.

Reclamation owns the Carlsbad Project dams and reservoirs, and CID operates the dams and reservoirs. Carlsbad Project operations include diverting to storage and releasing water to deliver project water to CID water users. Within the CID, 25,055 acres of land are authorized for irrigation, with about 70 to 80 percent actively irrigated each year. The Carlsbad Project was one of the earliest Reclamation projects, and is one of the more

significant surviving examples of mixed 19th and 20th century technology (Reclamation 2001).

Currently, the Carlsbad Project comprises three dams and reservoirs. From south to north, these dams are Avalon Dam, Brantley Dam, and Sumner Dam (Figure 2). Avalon Dam was rebuilt by 1907 with Reclamation funds, and is still in operation. Avalon Reservoir is near Carlsbad, and has very little storage capacity; the dam primarily serves as a diversion structure for the CID Main Canal. Avalon Reservoir does not have any designated flood storage capacity. Brantley Dam and Reservoir were authorized for construction in 1972. Construction was finished in 1988, and by 1991 Brantley was being used for the purposes of irrigation, flood control, fish and wildlife, and Brantley Dam, which replaced recreation. McMillan Dam, provides flood protection for the City of Carlsbad. CID, under contract to Reclamation, operates and maintains Brantley Dam and Reservoir and Avalon Dam and Reservoir. Sumner Dam, located about 230 river miles north of Carlsbad, began operation in 1937 primarily for irrigation storage, and secondarily for flood control, river regulation, and other beneficial uses.

Project water is also stored behind Santa Rosa Dam, located about 7 miles north of Santa Rosa, New Mexico. The U.S. Army Corps of Engineers completed the dam in 1979 and began reservoir operations for irrigation in 1980 (Corps 2004). The New Mexico Division of Parks and Recreation manages recreation around Santa Rosa Lake, Brantley Reservoir and Sumner Lake. The CID manages recreation at Avalon Reservoir.

In 2001, Reclamation transferred to CID all interests the United States held in the irrigation system of the Carlsbad Project, and all related lands. Reclamation also conveyed title to certain acquired lands north of Brantley Dam and between

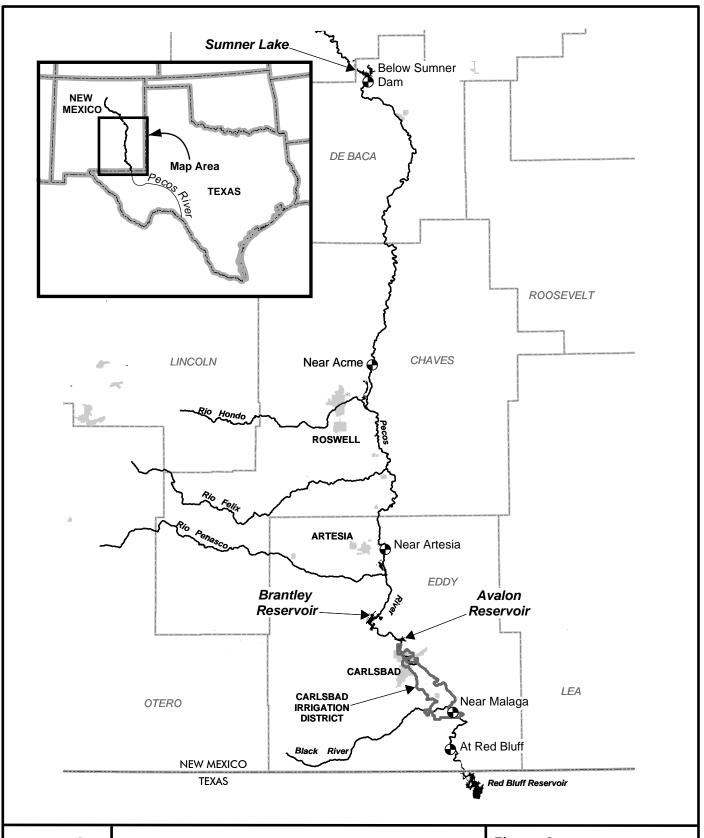
Brantley Dam and Avalon Dam. The United States retained title to land beneath the footprints of Brantley and Avalon Reservoirs, as well as reservoir storage space (Reclamation 2001).

In addition to irrigation, water uses in the Carlsbad area include municipal water supplies for the City of Carlsbad and the Villages of Loving and Otis, domestic wells, and industrial and mining operation water uses.

1.3.1.2 Roswell-Artesia Water Use

While the CID relies on diversion of surface water, most irrigated agriculture in the Roswell-Artesia area uses ground water, with limited surface water use. Ground water in the Roswell-Artesia area is in a declared ground water basin, the Roswell Artesian Basin (RAB). The New Mexico State Engineer has the authority and is responsible for managing the extraction or diversion, and use of waters from declared ground water basins. Most ground water rights in the RAB are junior to CID's senior surface water right. The association between ground water use and surface water depletions to the Pecos River was recognized as early as 1906 (Shomaker 2003). Ground water use was unregulated until the New Mexico State Engineer began administering RAB ground water (both deep and shallow aquifers) in 1931. The Pecos Valley Artesian Conservancy District (PVACD) was formed in 1932 to aid in water conservation in the Roswell area specifically for the deeper artesian aquifer (Shomaker 2003).

Primary surface water users in the Roswell-Artesia area are the Hagerman Irrigation Company (HIC) and river pumpers. The HIC historically obtained its water from the Rio Hondo. However, surface water flow in the Rio Hondo was low, and the HIC developed artesian and shallow wells to supplement their surface water source. Currently, the





ERO Resources Corp. 1842 Clarkson Street Denver, CO 80218 (303) 830-1188 Fax: 830-1199 Selected USGS Gauge Sites on Pecos River

1 Inch = 25 Miles

Figure 2 Carlsbad Project Facilities

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HIC uses treated effluent from the City of Roswell wastewater treatment plant and supplemental well water to irrigate about 8,600 acres (Longworth and Carron 2003). The river pumpers have rights to pump about 4,000 acre-feet of water directly from the Pecos River to irrigate lands (Carron 2003). The NMISC has purchased and retired much of the land once irrigated by river pumpers to help meet Compact obligations. Reclamation makes payments pursuant to 5-year lease agreements to owners of Pecos River diversion water rights (river pumpers) to forbear water use to offset water losses resulting from Endangered **Species** Act compliance.

1.3.1.3 Fort Sumner Area Water Use

The earliest uses of water in the Fort Sumner area were for irrigated agriculture developed by the U.S. Army for the Navajo and Mescalero Apache The agricultural development was not successful and was mostly abandoned. Two surface water rights on the Pecos River were filed in 1903, and the Fort Sumner Land and Canal Company began construction of a dam and canal to serve about 10,000 acres (Shomaker 2003). In 1918, the Fort Sumner Irrigation District (FSID) was formed, and in 1949 Reclamation was authorized to complete rehabilitation work on the FSID irrigation system on the behalf of the FSID. The FSID's water right, adjudicated in 1933 under the "Hope Decree," is for up to 100 cubic feet per second (cfs) of the natural flow of the Pecos River to be applied on 10,000 acres (Shomaker 2003). Reclamation computed an ideal diversion requirement for 6,500 acres in a study prepared to support the 1949 rehabilitation (Hale et al. 1960). A few other farmers near Fort Sumner use ground water for irrigation. Since 2000, Reclamation has entered into forbearance agreements with members of the FSID to forbear use of water for irrigation.

1.3.2 Pecos River Compact and Amended Decree

In 1948. New Mexico and Texas entered into the Pecos River Compact. The Compact established that Texas was due the same amount of water as it would have received under the "1947 Condition." The "1947 Condition" is a complex calculation that applies the current water year's supply to the 1947 hydrologic condition. In 1974, Texas filed a lawsuit against New Mexico for under-delivery of water required by the Compact. The Supreme Court found that New Mexico had under-delivered about 10,000 acre-feet per year to Texas since the Compact was ratified (Hall 2003). In 1988, the Supreme Court entered an Amended Decree, which appointed a federal River Master and established an accounting method to verify state line water deliveries and proportioning of Pecos River flows. In addition, New Mexico agreed to pay Texas \$14 million for past Compact violations.

Some of the most important points contained in the Amended Decree are that New Mexico is required to pay its annual delivery obligation with water, no monetary compensations are permitted, and New Mexico cannot have a net shortfall in its water deliveries to Texas. However, New Mexico is permitted to accrue a positive state line credit, which can be used for water delivery in years where there is a shortfall. For example, in 2000, New Mexico under-delivered 12,300 acre-feet of water (Table 1). Because of an accumulated credit of 22,900 acre-feet in 1999, New Mexico remained in compliance despite under-delivery in 2000 through 2002.

The Amended Decree established an accounting method that the River Master uses to verify proportioning of Pecos River flows. Any shortfall in state line water deliveries must be remedied in compliance with the River Master's plan. June is the earliest date that the River Master might find New Mexico to be in an accrued under-delivery status for the previous water year. If that were to occur, the Amended Decree requires New Mexico to submit a "Proposed Plan" in July to remedy the shortfall. The River Master will issue his "Approved Plan" in September, and New Mexico must execute the Approved Plan over the period from October until March of the following year.

Between 1987 and the present, New Mexico has satisfied its delivery obligations to Texas under the Compact. In some years, New Mexico has accrued state line credit (over-delivered) and some years has under-delivered (Table 1). The recent drought has had a negative effect on the accrued state line credit (Thorson 2003). While New Mexico has been able to maintain a positive credit at the state line, the nature of the Compact accounting method (based upon a three-year running average) can put a seemingly ample credit at risk of being completely consumed as a result of the annual variability in the hydrologic conditions of the basin, resulting in a net shortfall condition. New Mexico has been able to satisfy its Compact obligations in large part because of its leasing program and the associated fallowing of irrigated land within CID. The leasing program within CID has operated under an existing short-term miscellaneous purposes contract since 1992, which allows irrigation water to be delivered to the state line on behalf of the NMISC (see Section 1.3.3).

In 2001, NMISC staff alerted water users in the Pecos River basin that the risk of being in a net shortfall condition for Compact deliveries at the end of the year was great, and that in order to respond to such a situation, the issuance of a priority call to curtail water uses in the basin might be necessary. Under the doctrine of prior appropriation, a water right is a legal right to use surface or ground water for a beneficial use. Those

holders of water rights established earlier in time are considered "senior" to users and uses that came later in time, known as "juniors." In the event of a shortage of supply, according to the doctrine of prior appropriation, water will be supplied to the most senior users up to the limit of their right in order of "priority," or seniority. Junior water right holders in the Pecos River basin include some municipalities and ground water irrigators, many located in the Roswell Artesian Basin. The City of Carlsbad has the right to divert nearly 10,000 acrefeet per year from the Carlsbad Basin, with the majority of those rights having a priority date of 1883 and the balance with a priority date of 1940. In addition, the City has the right to divert approximately 350 acre-feet from the Pecos River, and surface water impoundment rights for Upper and Lower Tansill Lakes. The water rights associated with the lakes have priority dates of 1895, 1909, 1929, and 1930.

Because many junior water rights are for use of ground water, and most response times in the aquifers connected to the river are on the order of tens of years, a priority call on those rights likely would not provide immediate benefits to surface water flows. Only those shallow wells more closely connected to the flows of the river would respond quickly; this includes ground water wells in the Carlsbad area. In a shortfall or imminent shortfall situation, a priority call likely would be basin-wide (Hall 2003; *Ad Hoc* Pecos River Basin Committee 2003), and would have severe economic impact (Whittlesey et al. 1993).

1.3.3 NMISC's Leasing Program

The Sale of Water for Miscellaneous Purposes Act of 1920 ("1920 Act") allows the Secretary of the Interior to supply water from a Reclamation irrigation project for purposes other than irrigation (see Appendix A). The 1920 Act includes four

conditions: 1) irrigation water users' association approval, 2) proof of no other practicable water source to meet the other purposes, 3) the delivery of water for other purposes is not detrimental to the irrigation project or other prior appropriated rights, and 4) funds derived from the contract be credited to the project from which the water originated.

Delivery of Project water for purposes other than irrigation is typically accomplished through a contract between Reclamation and the intended user, such as the CID. In 1992, Reclamation and the CID entered into the first short-term miscellaneous purposes contract and renewed it in 1999 and again in 2004. The existing short-term miscellaneous purposes contract between Reclamation and the CID allows the CID to "...enter into a third-party contract or series of third-party contracts with the NMISC for the delivery of Project water for the sole purpose of participating in the NMISC's Water Resource Conservation Project" (Reclamation and CID 1999). The NMISC is the only entity allowed under the existing short-term miscellaneous purposes contract to enter into an agreement with the CID, and such agreements are subject to Reclamation's review.

The NMISC began a leasing program of Project water in 1992 as part of its Water Resource Conservation Project; the leasing has continued through the present. The existing short-term miscellaneous purposes contract allows Project water to be used for state line delivery. The NMISC also leases non-Project water from other users in the river basin to aid in Compact compliance.

Leases of Project water occur in two general types: "fallowed land" water leases and undelivered allotment water leases. Fallowed land water leases

are annually leased water allotments appurtenant to lands that were put into the State's Water Conservation Project, where lands are temporarily fallowed in a given year. Annual undelivered allotment water leases occur when water allotted to lands within the CID is not delivered and is later made available to the NMISC for lease. For example, rains may negate the need for water to be delivered to farms and water may stay in storage.

Since implementation of the leasing program in 1992, release of leased water from Avalon Dam has contributed significantly to New Mexico's efforts to comply with the Compact and Amended Without the leasing program, New Decree. Mexico may have defaulted on its Compact obligations as early as 1995 (Figure 3). The total amount of Project water leased since 1992 ranges from a minimum of 5.600 acre-feet in 2003 to a maximum of 44,800 acre-feet in 1997; leases have averaged 17,300 acre-feet. No fallowed land water leases occurred in 2003 or 2004 because the CID Board determined there was insufficient supply; the entire amount of water leased by the NMISC in these two years is from undelivered allotment water leases.

1.3.4 Ad Hoc Pecos River Basin Committee and Settlement Agreement

In 2001, the NMISC established an *ad hoc* committee made up of representatives of water users in the Pecos River basin. The NMISC and the *ad hoc* committee have worked together to engage critical interests in the basin to assist the State in developing strategies to deliver water to the state line in compliance with the Pecos River Compact and Amended Decree (*Ad Hoc* Pecos River Basin Committee 2001.)

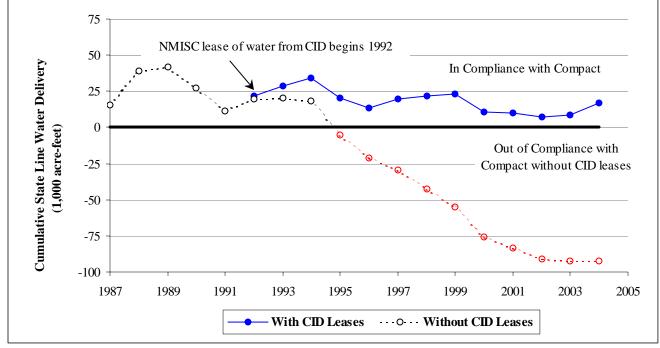


Figure 3. Accumulated state line water deliveries.

Source: NMISC.

The *ad hoc* committee was responsible for two actions: developing a short-term plan to meet a state line delivery shortfall that was anticipated in 2001, and developing a plan to achieve long-term Compact compliance. The plan developed by the *ad hoc* committee became known as the Consensus Plan. The *ad hoc* committee's work in 2001 was instrumental in reaching and implementing agreements that resulted in the delivery of an additional 9,000 acre-feet of Project water and other lower Pecos River basin water to the state line and successfully avoiding a shortfall in 2001 (NMISC 2002).

In 2003, NMOSE, NMISC, Reclamation, CID, and the PVACD entered into a Settlement Agreement that resolves litigation (*Lewis Case*-Carlsbad Project Phase), implements a plan to ensure delivery of water to the CID and state line, and

settles many water management issues on the Pecos River. The Settlement Agreement includes elements from the Consensus Plan to achieve longterm Compact compliance. Components of the Settlement Agreement and Consensus Plan that are pertinent to this FEIS are discussed in Section 4.1.2. Because implementing the Settlement Agreement has begun and will continue into the future, any cumulative effects associated with the Proposed Action and the Settlement Agreement are discussed under cumulative effects in Chapter 4. If is not Settlement Agreement fully miscellaneous implemented. the long-term purposes contract has separate and independent utility for the NMISC.

1.3.5 Relevant State Statutes and Regulations

This section provides a brief summary of a few relevant New Mexico statutes and regulations covering water use in the lower Pecos River basin. The reader is referred to the NMOSE for more information.

1.3.5.1 Water Resources Conservation Project

In 1991, the New Mexico Legislature found a potential water shortage crisis existed in the Pecos River basin. The legislature authorized the NMISC to "...purchase, and retire and place in a state water conservation program...adequate water rights over a period of years to increase the flow of water in the Pecos River...and therefore meet the State's future obligations under the Pecos River Compact and the United States Supreme Court's amended decree..." (NMSA §72-1-2.2). Water rights eligible for this program include rights to Project water as well as other lower Pecos River basin The CID and NMISC recently water rights. developed an agreement for the bypass of leased non-Project water through Carlsbad Project facilities.

1.3.5.2 Land Purchase in the Pecos River Basin

In 2003, the New Mexico Legislature authorized the State to take actions "to achieve Compact compliance" and "provide a reliable annual irrigation supply... to all of the irrigated land in the CID and for adequate water to fulfill delivery requirements to the Texas state line pursuant to the Compact" (NMSA §72-1-2.4). Additionally, this statute also authorized the NMISC to expend funds for the purchase of land with appurtenant water rights or rights to the delivery of water and to take other actions that will aid in Compact compliance.

1.3.5.3 Priority Administration

New Mexico is a prior appropriation state, established in Article XVI of the New Mexico Constitution and statute (NMSA §72-1-2). The New Mexico Legislature also recognized in 2003 "that the water rights adjudication process is slow, the compliance with interstate compacts is imperative, and the State Engineer has authority to administer water allocations..." (NMSA §72-2-9.1). The statute requires the State Engineer to adopt rules for priority administration; that initiative is being accomplished through the NMOSE Active Water Resource Management Program.

1.3.5.4 Active Water Resource Management

In 2004, the New Mexico State Engineer approved general rules and regulations for Active Water Resource Management. The regulations establish a framework for the NMOSE to supervise the physical distribution of water, and to administer the available water supply by priority date or alternative administration, as appropriate (see Section 4.1.3). These rules and regulations will address water management statewide. Currently, rules and regulations specific to the Pecos River basin are being drafted and promulgated.

1.4 Permits or Approvals

1.4.1 Endangered Species Act

Section 7(a)(2) of the federal Endangered Species Act (ESA) requires that Reclamation consult with the USFWS to ensure that a Proposed Action would not "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat..." Informal consultation with the USFWS for the Proposed Action evaluated in this FEIS

began in August 2004. In December 2005, NMISC submitted a Biological Evaluation to the USFWS that indicated the Proposed Action would not directly, indirectly or cumulatively affect threatened or endangered species.

1.4.2 National Historic Preservation Act

The National Historic Preservation Act requires cultural resources be identified and evaluated as to

their significance prior to Federal actions that may affect them. Adverse effects on significant cultural resources must be mitigated before a Federal action is implemented. The Act also requires Reclamation to consult with the New Mexico State Historic Preservation Office (SHPO), as well as Native American Tribes. Chapter 5 provides a discussion of agency consultation and coordination.