

RECLAMATION

Managing Water in the West

2004 Calendar Year Report to the Pecos River Commission

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**Department of the Interior
Bureau of Reclamation
Upper Colorado Region
Albuquerque Area Office
Albuquerque, New Mexico**

March 2005

MISSION STATEMENTS

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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**U. S. Bureau of Reclamation
Upper Colorado Region - Albuquerque Area Office
2004 Calendar Year Report to the Pecos River Commission**

1.0 INTRODUCTION

The Albuquerque Area Office of the Bureau of Reclamation (Reclamation) is responsible for operation, maintenance, and oversight of three projects on the Pecos River. These projects are: the *Carlsbad Project*, which includes Sumner, Brantley, and Avalon Dams; the *Pecos River Basin Water Salvage Project*, and the *Fort Sumner Project*, which includes the Fort Sumner Diversion Dam. Figure 1 *Project Map of Reclamation's Albuquerque Area Office* depicts the general location of Reclamation's Projects under the Albuquerque Area Office's area.

Reclamation's Carlsbad Field Office now reports to the Albuquerque Area Office's Project Administration Group. An agreement between Reclamation and Carlsbad Irrigation District (Carlsbad District), finalized on October 2, 1989, provided for the Carlsbad District to operate and maintain Brantley Dam, Avalon Dan, Sumner Dam, and the Pecos River Water Salvage Project. Reclamation continues to be responsible for assuring that this work is accomplished in compliance with all applicable agreements, contracts, regulations, compacts, and other related laws.

The gage data used within this report is provisional and was downloaded from the United States Geological Service web page, <http://waterdata.usgs.gov/nm/nwis/dv>. The reservoir elevation data is recorded by the dam tender and reported to Reclamation on a monthly basis; this data too is provisional.

2.0 CARLSBAD PROJECT OPERATIONS

2.1 Crop Production

As of the printing of this report, Reclamation has not received the Carlsbad District's 2004 crop and water data. This information is generally received in mid to late spring of the following year and will be provided in the 2005 Calendar Year Report to the Pecos River Commission.

Since Reclamation had not received Carlsbad District's 2003 and 2002 crop and water data at the time of the printing of the 2003 and 2002 Calendar Year Reports to the Pecos River Commission, this information is now being provided. As reported by the Carlsbad District crops grown in the 2003 water year were as follows: oats, alfalfa hay, cotton lint, sorghums, wheat, irrigated pasture, silage, cantaloupe, watermelon, grass, and pecans. Out of a total irrigable area of 25,055 acres, 15,525

acres were irrigated in 2003. Crop and water data submitted by the Carlsbad District did not contain total gross crop related income therefore the average crop value per irrigated acre is not provided. Of the total water diverted, 23,735 af were delivered to the irrigated lands, for a total of 1.53 af delivered per irrigated acre.

Crops grown in the 2002 water year were as follows: oats, alfalfa hay, cotton lint, sorghums, wheat, irrigated pasture, silage, cantaloupe, watermelon, grass, and pecans. Out of a total irrigable area of 25,055 acres, 16,588 acres were irrigated in 2002. Again, crop and water data submitted by the Carlsbad District did not contain total gross crop related income therefore the average crop value per irrigated acre is not provided. Of the total water diverted, 26,783 af were delivered to the irrigated lands, for a total of 1.61 af delivered per irrigated acre.

2.2 Reservoir Storage Entitlements

All Carlsbad Project reservoirs were operated in accordance with the requirements of the Pecos River Compact and U.S. Army Corps of Engineers (Corps) flood control criteria. Figure 2 *Area map of the Carlsbad Project* depicts the location of the Carlsbad Project Storage Dams on the Pecos River.

The Corps determines area and capacity tables for Santa Rosa Reservoir. Reclamation calculates annual total conservation storage entitlements for the Pecos River reservoirs that are in New Mexico. Table 1 *2004 Pecos River Reservoir Storage Entitlements* presents the calendar year 2004 storage entitlements for the four Pecos River Reservoirs.

Table 1. 2004 Pecos River Reservoir Storage Entitlements.

| Reservoir | Entitlement Storage (acre-feet) | Minimum Pool (acre-feet) | Total Estimated Sediment Accumulation (acre-feet) | Total Conservation Storage (acre-feet) | Conservation Elevation (feet) |
|---------------|---------------------------------|--------------------------|---|--|-------------------------------|
| Santa Rosa | 92,300 | 0 | 2,801 | 95,101 | 4744.46 |
| Sumner | 40,334 | 2,500 | 92 | 42,926 | 4,262.88 (NAVD88) |
| Brantley | 40,000 | 2,000 | 308 | 42,308 | 3,256.05 (NAVD 88) |
| Avalon | 3,866 | 600 | 0 | 4,466 | 3,117.40 |
| TOTAL: | 176,500 | | | | |

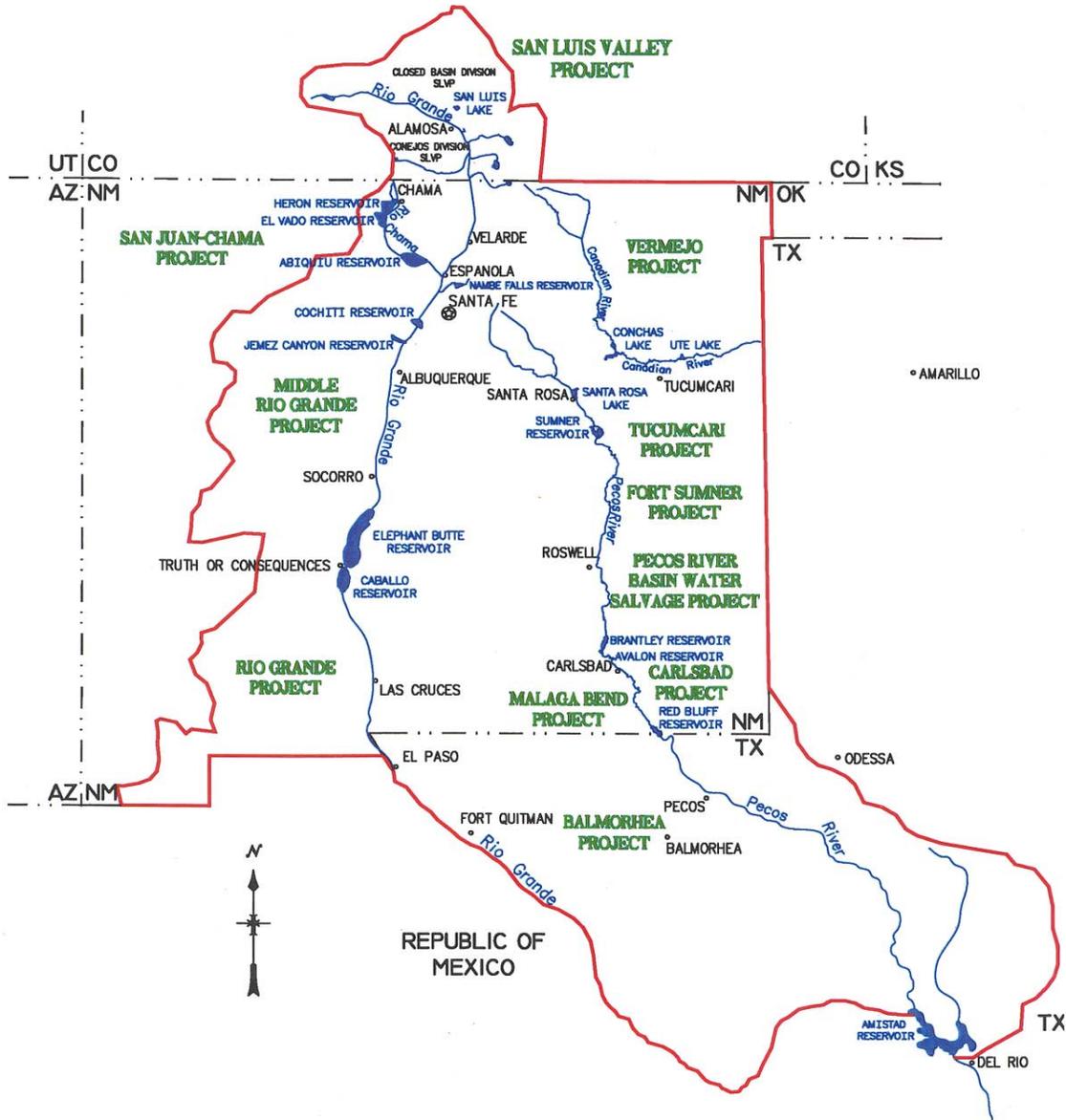


Figure 1. Project Map of Reclamation's Albuquerque Area Office.

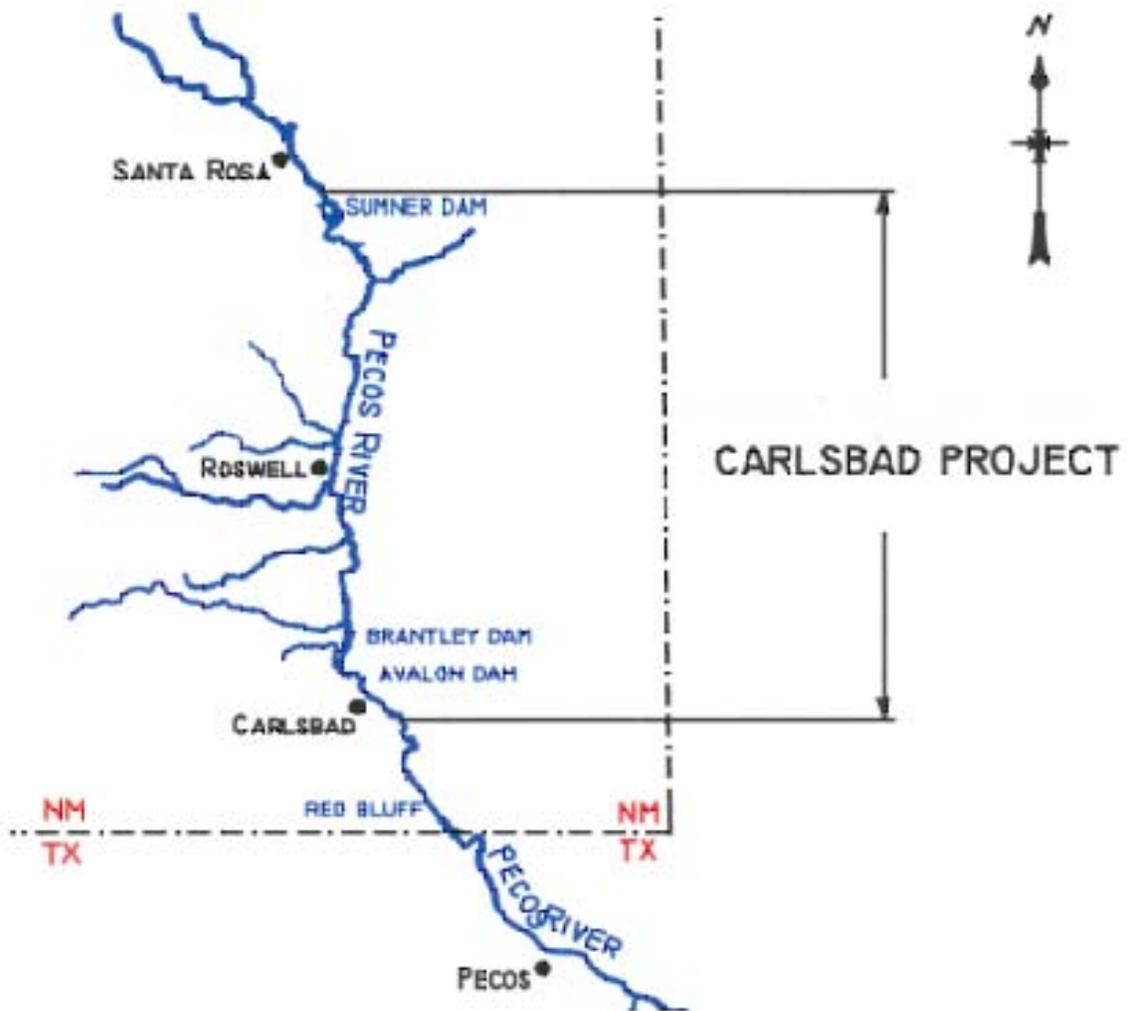


Figure 2. Area map of the Carlsbad Project.

Operation of the dams on the Pecos River is a joint effort between Reclamation, Carlsbad District, and the Corps in coordination with the Fort Sumner Irrigation District (Ft. Sumner District) and the State of New Mexico. The Corps has flood control responsibilities at Sumner Dam when the reservoir gets into the exclusive flood control pool (elevation 4262.88 to 4283.88 feet (ft); except it is 4269.16 to 4283.88 ft from November 1 through April 30, elevations in North American Vertical Datum (NAVD) 88) and at Brantley Dam when the reservoir elevation is above 3272.69 ft up to 3284.69 ft (NAVD 88).

The 2004 start-of-year total Carlsbad Project conservation storage in the four Pecos River reservoirs (Santa Rosa, Sumner, Brantley and Avalon) was 14 percent of entitlement. Santa Rosa, Sumner, Brantley and Avalon reservoirs on the Pecos River were at approximately 5, 27, 15, and 39 percent, respectively, of each reservoir's entitled conservation storage. The March 1, 2004 most probable forecasted snow melt runoff inflow into Santa Rosa Reservoir was approximately 28,000 acre-feet (af) or 53 percent of the 30-year average.

The actual April through June 2004 inflow to Santa Rosa Reservoir was 52,200 af, 99 percent of the 30-year average. On December 31, 2004, the total Carlsbad Project entitlement storage in the four Pecos reservoirs was 52 percent of entitlement. Santa Rosa, Sumner, Brantley and Avalon reservoirs were at approximately 32, 55, 86, and 33 percent, respectively, of each reservoir's entitlement storage.

2.3 Sumner Dam and Reservoir

2.3.1 Sumner Dam Operations

The operation of Sumner Dam is to divert to storage available natural inflow above the Ft. Sumner District's allotted direct diversion water right (up to 100 cubic-feet-per-second (cfs) of the natural inflow above Sumner Reservoir) when not required to target downstream flows at the United States Geological Survey (USGS) Pecos River near Acme (Acme) river gage (located 113 miles downstream of Sumner Dam), and to release stored Carlsbad Project water for the Carlsbad District. Reclamation assumed operation of Sumner Dam on November 12, 1998 to assure compliance with the Endangered Species Act (ESA), specifically, to provide bypasses for the threatened Pecos bluntnose shiner. Reclamation continues to direct the Carlsbad District dam tender on gate adjustments and the Carlsbad District continues to be responsible for all maintenance activities. This operating procedure does not alter the normal operations of Avalon and Brantley Reservoirs for the purpose of delivering water to the Carlsbad District.

Under a water right permit granted by the State of New Mexico, the Carlsbad Project is allowed to store up to an additional 20,000 acre-feet (af) in Sumner Reservoir from November 1 to April 30 each year, provided that the entitled conservation storage of all four reservoirs on the Pecos River in New Mexico does not exceed 176,500 af. No additional storage under this water right permit occurred in 2004.

A final permit for the creation of a Fish Conservation Pool in Sumner Reservoir and Santa Rosa Reservoir was received during March 2004. The permit authorizes Reclamation to store and release 500 af out of Sumner Reservoir to maintain riverine habitat in the Upper Critical Habitat of the Pecos River. Reclamation must replace the water released out of Sumner Reservoir with 375 af of water in Brantley Reservoir.

Sumner Reservoir began the year with 11,548 af in total storage. Non-irrigation season ESA-related bypasses were initiated on November 9, 2003, and discontinued on February 15, 2004. Irrigation season ESA-related bypasses occurred once, from June 7 through June 13 (10 cfs). Two Carlsbad Project block releases occurred during the 2004 irrigation season. The first block release was initiated on March 3rd and terminated on March 10th, a total of 18,345 af were released from Sumner Dam. The second block release was initiated on September 17th and terminated on September 30th, a total of 33,472 af were released from Sumner Dam. Sumner Reservoir reached a maximum total storage of 23,573 af on December 31st, 2004. Sumner Reservoir's lowest total storage was on July 22nd, at 2,050 af. Sumner Reservoir end-of-year total storage was 23,573 af.

Sumner Reservoir dropped below the minimum pool on July 9th and remained below the minimum pool until July 24th.

Figure 3 *2004 Sumner Dam Bypass/Release and Total Storage* illustrates Sumner Dam's total storage, bypasses, and releases.

A total of approximately 5,400 af were bypassed for ESA-related purposes during the non-irrigation season from November 1, 2003, through February 28, 2004. A total of approximately 200 af were bypassed during the 2004 irrigation season. The effects of these modified operations on the Carlsbad Project water supply are discussed in Section 6.1 Reclamation's Water Offset Program. Reclamation has leased water from river pumpers and the Hagerman Irrigation Company to replace the depletions associated with the modified operations.

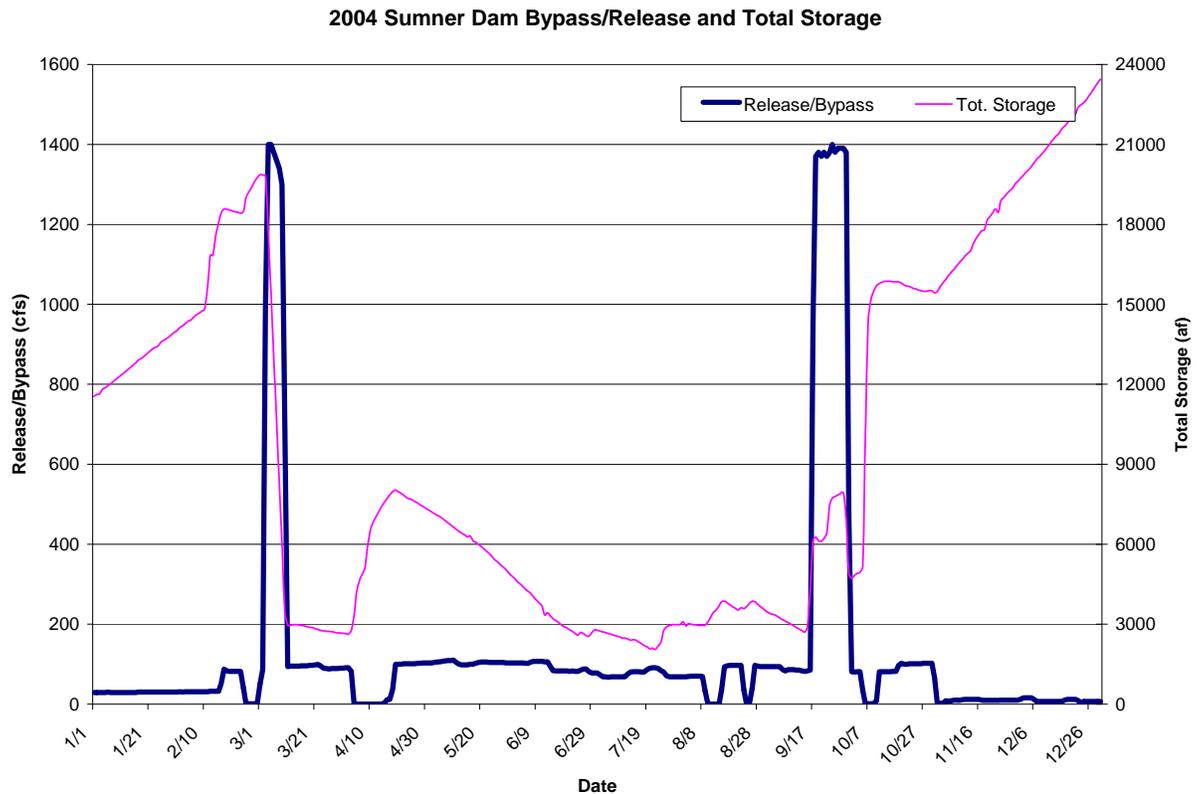


Figure 3. Calendar year 2004 Sumner Dam bypass/release and total storage (downloaded from USGS web site on 03/03/05).

2.3.2 Sumner Dam Facility Review and Safety of Dams Programs

The three radial gates at Sumner Dam are used to pass up to 50,000 cfs and are in need of repairs. This repair is scheduled to be completed during 2007.

Sumner Dam Standing Operating Procedures and Emergency Action Plan were revised in 2004. The Sumner Dam annual examination and report was completed in September 2004.

Comprehensive Facility Reviews for Sumner Dam, Brantley Dam and Avalon Dam are scheduled in November 2005.

2.4 Brantley Dam and Reservoir

2.4.1 Brantley Dam Operations

During periods without irrigation releases Brantley Dam bypasses mitigation flows of 20 cfs. During the irrigation season (normally March through October),

releases are made from Brantley Dam to Avalon Reservoir at the rate necessary to support the diversion into the Carlsbad District's main canal, generally between 75 and 350 cfs, as required by irrigation demand. Additionally, Brantley Dam releases were made, in November 2004, to assist the New Mexico Interstate Stream Commission (NMISC) in meeting its Pecos River Compact obligations as discussed in section 6.3 Water Release and Replacement Agreement for State Line Delivery and 6.2 Carlsbad Irrigation District Water Lease Program. Figure 4 *2004 Brantley Dam Bypass/Release and Total Storage* depicts Brantley Dam's Total Storage, Release, and Bypasses.

The Corps has flood operation responsibility once the reservoir rises into the flood pool, as identified by the Corps in their Water Control Manual for Brantley Dam. Even though the top of the conservation or entitlement pool for Brantley Reservoir was 3,256.05 ft (NAVD 88) for 2004, the Corps does not recognize its flood operations control responsibility to start until the reservoir reaches elevation 3,272.69 ft which is the projected top of conservation after 100 years of sediment buildup. Therefore, Reclamation has flood operation control responsibility below elevation 3,272.69 (NAVD 88) ft to the top of the entitlement pool, which is adjusted each year for sediment.

Brantley Reservoir began the year with a total storage of 6,241 af. Brantley Dam irrigation releases were initiated on April 30th and were stopped and started as needed to meet demand and to conserve water. The final irrigation release occurred on October 31st. Approximately 54,000 af were released for irrigation during this period. Brantley Reservoir reached a maximum total storage of 42,466 af on November 1st. Brantley Reservoir's lowest total storage was on September 20th at a volume of 5,616 af. Brantley Reservoir end-of-year total storage was 36,506 af. From November 1st to November 27th, 23,098 af were released for the Carlsbad District's water lease program.

2.4.2 Brantley Dam Facility Review and Safety of Dams Programs

Sinkholes exist upstream and downstream on the left side of Brantley Dam. The sinkholes are visually monitored on a regular basis and surveyed every two years. The latest survey was completed on May, 10, 2004. Currently, the sinkholes are not a structural threat to the facility.

As part of regular maintenance, rip rap was placed around the perimeter of the stilling basin. Additionally, the Standing Operating Procedures and Emergency Action Plan were revised, and the Brantley Dam annual examination and report was completed in November 2004.

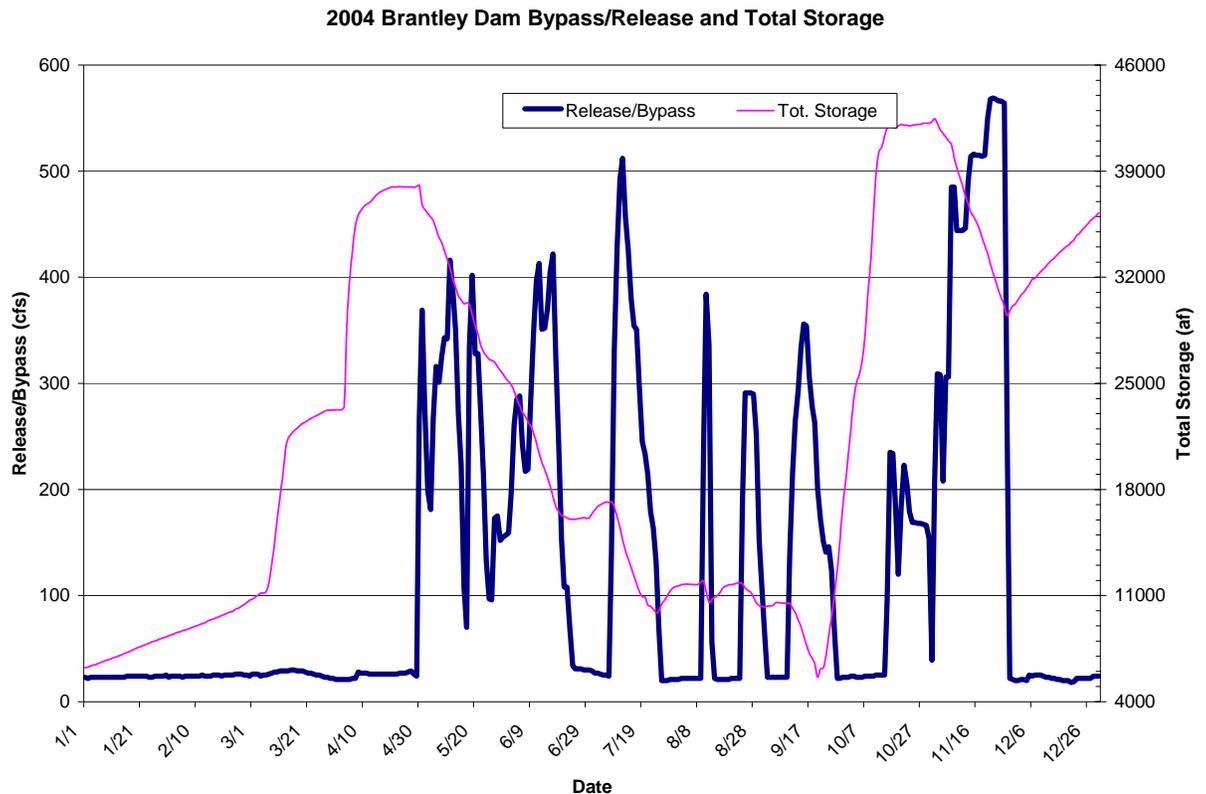


Figure 4. Calendar year 2004 Brantley Dam releases and total storage (downloaded from USGS web site on 03/03/05).

2.4.3 Brantley Reservoir Water Quality Monitoring

Bio-West Inc. has contracted with the Bureau of Reclamation to continue weekly water quality monitoring of Brantley Reservoir. Total dissolved solids, salinity, specific conductivity, temperature, dissolved oxygen, and pH data are being collected each week at the same locations as previous collection efforts and are being forwarded to the Carlsbad Irrigation District on a weekly basis. Monitoring will continue with Bio-West through January 21, 2006.

2.5 Avalon Dam and Reservoir

2.5.1 Avalon Dam Operations

Due to the small reservoir capacity and the location of Brantley Dam 10 miles upstream, Avalon Dam is used primarily as a diversion dam to meet irrigation demand for the Carlsbad District. Water is released from Brantley Dam and the small reservoir at Avalon is used to fine tune the releases into the Carlsbad

District Main Canal. Diversions into the Carlsbad District Main Canal began on April 26, and ceased on October 28, totaling 50,620 af. Avalon Reservoir began the year with conservation storage of 1,722 af. Carlsbad District diversions are presented in Figure 5. 2004 *Carlsbad District Main Canal Diversions*.

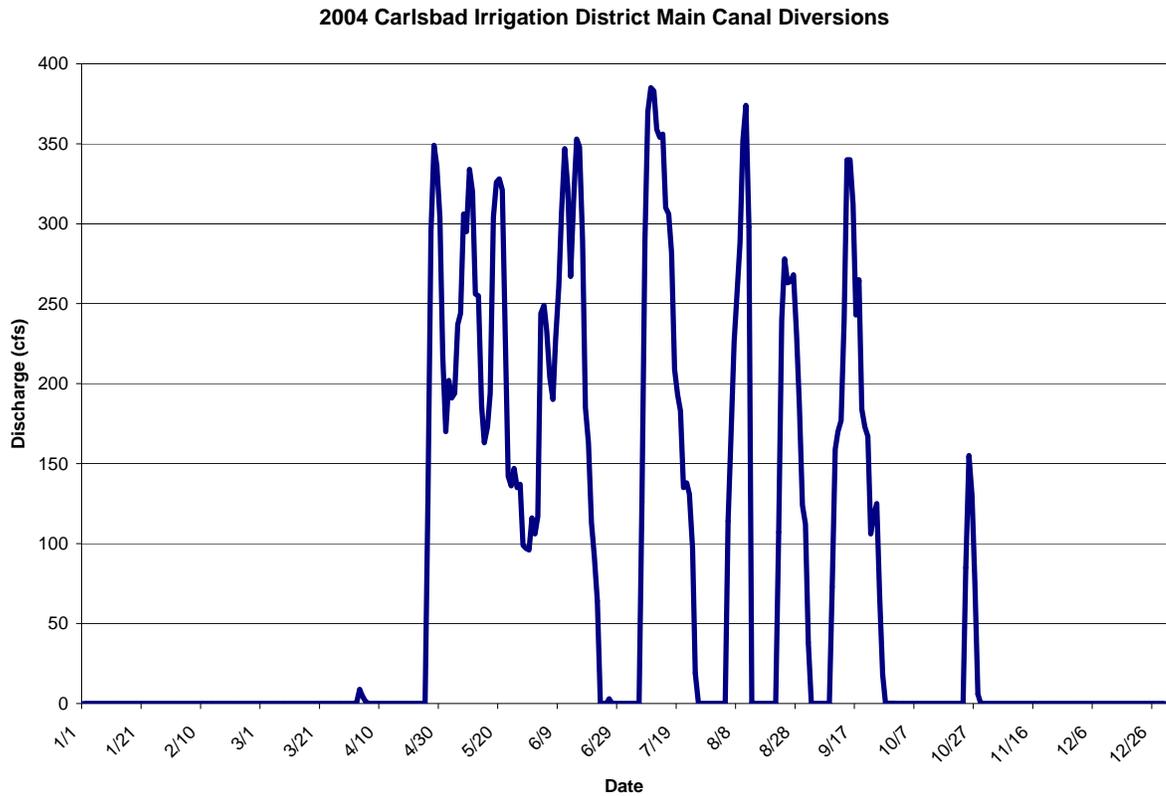


Figure 5. Calendar Year 2004 Carlsbad District Main Canal Diversions (downloaded from the USGS web site 03/03/05).

A total of 26,330 af of water was released from Avalon Dam directly to the Pecos River in 2004 for the NMISC and Carlsbad District lease agreement. Avalon Reservoir end-of-year total storage was 1,461 af.

A significant flood event occurred on April 3rd and 4th. Once the flooding started, the releases from Brantley Dam were stopped. The large flows below Brantley Dam, specifically from the Rocky Arroyo, caused all three of Avalon’s spillways to flow, with a peak daily flow of 14,400 cfs.

2.5.2 Avalon Dam Facility Review and Safety of Dams Programs

Standing Operating Procedures and Emergency Action Plan were revised, and the Avalon Dam annual examination and report was completed in November 2004. A masonry wall survey was completed on May 14, 2004.

3.0 CARLSBAD PROJECT ENVIRONMENTAL COMPLIANCE ACTIVITIES

3.1 Endangered Species Program for Water Operations

Reclamation is operating in compliance with a Biological Opinion (BiOp) issued by the U.S. Fish and Wildlife Service (Service) in June 2003. The BiOp is effective through February 28, 2006.

The Pecos River experienced an intermittent period from July 17 to July 24, 2004. Service officials were quick to monitor the dry conditions. Water from the Fish Conservation Pool was used to supplement native flows hoping to minimize or eliminate the intermittent condition, flood inflows from upstream of Acme Gage reconnected the river flow of the affected area within eight-days after drying started. The later part of the irrigation season and all of the non-irrigation season experienced high amounts of precipitation within the basin. Conditions at the present are above average.

The beginning of 2004 was an extremely dry year and starting January 1st bypasses remained at 30 cfs until the Ft. Sumner District started irrigating on February 17, 2004. The Carlsbad Irrigation District (Carlsbad District) also called for an early release, which began on March 3, 2004 after conditions of the BiOp were clarified. The bypass from November 1st to December 31st, 2004 was less than 12 cfs because the hydrologic conditions for the latter half of 2004 were significantly different.

Reclamation leased groundwater rights associated with 300 acres located approximately 15 miles upstream of the Acme gage. Approximately 1,000 af were pumped to the Pecos River during calendar year 2004. The land fallowing and pumping operation associated with the groundwater lease did not increase or decrease the Carlsbad Project water supply in 2004. Although the water pumped to the Pecos River did provide refuge for approximately one mile during low flow and intermittent conditions.

3.2 National Environmental Policy Act (NEPA) Activities

3.2.1 Carlsbad Project Water Operations and Water Supply Conservation Environmental Impact Statement

During 2004, work continued on preparation of the Carlsbad Project Water Operations and Water Supply Conservation Environmental Impact Statement (Carlsbad Project Operations EIS). The Carlsbad Project Operations EIS has five action alternatives and the no action alternative. An Open House

meeting was held at the Bureau of Land Management Office in Roswell, NM, on December 8, 2004 to present preliminary results. Carlsbad Project Operations EIS team members made presentations on the National Environmental Policy Act process, Hydrological Modeling, Endangered Species, and social and economical status of the Carlsbad and Artesia communities. This is a multi-agency effort with participation by federal, state and local agencies and irrigation districts. The Carlsbad Project Operations EIS teams are currently revising and reviewing all the chapters of the Draft Carlsbad Project Operations EIS. The Draft Carlsbad Project Operations EIS is scheduled to be printed and released in September 2005; the Record of Decision is expected in July 2006.

3.2.1.1 Biological Resources Working Group

The Biological Resource Working Group (BRWG) completed its first round of reviews on Chapter 3, Affected Environment and Chapter 4, Environmental Consequences, of the draft Carlsbad Project Water Operations and Water Supply Conservation Environmental Impact Statement (EIS). Final edits were submitted to the Bureau of Reclamation Editors in late February 2005. A review of the draft EIS occurred from March 17 to April 7, 2005 and comments were recently considered by the Management Team.

An internal draft of the Biological Assessment (BA) has been started. Interested parties will be solicited for comments and data to help in the preparation of the BA. A schedule has been developed to meet the August 8, 2005 submission of the final BA to the U.S. Fish and Wildlife Service to initiate formal consultation under Section 7 of the Endangered Species Act (ESA).

3.2.1.2 Pecos River Hydrology Working Group

The Hydrology Working Group (HWG) consists of representatives from Reclamation, NMISC, and New Mexico Office of the State Engineer (NMOSE), Corps, Carlsbad District, Pecos Valley Artesian Conservancy District (PVACD), and the Service. The HWG was formed in January 2000 to further develop the river and operations simulation computer model of the Pecos River from Santa Rosa Lake to Avalon Dam. A suite of models, called the Pecos River Decision Support Software, have been linked to model the Pecos River Basin from Santa Rosa Dam to the Red Bluff gage. In 2004 the HWG analyzed the set of alternatives and has reduced the data for presentation in the Draft Carlsbad Project Operations EIS.

3.2.2 Miscellaneous Purposes Contract Environmental Impact Statement

A second Environmental Impact Statement (EIS), called the Miscellaneous Purposes Contract EIS, is being prepared by Reclamation and the New Mexico Interstate Stream Commission (NMISC) to cover a long-term miscellaneous purpose contract between the Carlsbad District and Reclamation specifically for any related subsequent agreements with the NMISC. The Miscellaneous Purposes Contract EIS is spearheaded by the NMISC and would allow the NMISC to use Carlsbad Project water allotted to land located inside the boundaries of the Carlsbad District that NMISC owns or leases from other member of the Carlsbad District, or other project water, for release from facilities serving the Carlsbad Project. It would replace an existing 1999 short-term contract detailed in Section 6.2 Carlsbad Irrigation District Water Lease Program. This will assist the NMISC in compliance with the Pecos River Compact and the Supreme Court Amended Decree. Work to date includes a funding transfer agreement with the NMISC; selection of the NMISC contractor; publication of the Notice of Intent on January 20, 2004, in the Federal Register; one public meeting held on February 12, 2004, in Carlsbad, New Mexico; and data collection. A newsletter provided an update on the EIS in January 2005. A Memorandum of Agreement with NMISC was signed in September 2004. The draft EIS is scheduled to be printed and distributed to the public in June 2005, the final EIS is due out by March 2006. A Record of Decision is expected in May 2006.

4.0 PECOS RIVER BASIN WATER SALVAGE PROJECT

Under the authority of Public Law 88-594, Reclamation continues to control salt cedar growth from the Sumner Dam area to the New Mexico-Texas state line. This excludes the area between the Artesia bridge and north boundary of Reclamation's Brantley lands. Reclamation contracts with the Carlsbad District to perform the mechanical removal work. Salt cedar removal is primarily accomplished utilizing rubber-tire tractors with root plows, and a D-7 caterpillar with a rake attachment.

Pecos River lands cleared in New Mexico total approximately 33,200 acres. Acreage cleared by Reclamation, south of the New Mexico-Texas state line, used to total about 14,000 acres. The State of Texas presently addresses salt cedar clearing on these areas. Reclamation is working with the state of Texas to release the easements in Texas back to the State of Texas. Federal lands in the program make up about 36 percent of the cleared areas, and private lands make up about 64 percent.

The original authorizing legislation allowed clearing for approximately 58,000 acres, but was reduced by litigation brought by the Audubon Society and the completion of an EIS in 1979. Fiscal Year 2004 expenditures for maintaining the cleared areas of salt cedar

was \$600,000 or \$18.07 per acre. The NMISC funded \$150,000.00 of these costs. In 2004, \$298,000 was used for equipment replacement.

NMISC continues to fund Reclamation's involvement in obtaining annual cooperative agency agreements from private landowners for the Pecos River Basin Water Salvage Program.

Although the program did not achieve the original acreage intended, the Water Salvage Project is, to date, the largest and most successful effort to control the growth of salt cedar in the Pecos Valley.

5.0 FORT SUMNER PROJECT

5.1 Crop Production

As reported by Ft. Sumner District, crops grown in 2004 were alfalfa hay, other hay, irrigated pasture, cantaloupe, watermelon, honey ball, honey dew, pecans, and nursery. Out of a total irrigable area of 6,500 acres, 6,354 acres were irrigated in 2004. Total gross crop related income of \$3,108,586 was reported on Ft. Sumner District's crop and water data for an average crop value of \$489.23 per irrigated acre. Of the total water diverted, 24,959 acre-feet (af) were delivered to the irrigated lands, for a total of 3.9 af delivered per irrigated acre.

5.2 Operations

The irrigation season for Ft. Sumner District typically begins March 1st and ends October 31st. The Ft. Sumner District is also allowed to divert for two, eight-day periods during the winter. This winter right is usually taken just prior to March 1st. During irrigation season, 80 to 100 cfs is usually bypassed through Sumner Reservoir depending on Ft. Sumner District's available water right. During 2004, Ft. Sumner District began calling for water on February 17th, 2004 and discontinued irrigating on October 31st, 2004. Ft. Sumner District's allotment ranged from 65 to 100 cfs. A total of 34,300 af were diverted into the Ft. Sumner District Main Canal as recorded at the USGS Fort Sumner Main Canal Near Fort Sumner, NM gage. The amount diverted into the main canal was reduced by 110 af to account for the diversion of the Fish Conservation Pool water. A graph of Ft. Sumner District's diversions is shown in Figure 6 *2004 Fort Sumner Irrigation District Main Canal Diversions*.

The Bureau of Reclamation signed a following agreement with the Ft. Sumner District to fallow land within the Ft. Sumner District and returns the water to the Pecos River at the Sandgate wasteway. The water returned to the Pecos River is calculated based on the amount of land retired and the amount of water diverted into the Main Canal. The term of the lease agreement is from May 30, 2003 through

December 31, 2005. The purpose of the lease is to increase the flows in the upper critical habitat. In 2004 the retired acreage ranged from 1,164 acres to 716 acres (changes on August 15th), a total of 6,772 af was bypassed by the Ft. Sumner District into the Pecos River under this lease agreement.

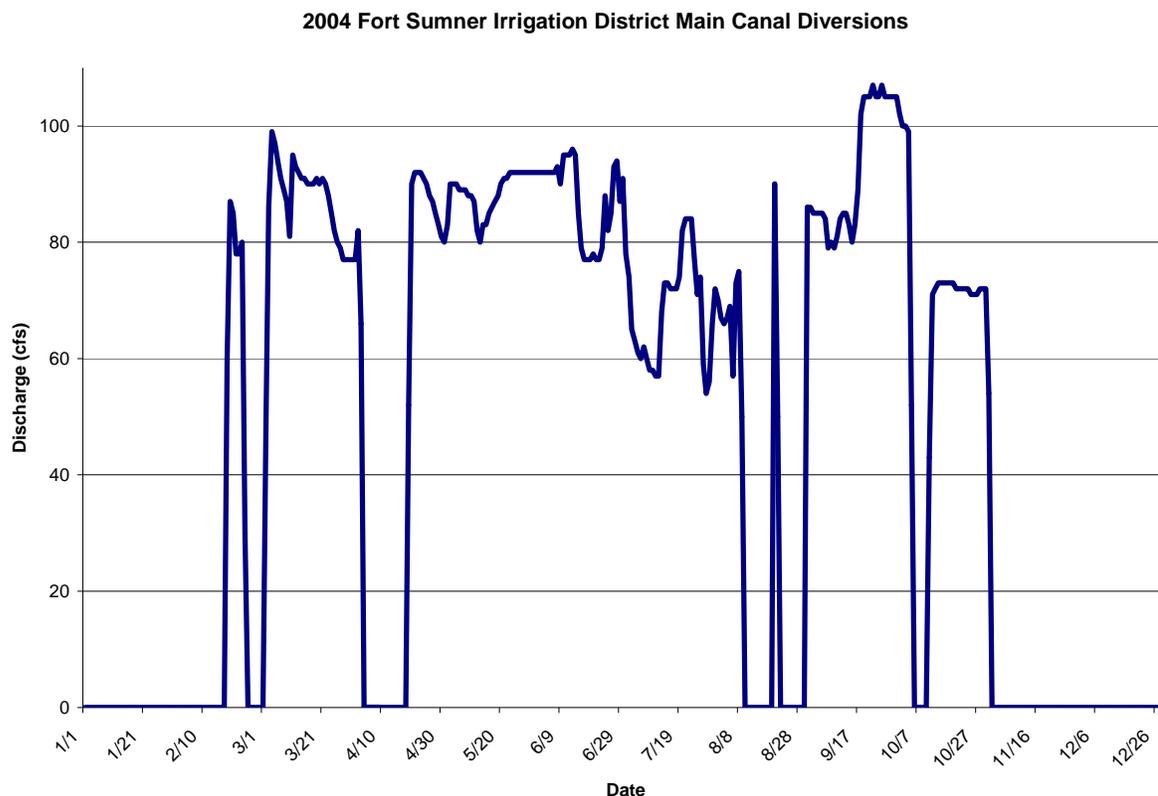


Figure 6. Fort Sumner Irrigation District 2004 diversions (downloaded from USGS web site on 03/03/05).

5.3 Fort Sumner Irrigation District Review of Operation and Maintenance Program

The 2003 Ft. Sumner District Review of Operation and Maintenance (RO&M) Examination and Report were completed on December 12, 2003. The next RO&M examination is scheduled for 2006.

6.0 OTHER PECOS RIVER ACTIVITIES AND OPERATIONS

6.1 Reclamation's Water Offset Program

Reclamation leases water rights from willing sellers within the Pecos River Basin to offset the additional depletions caused by Endangered Species Act related operations. During 2004, agreements were reached with six Pecos River pumpers and a Hagerman Irrigation Company (HIC) irrigator to lease the water rights

associated with 1,431.8 acres. Applying a consumptive irrigation requirement of 2.1 af/acre to the 1,262.8 acres associated with the river pumpers and the 169 acres associated with the HIC, an additional 3,007 af was added to the Pecos River.

General calculations show that Reclamation's water offset program put more water into the Pecos River than the additional depletions incurred by the modified operations of Sumner Dam for the period November 1, 2003, through October 31, 2004. In general, the bypass flows are approximately 50 percent as efficient as block releases. Using this assumption, the bypass of approximately 5,400 af resulted in approximately 2,800 af of additional depletions to the Carlsbad Project water supply. Reclamation's water acquisition credit of approximately 3,007 af is greater than the additional depletions.

Reclamation and NMISC staff are working together to develop a fair, equitable, and simple method that accurately calculates the additional net depletions and offsets.

6.2 Carlsbad Irrigation District Water Lease Program

Reclamation and Carlsbad District entered into a 5-year agreement on February 9, 1999, which authorizes the use of Carlsbad Project water for a purpose other than agriculture. This agreement has been extended through February 9, 2009, and will eventually be replaced by a long-term contract with similar provisions. This agreement provides for individual yearly contracts between Carlsbad District and the NMISC, approved by Reclamation. Such an agreement for the 2004 water year was entered into on July 7, 2004, to lease from Carlsbad District water allocated and available to Carlsbad District but uncalled for by its users (undelivered allotment water). Approximately 22,200 acre-feet of such water was leased pursuant to this agreement. The date for sign-up and delivery of 2004 undelivered allotment water was extended by amendment to the July 7 agreement to December 31, 2004, with delivery of that the additional water will take place in 2005. Approximately 1,366 acre-feet of water was leased pursuant to that amendment. An environmental impact statement is being prepared for a long term contract. Details are provided in Section 3.2.2 Miscellaneous Purposes Contract EIS.

6.3 Water Release and Repayment Agreement for State Line Delivery

There was no release and repayment agreement for 2004.

6.4 Lower Pecos River Basin Committee (Ad Hoc Pecos River Basin Committee)

Reclamation continues to participate in the Lower Pecos River Basin Committee, a group originally convened as an *ad hoc* committee by NMISC in August 2001 to develop a consensus plan for continuing to meet New Mexico's Compact obligations.

The committee's focus is implementation of the consensus plan and other actions to continue New Mexico's compliance with the Pecos River Compact.

6.5 Pecos River Basin General Stream Adjudication

[State of New Mexico, ex rel. the Office of the State Engineer and Pecos Valley Artesian Conservancy District v. L. T. Lewis, et al. and the United States of America, Case Nos. 20294 and 22600 (Consolidated)].

The Pecos River General Stream Adjudication (State Engineer v. L.T. Lewis) is ongoing in the 5th Judicial District Court in Chaves County, New Mexico. Reclamation and the U. S. Department of Justice are involved in this case by virtue of the U. S. interest in the water rights for the Carlsbad Project.

In authorizing funding to implement the *ad hoc* committee's consensus plan, the New Mexico legislature required that there be a settlement of the Carlsbad Project's surface water claims (H.B. 417, NMSA 72-1-2.4). The Carlsbad District, Pecos Valley Artesian Conservancy District, the State of New Mexico, and the United States reached a settlement agreement in March, 2003. Key settlement terms are in accordance with the consensus plan and H.B. 417. They include NMISC purchase of land and water rights, augmentation of the flow of the Pecos River by pumping groundwater to the river, and provisions for management of supplemental well pumping within Carlsbad District. The settlement also includes operating rules governing the use of water allotted to Carlsbad District lands that will be purchased by NMISC. Depending on stateline delivery status and the water supply available to Carlsbad District, NMISC allotments may be delivered to the state line or re-allotted to Carlsbad District irrigators. Under the settlement the United States and Carlsbad District have agreed to refrain from making a priority call unless the supply available to Carlsbad District drops below 50,000 acre feet. An interim period to allow the parties to meet conditions necessary for fully implementing the settlement has been extended to August 31, 2006.

A proposed Partial Final Decree (PFD) notice and summary of the settlement agreement were mailed to all known defendants in the adjudication in November 2003. The Court received approximately 20 statements of intent to file objections to the PFD. Most of the objections were withdrawn before the Court dismissed those remaining on November 30, 2004. Dismissed objections are being appealed.

The conditions precedent in the settlement agreement include minimum levels of land and water right purchases by NMISC, a minimum capacity for augmentation well pumping to be in place, and completion of environmental compliance requirements. A "Miscellaneous Purposes Contract" will be required to allow Carlsbad Project Water to be delivered to the state line. Reclamation and the

NMISC are in the process of preparing an Environmental Impact Statement (EIS) for implementation of this contract.

The settlement agreement addresses only the rights of the United States and Carlsbad District. Adjudication of individual Carlsbad District members' rights is continuing

6.6 Endangered Species Act Related Litigation

Forest Guardians v. Bureau of Reclamation, et al. – CIV No. 02-749-JP/RLP-ACE
On June 27, 2002, the Forest Guardians filed a lawsuit against Reclamation and the Army Corps of Engineers claiming violations of the ESA and National Environmental Policy Act. On August 31, 2004, the Forest Guardians and the Reclamation signed a Stipulation of Dismissal, ending the two-year old lawsuit. The order stipulated that Reclamation would complete the Carlsbad Project Operations EIS on the following schedule: 1) Issuance of Draft Carlsbad Project Operations EIS by September 1, 2005; 2) Issuance of Final Carlsbad Project Operations EIS by June 1, 2006, and 3) Issuance of Record of Decision (ROD) by August 1, 2006. Consequently, by stipulation, the Forest Guardians will not be able to file any lawsuit against the federal government's "flow control facilities" on the Pecos River that raises any violation of NEPA prior to "August 1, 2006... or the issuance of the ROD..," whichever comes first. (Civ. No. 02-749-JB/LG-ACE)

6.7 Water 2025

The Department of the Interior's Water 2025 initiative assists communities and irrigation districts in the western United States with funding to meet critical water related needs. The Department is seeking to collaborate with local interests on projects that will help reduce the potential for water related conflicts. Through the Water 2025 program Reclamation has awarded challenge grants for up to 50 percent of the cost of projects to improve conservation, efficiency, and opportunities for development of water markets. In FY 2004, the program's first year, Reclamation awarded approximately \$4 million in grants for 19 projects West-wide. In FY 2005, Reclamation expects to award approximately \$19 million through the program for application of new technologies for improved water management, measuring devices, canal lining, and implementing water banks and other market mechanisms. Water 2025 grants are awarded through a competitive process requiring prospective recipients to respond to a request for proposals (RFP). Generally, grants are limited to \$300,000 but exceptions are possible.