

No. 65, Original

In the Supreme Court of the United States

STATE OF TEXAS, PLAINTIFF

v.

STATE OF NEW MEXICO.

*ON REVIEW OF THE RIVER MASTER'S 2018 FINAL
DETERMINATION*

**APPENDIX TO MOTION FOR REVIEW OF RIVER
MASTER'S FINAL DETERMINATION**

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WATER CODE

TITLE 3. RIVER COMPACTS

CHAPTER 42. PECOS RIVER COMPACT

Sec. 42.001. RATIFICATION. The Pecos River Compact, the text of which is set out in Section 42.010 of this code, was ratified by the legislature of this state in Chapter 30, Acts of the 51st Legislature, Regular Session, 1949, after having been signed at Santa Fe, New Mexico, on December 3, 1948, by John H. Bliss, commissioner for the State of New Mexico, and Charles H. Miller, commissioner for the State of Texas, and approved by Berkeley Johnson, representing the United States.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

Sec. 42.002. ORIGINAL COPY. An original copy of the compact is on file in the office of the secretary of state.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

Sec. 42.003. COMMISSIONER. The governor, with the advice and consent of the senate, shall appoint a commissioner to represent this state on the commission established by Article V of the compact.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

Sec. 42.004. TERM OF OFFICE. The commissioner holds office for a term of six years and until his successor is appointed and has qualified.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971. Amended by Acts 1985, 69th Leg., ch. 607, Sec. 2.

Sec. 42.005. OATH. The commissioner shall take the constitutional oath of office and shall also take an oath to faithfully perform his duties as commissioner.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

Sec. 42.006. COMPENSATION; EXPENSES. The commissioner is entitled to compensation as provided by legislative appropriation. He is entitled to reimbursement for actual expenses incurred while traveling in the discharge of his duties.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

Sec. 42.007. EMPLOYEES; ADMINISTRATIVE EXPENSES. The commissioner may employ engineering, legal, and clerical personnel as necessary to protect the interest of the state and to carry out and enforce the terms of the compact. He may incur necessary office expenses and other expenses incident to the proper performance of his duties and the proper administration of the compact. However, the commissioner shall not incur any financial obligation on behalf of this state until the legislature has authorized and appropriated money for the obligation.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

Sec. 42.0071. NOTICE OF COMPACT MEETINGS. For informational purposes, the commissioner shall file with the secretary of state notice of compact meetings for publication in the Texas Register.

Added by Acts 1985, 69th Leg., ch. 607, Sec. 1, eff. Sept. 1, 1985.

Sec. 42.008. POWERS AND DUTIES. (a) The commissioner is responsible for administering the provisions of the compact, and he has all the powers and duties prescribed by the compact.

(b) The commissioner may meet and confer with the New Mexico commissioner at any place the commission considers proper.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

Sec. 42.009. COOPERATION OF TEXAS NATURAL RESOURCE CONSERVATION COMMISSION. The Texas Natural Resource Conservation Commission shall cooperate with the commissioner in the performance of his duties and shall furnish him any available data and information he needs.

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971. Amended by Acts 1985, 69th Leg., ch. 607, Sec. 3, eff. Sept. 1, 1985; Acts 1985, 69th Leg., ch. 795, Sec. 1.135, eff. Sept. 1, 1985; Acts 1987, 70th Leg., ch. 977, Sec. 34, eff. June 19, 1987; Acts 1995, 74th Leg., ch. 76, Sec. 11.315, eff. Sept. 1, 1995.

Sec. 42.010. TEXT OF COMPACT. The Pecos River Compact reads as follows:

PECOS RIVER COMPACT

Entered Into by the States of

NEW MEXICO

and

TEXAS

Santa Fe, New Mexico

December 3, 1948

PECOS RIVER COMPACT

The State of New Mexico and the State of Texas, acting through their Commissioners, John H. Bliss for the State of New Mexico and Charles H. Miller for the State of Texas, after negotiations participated in by Berkeley Johnson, appointed by the President as the representative of the United States of America, have agreed respecting the uses, apportionment and deliveries of the water of the Pecos River as follows:

Article I

The major purposes of this Compact are to provide for the equitable division and apportionment of the use of the waters of the Pecos River; to promote interstate comity; to remove causes of present and future controversies; to make secure and protect present

development within the states; to facilitate the construction of works for, (a) the salvage of water, (b) the more efficient use of water, and (c) the protection of life and property from floods.

Article II

As used in this Compact:

(a) The term “Pecos River” means the tributary of the Rio Grande which rises in north-central New Mexico and flows in a southerly direction through New Mexico and Texas and joins the Rio Grande near the town of Langtry, Texas, and includes all tributaries of said Pecos River.

(b) The term “Pecos River Basin” means all of the contributing drainage area of the Pecos River and its tributaries above its mouth near Langtry, Texas.

(c) “New Mexico” and “Texas” mean the State of New Mexico and the State of Texas, respectively; “United States” means the United States of America.

(d) The term “Commission” means the agency created by this Compact for the administration thereof.

(e) The term “deplete by man’s activities” means to diminish the stream flow of the Pecos River at any given point as the result of beneficial consumptive uses of water within the Pecos River Basin above such point. For the purposes of this Compact it does not include the diminution of such flow by encroachment of salt cedars or other like growth, or by deterioration of the channel of the stream.

(f) The term “Report of the Engineering Advisory Committee” means that certain report of the Engineering Advisory Committee dated January, 1948, and all appendices thereto; including, basic data, processes, and analyses utilized in preparing that report, all of which were reviewed, approved, and adopted by the Commissioners signing this Compact at a meeting held in Santa Fe, New Mexico, on December 3, 1948, and which are included in the Minutes of that meeting.

(g) The term “1947 condition” means that situation in the Pecos River Basin as described and defined in the Report of the Engineering Advisory Committee. In determining any question of fact hereafter arising as to such situation, reference shall be made to, and decisions shall be based on, such report.

(h) The term “water salvaged” means that quantity of water which may be recovered and made available for beneficial use and which quantity of water under the 1947 condition was non-beneficially consumed by natural processes.

(i) The term “unappropriated flood waters” means water originating in the Pecos River Basin above Red Bluff Dam in Texas, the impoundment of which will not deplete the water usable by the storage and diversion facilities existing in either state under the 1947 condition and which if not impounded will flow past Girvin, Texas.

Article III

(a) Except as stated in paragraph (f) of this Article, New Mexico shall not deplete by man's activities the flow of the Pecos River at the New Mexico-Texas state line below an amount which will give to Texas a quantity of water equivalent to that available to Texas under the 1947 condition.

(b) Except as to the unappropriated flood waters thereof, the apportionment of which is included in and provided for by paragraph (f) of this Article, the beneficial consumptive use of the waters of the Delaware River is hereby apportioned to Texas, and the quantity of such beneficial consumptive use shall be included in determining waters received under the provisions of paragraph (a) of this Article.

(c) The beneficial consumptive use of water salvaged in New Mexico through the construction and operation of a project or projects by the United States or by joint undertakings of Texas and New Mexico, is hereby apportioned forty-three per cent (43%) to Texas and fifty-seven per cent (57%) to New Mexico.

(d) Except as to water salvaged, apportioned in paragraph (c) of this Article, the beneficial consumptive use of water which shall be non-beneficially consumed, and which is recovered, is hereby apportioned to New Mexico but not to have the effect of diminishing the quantity of water available to Texas under the 1947 condition.

(e) Any water salvaged in Texas is hereby apportioned to Texas.

(f) Beneficial consumptive use of unappropriated flood waters is hereby apportioned fifty per cent (50%) to Texas and fifty per cent (50%) to New Mexico.

Article IV

(a) New Mexico and Texas shall cooperate to support legislation for the authorization and construction of projects to eliminate nonbeneficial consumption of water.

(b) New Mexico and Texas shall cooperate with agencies of the United States to devise and effectuate means of alleviating the salinity conditions of the Pecos River.

(c) New Mexico and Texas each may:

(i) Construct additional reservoir capacity to replace reservoir capacity made unusable by any cause.

(ii) Construct additional reservoir capacity for the utilization of water salvaged and unappropriated flood waters apportioned by this Compact to such state.

(iii) Construct additional reservoir capacity for the purpose of making more efficient use of water apportioned by this Compact to such state.

(d) Neither New Mexico nor Texas will oppose the construction of any facilities permitted by this Compact, and New Mexico and Texas will cooperate to obtain the construction of facilities that will be of joint benefit to the two states.

(e) The Commission may determine the conditions under which Texas may store water in works constructed in and operated by New Mexico.

(f) No reservoir shall be constructed and operated in New Mexico above Avalon Dam for the sole benefit of Texas unless the Commission shall so determine.

(g) New Mexico and Texas each has the right to construct and operate works for the purpose of preventing flood damage.

(h) All facilities shall be operated in such manner as to carry out the terms of this Compact.

Article V

(a) There is hereby created an interstate administrative agency to be known as the "Pecos River Commission." The Commission shall be composed of one Commissioner representing each of the states of New Mexico and Texas, designated or appointed in accordance with the laws of each such state, and, if designated by the President, one Commissioner representing the United States. The President is hereby requested to designate such a Commissioner. If so designated, the Commissioner representing the United States shall be the presiding officer of the Commission, but shall not have the right to vote in any of the deliberations of the Commission. All members of the Commission must be present to constitute a quorum.

(b) The salaries and personal expenses of each Commissioner shall be paid by the government which he represents. All other expenses which are incurred by the Commission incident to the administration of this Compact and which are not paid by the United States shall be borne equally by the two states. On or before November 1 of each even numbered year the Commission shall adopt and transmit to the Governors of the two states and to the President a budget covering an estimate of its expenses for the following two years. The payment of the expenses of the Commission and of its employees shall not be subject to the audit and accounting procedures of either of the two states. However, all receipts and disbursements of funds handled by the Commission shall be audited yearly by a qualified independent public accountant and the report of the audit shall be included in, and become a part of, the annual report of the Commission.

(c) The Commission may appoint a secretary who, while so acting, shall not be an employee of either state. He shall serve for such term, receive such salary, and perform such duties as the Commission may direct. The Commission may employ such engineering, legal, clerical, and other personnel as in its judgment may be necessary for the performance of its functions under this Compact. In the hiring of employees the Commission shall not be bound by the civil service laws of either state.

(d) The Commission, so far as consistent with this Compact, shall have power to:

1. Adopt rules and regulations;
2. Locate, establish, construct, operate, maintain, and abandon water gaging stations, independently or in cooperation with appropriate governmental agencies;
3. Engage in studies of water supplies of the Pecos River and its tributaries, independently or in cooperation with appropriate governmental agencies;

4. Collect, analyze, correlate, preserve and report on data as to the stream flows, storage, diversions, salvage, and use of the waters of the Pecos River and its tributaries, independently or in cooperation with appropriate governmental agencies;

5. Make findings as to any change in depletion by man's activities in New Mexico, and on the Delaware River in Texas;

6. Make findings as to the deliveries of water at the New Mexico-Texas state line;

7. Make findings as to the quantities of water salvaged and the amount thereof delivered at the New Mexico-Texas state line;

8. Make findings as to quantities of water non-beneficially consumed in New Mexico;

9. Make findings as to quantities of unappropriated flood waters;

10. Make findings as to the quantities of reservoir losses from reservoirs constructed in New Mexico which may be used for the benefit of both states, and as to the share thereof charged under Article VI hereof to each of the states;

11. Acquire and hold such personal and real property as may be necessary for the performance of its duties hereunder and to dispose of the same when no longer required;

12. Perform all functions required of it by this Compact and do all things necessary, proper or convenient in the performance of its duties hereunder, independently or in cooperation with appropriate governmental agencies;

13. Make and transmit annually to the Governors of the signatory states and to the President of the United States on or before the last day of February of each year, a report covering the activities of the Commission for the preceding year.

(e) The Commission shall make available to the Governor of each of the signatory states any information within its possession at any time, and shall always provide free access to its records by the Governors of each of the States, or their representatives, or authorized representatives of the United States.

(f) Findings of fact made by the Commission shall not be conclusive in any court, or before any agency or tribunal, but shall constitute prima facie evidence of the facts found.

(g) The organization meeting of the Commission shall be held within four months from the effective date of this Compact.

Article VI

The following principles shall govern in regard to the apportionment made by Article III of this Compact:

(a) The Report of the Engineering Advisory Committee, supplemented by additional data hereafter accumulated, shall be used by the Commission in making administrative determinations.

(b) Unless otherwise determined by the Commission, depletions by man's activities, state-line flows, quantities of water salvaged, and quantities of unappropriated flood waters

shall be determined on the basis of three-year periods reckoned in continuing progressive series beginning with the first day of January next succeeding the ratification of this Compact.

(c) Unless and until a more feasible method is devised and adopted by the Commission the inflow-outflow method, as described in the Report of the Engineering Advisory Committee, shall be used to:

(i) Determine the effect on the state-line flow of any change in depletions by man's activities or otherwise, of the waters of the Pecos River in New Mexico.

(ii) Measure at or near the Avalon Dam in New Mexico the quantities of water salvaged.

(iii) Measure at or near the state line any water released from storage for the benefit of Texas as provided for in subparagraph (d) of this Article.

(iv) Measure the quantities of unappropriated flood waters apportioned to Texas which have not been stored and regulated by reservoirs in New Mexico.

(v) Measure any other quantities of water required to be measured under the terms of this Compact which are susceptible of being measured by the inflow-outflow method.

(d) If unappropriated flood waters apportioned to Texas are stored in facilities constructed in New Mexico, the following principles shall apply:

(i) In case of spill from a reservoir constructed in and operated by New Mexico, the water stored to the credit of Texas will be considered as the first water to spill.

(ii) In case of spill from a reservoir jointly constructed and operated, the water stored to the credit of either state shall not be affected.

(iii) Reservoir losses shall be charged to each state in proportion to the quantity of water belonging to that state in storage at the time the losses occur.

(iv) The water impounded to the credit of Texas shall be released by New Mexico on the demand of Texas.

(e) Water salvaged shall be measured at or near the Avalon Dam in New Mexico and to the quantity thereof shall be added a quantity equal to the quantity of salvaged water depleted by man's activities above Avalon Dam. The quantity of water salvaged that is apportioned to Texas shall be delivered by New Mexico at the New Mexico-Texas state line. The quantity of unappropriated flood waters impounded under paragraph (d) of this Article, when released shall be delivered by New Mexico at the New Mexico-Texas state line in the quantity released less channel losses. The unappropriated flood waters apportioned to Texas by this Compact that are not impounded in reservoirs in New Mexico shall be measured and delivered at the New Mexico-Texas state line.

(f) Beneficial use shall be the basis, the measure, and the limit of the right to use water.

Article VII

In the event of importation of water by man's activities to the Pecos River Basin from any other river basin the state making the importation shall have the exclusive use of such imported water.

Article VIII

The provisions of this Compact shall not apply to, or interfere with, the right or power of either signatory state to regulate within its boundaries the appropriation, use and control of water, not inconsistent with its obligations under this Compact.

Article IX

In maintaining the flows at the New Mexico-Texas state line required by this Compact, New Mexico shall in all instances apply the principle of prior appropriation within New Mexico.

Article X

The failure of either state to use the water, or any part thereof, the use of which is apportioned to it under the terms of this Compact, shall not constitute a relinquishment of the right to such use, nor shall it constitute a forfeiture or abandonment of the right to such use.

Article XI

Nothing in this Compact shall be construed as:

(a) Affecting the obligations of the United States under the Treaty with the United Mexican States (Treaty Series 994);

(b) Affecting any rights or powers of the United States, its agencies or instrumentalities, in or to the waters of the Pecos River, or its capacity to acquire rights in and to the use of said waters;

(c) Subjecting any property of the United States, its agencies or instrumentalities, to taxation by any state or subdivision thereof, or creating any obligation on the part of the United States, its agencies or instrumentalities, by reason of the acquisition, construction or operation of any property or works of whatever kind, to make any payment to any state or political subdivision thereof, state agency, municipality or entity whatsoever, in reimbursement for the loss of taxes;

(d) Subjecting any property of the United States, its agencies or instrumentalities, to the laws of any state to an extent other than the extent to which such laws would apply without regard to this Compact.

Article XII

The consumptive use of water by the United States or any of its agencies, instrumentalities or wards shall be charged as a use by the state in which the use is made; provided, that such consumptive use incident to the diversion, impounding, or conveyance of water in one state for use in the other state shall be charged to such latter state.

Article XIII

This Compact shall not be construed as establishing any general principle or precedent applicable to other interstate streams.

Article XIV

This Compact may be terminated at any time by appropriate action of the legislatures of both of the signatory states. In the event of such termination, all rights established under it shall continue unimpaired.

Article XV

This Compact shall become binding and obligatory when it shall have been ratified by the legislature of each State and approved by the Congress of the United States. Notice of ratification by the legislature of each State shall be given by the Governor of that State to the Governor of the other State and to the President of the United States, and the President is hereby requested to give notice to the Governor of each State of approval by the Congress of the United States.

In Witness Whereof, the Commissioners have executed three counterparts hereof each of which shall be and constitute an original, one of which shall be deposited in the archives of the Department of State of the United States, and one of which shall be forwarded to the Governor of each State.

Done at the City of Santa Fe, State of New Mexico, this 3rd day of December, 1948.

JOHN H. BLISS

Commissioner for the State of New Mexico

CHARLES H. MILLER

Commissioner for the State of Texas

APPROVED

BERKELEY JOHNSON

Representative of the United States of America

Acts 1971, 62nd Leg., p. 110, ch. 58, Sec. 1, eff. Aug. 30, 1971.

10a

**THE PECOS RIVER
MASTER'S MANUAL**

July 28, 2003

FOREWORD

July 28, 2003 Version

This revised edition of the Pecos River Master's Manual was compiled from the edition dated November 30, 1987, which was marked as "Texas Exhibit No. 108." In the revised edition, modifications have been added to the text of the Manual and a few minor changes in presentation style have been made. The edition was prepared by the River Master and submitted to the Technical Representatives of New Mexico and Texas for review and approval. Comments received in a joint letter from the states dated May 14, 2003 have been incorporated into the revision.

INTRODUCTION

This manual contains the procedures to be used by the River Master to make the calculations provided for in the decree of the United States Supreme Court in Texas vs. New Mexico, No. 65 Original. The Calculations include determination of negative or positive departures from New Mexico's delivery obligation.

The computational procedures and the computer programs required to make the computations are described in detail in Texas Exhibit no. 79.

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MANUAL OF PROCEDURES

TO COMPUTE PECOS RIVER COMPACT COMPLIANCE

A. General

A. General

1. The so-called “annual flood inflow” for the Sumner Dam¹ to state line reach is defined as the sum of the measured flow of the Pecos River below Sumner Dam plus the estimated flood inflows from the Sumner Dam to Artesia, Artesia to Carlsbad, and Carlsbad to state line reaches. The current year’s “annual flood inflow” is averaged with the annual flood inflows for the two prior years. This three-year average quantity is termed the “Index Inflow” and is used as “x” in the equation

$$y = 0.0489892 (x)^{1.42318}$$

in order to determine the “Index Outflow,” or “y,” New Mexico’s three-year average 1947 Condition delivery obligation at the New Mexico-Texas state line. This Index Inflow-Index Outflow equation was approved June 11, 1984 by the U.S. Supreme Court in the Texas vs. New Mexico Pecos River Compact Litigation, No. 65 Original. This equation will be used to determine New Mexico’s 1947 condition delivery obligation imposed by the Pecos River Compact. A comparison of the Index Outflow with the three year average historical outflow will identify any delivery depletions from the 1947 Condition which might have occurred.

2. There are several factors which, under terms of the Pecos River Compact, might at times increase or decrease New Mexico’s obligation to deliver Pecos River water at the state line. When appropriate, the following factors may need to be employed to adjust the computed departures in the Compact compliance computations:
 - a. Adjustments for Depletions Above Sumner Dam
 - b. Depletions Due to McMillan Dike
 - c. Salvage Water in New Mexico
 - d. Unappropriated Flood Waters
 - e. Texas Water Stored in New Mexico Reservoirs
 - f. Beneficial Consumptive Use of Waters of Delaware River by Texas

¹ On October 17, 1974, Alamogordo Dam was renamed Sumner Dam by the U.S. Congress under Public Law 93-447. In the original manual, Sumner Dam was usually referenced as Alamogordo Dam. In the revision dated July 28, 2003, the references were changed to Sumner Dam because data is delivered under that name.

B. Procedures to Compute Departures of State Line Flows of the Pecos River from the 1947 Condition

1. General

- a. Compute Index Inflow, Sumner Dam to New Mexico-Texas state line as follows:²

(1). The annual flood inflow is computed as follows:

- (a) Gaged flow of the Pecos River below Sumner Dam, plus
- (b) Computed flood inflow, Sumner Dam to Artesia reach, plus
- (c) Computed flood inflow, Artesia to Carlsbad reach, plus
- (d) Computed flood inflow, Carlsbad to state line reach.

(2). The Index Inflow for one year is the average of the annual flood inflow for that year and the two prior years.

- b. Determine New Mexico's 1947 Condition delivery obligation at the New Mexico-Texas state line (Index Outflow). The 1947 Condition Index Outflow is determined by the equation:

$$y = 0.0489892(x)^{1.42318}$$

Where (x) is the Index Inflow and Y is the 1947 Condition outflow in units of 1,000 acre-feet.

- c. Determine the three-year running average historical outflow at the New Mexico-Texas state line.

(1). The annual historical outflow is computed as follows:

- (a) Gaged flow of the Pecos River at Red Bluff, New Mexico.
- (b) Gaged flow of the Delaware River near Red Bluff, New Mexico.
- (c) The total annual metered diversions under New Mexico State Engineer Permit Number 3254 into C-2713 (approved April 24, 2001), currently held by the Red Bluff Water Power Control District, not to exceed a total of 845 acre-feet per annum.³
- (d) Subparagraph B.1.c.(1)(c) will continue in effect for an initial term beginning on the date this amendment is approved by the River Master and extending until the end of Water Year 2007. Thereafter, unless rescinded as provided herein, Subparagraph B.1.c.(1)(c) will continue in effect for successive six (6) year terms coinciding with Water Years. Subparagraph B.1.c.(1)(c) may rescinded by agreement

² All computations are to be performed in units of 1,000 acre-feet rounded to the nearest 1 acre-foot. (Modified by Joint Motion, approved by the River Master, June 6, 2002).

³ Sections B.1.c.(1)(c) through B.1.c.(1)(j) were added by Joint Motion of the states as approved by the River Master on June 6, 2002 for use in accounting for Water Year 2002 and thereafter.

of Texas and New Mexico, or Subparagraph B.1.c.(1)(c) may be rescinded by either Texas or New Mexico if the Average Daily Brine Inflow of the Pecos River between the United States and Geological Survey (“USGS”) Gage at Pierce Canyon and the USGS Gage at Malaga exceeds a total dissolved solids load of 367.7 tons per day, i.e., seventy-five percent (75%) of the Base Number.

- (e) For purposes of this Paragraph, the Base Number shall be 490.3 tons per day of total dissolved solids.
 - (f) For purposes of this Paragraph, the Average Daily Brine Inflow will be determined as follows. A daily average of total dissolved solids in tons per day will be used, calculated by the USGS and based on the difference between measurements at the USGS Gage on the Pecos River at Pierce Canyon Crossing near Malaga, New Mexico (Station No. 08407000) and at the USGS Gage on the Pecos River near Malaga, New Mexico (Station No. 08406500) during the first five (5) years of the current six-year term described in Subparagraph B.1.c.(1)(d) above.
 - (g) Either Texas or New Mexico may rescind Subparagraph B.1.c.(1)(c) at the end of any Water Year, if during the year the brine well being operated under Permit Number 3254 into C-2713 is not being operated for a period of twenty (20) consecutive calendar days or for more than thirty (30) total (exclusive of holidays and weekends) days in any calendar year.
 - (h) Either Texas or New Mexico may rescind Subparagraph B.1.c.(1)(c) at the end of any Water Year, if adequate precautions to prevent brine removed from the aquifer from reentering the Pecos River are not being taken.
 - (i) Either Texas or New Mexico may rescind Subparagraph B.1.c.(1)(c) at the end of any Water Year if the annual diversion exceeds 645 acre-feet.
 - (j) Any State wishing to rescind Subparagraph B.1.c.(1)(c) must first provide the River Master and the other State with written notice of rescission at least thirty (30) days prior to the Water Year in which the rescission is to be effective.
- (2) The three-year average historical outflow for any year is the average of the annual historical outflow for that year and the two prior years.
- d. Compute annual departures of state line flows of the Pecos River from the 1947 Condition. Compute each annual departure by subtracting the annual 1947 Condition delivery obligation (Index Outflow) from the corresponding three-year average historical outflow. Add algebraically the adjustments to the computed departures as determined under the provisions of Part C herein. A negative

departure indicates an underdelivery at state line and a positive departure indicates an overdelivery.

Figure 1 shows the approximate boundary of the Pecos River Basin from its headwaters in New Mexico to the gaging station of the Pecos River near Girvin, Texas. Figures 2, 3, and 4 are stick diagrams of the main stem of the Pecos River showing important tributaries, gaging stations, diversion facilities and reservoirs in New Mexico and Texas.

2. Determination of Sumner Reservoir Releases and Spills

Use the monthly United States Geological Survey (USGS) streamflow records for the gaging station, Pecos River below Sumner Dam, as the measure of releases and spills from the reservoir.

3. Determination of Flood Inflows, Sumner Dam to Artesia

The computational items used to estimate the flood inflows to this 197.8 river mile reach of the Pecos River are listed below, followed by an explanation for each computation to be made. Monthly quantities for each item will be measured or computed, and the annual quantity will be the sum of the monthly quantities.

- Streamflow below Sumner Dam (see 3.a. below).
- Fort Sumner Irrigation District diversion (see 3.b. below)
- Fort Sumner Irrigation District return flow (see 3.c. below)
- Streamflow past Fort Sumner Irrigation District (see 3.d. below)
- Channel loss, Sumner Dam to Acme (see 3.e. below)
- Computed residual flow at Acme (see 3.f. below)
- Base Inflow, Acme to Artesia (see 3.g. below)
- River pump depletions (see 3.h. below)
- Residual flow at Artesia (see 3.i. below)
- Streamflow, Pecos River near Artesia (see 3.j. below)
- Flood inflow, Sumner Dam to Artesia (see 3.k. below)

a. Streamflow below Sumner Dam

Use the monthly USGS streamflow records for the gaging station, Pecos River below Sumner Dam, N.M.

b. Fort Sumner Irrigation District diversion

Use the monthly USGS discharge records for the gaging station, Fort Sumner Main Canal near Fort Sumner, N.M.

c. Fort Sumner Irrigation District return flow

Use 53 percent of the total annual diversion (item b. above) and distribute on a monthly basis as follows:

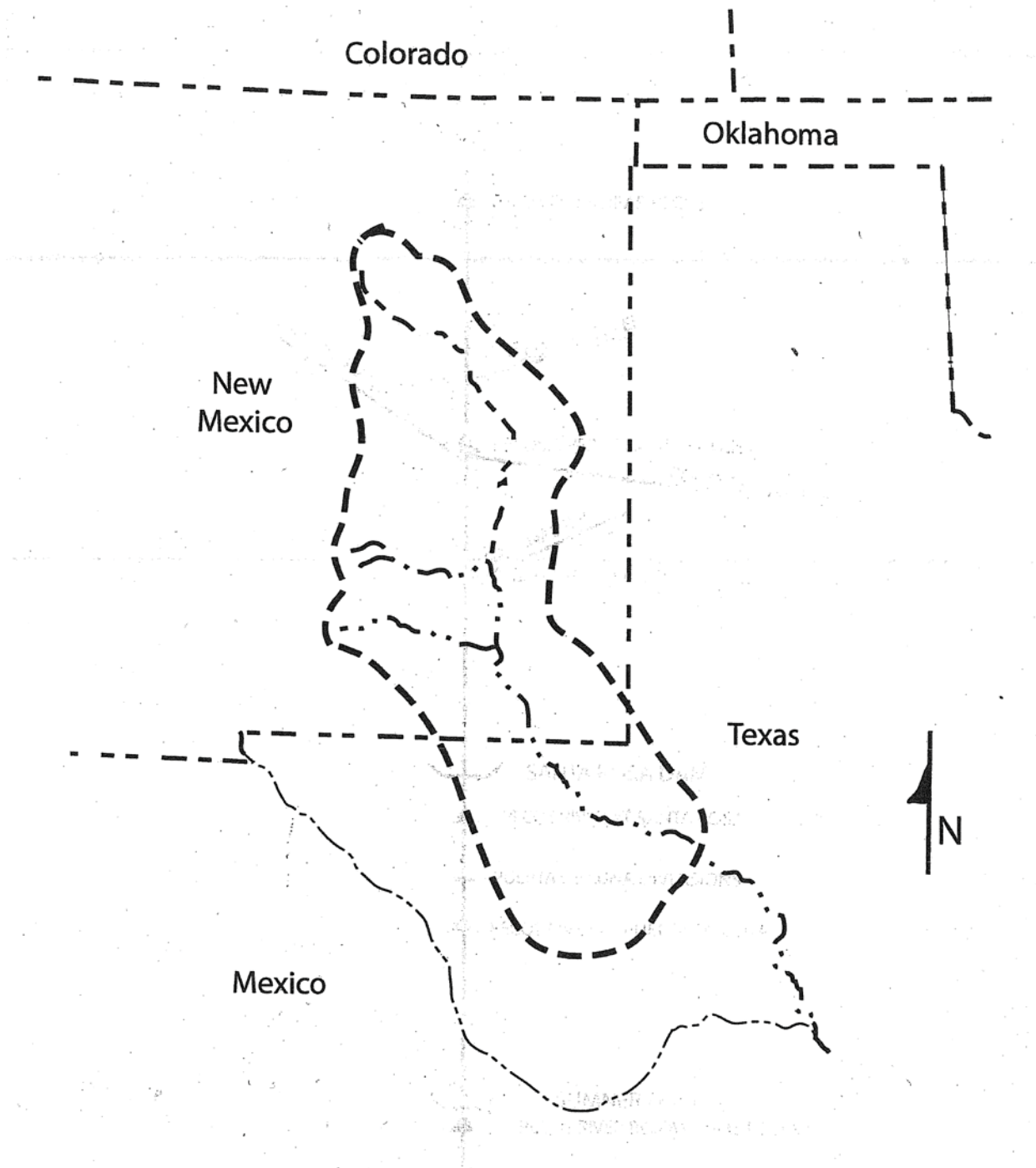


Figure 1
Pecos River Basin
Pecos River Compact
New Mexico-Texas

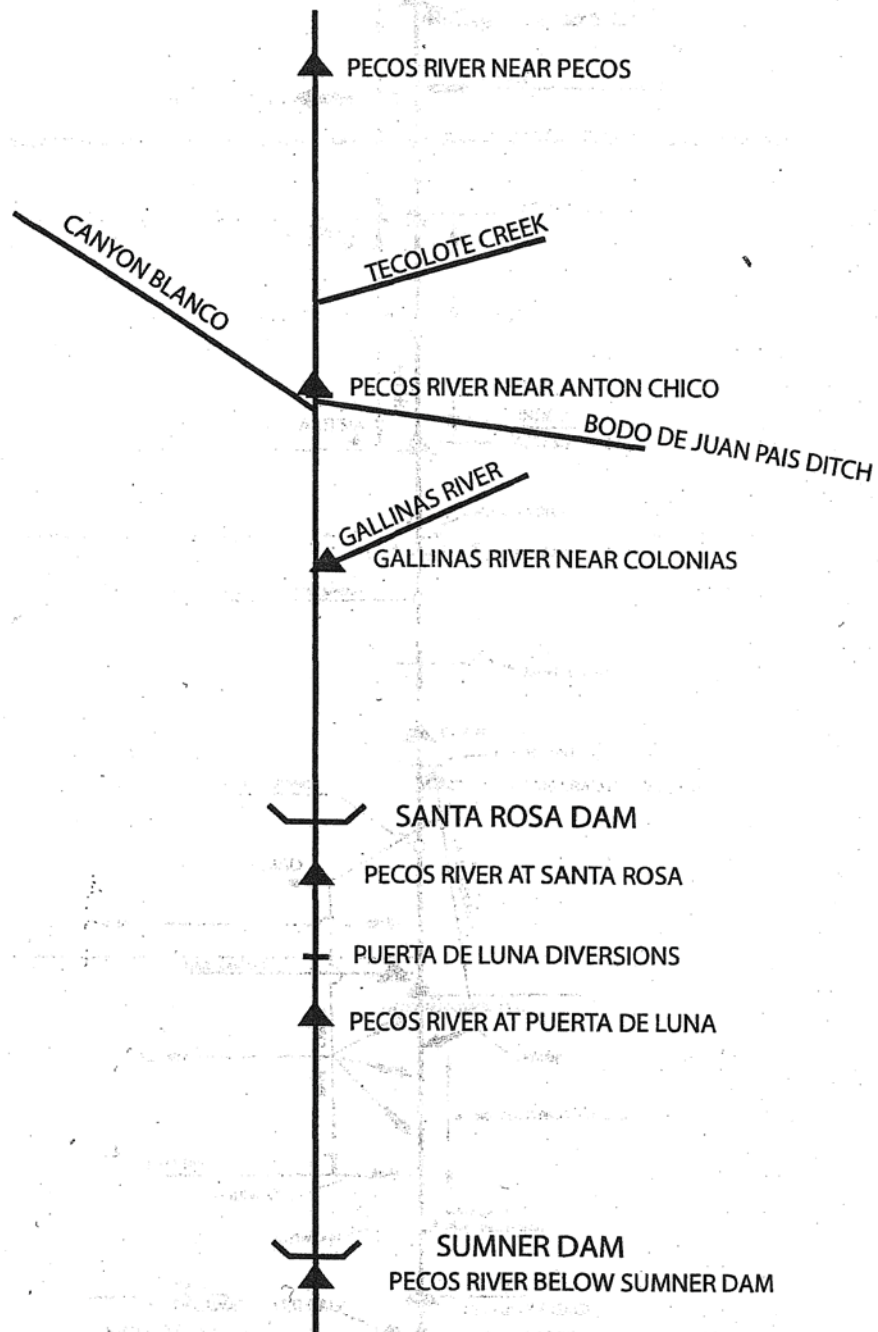
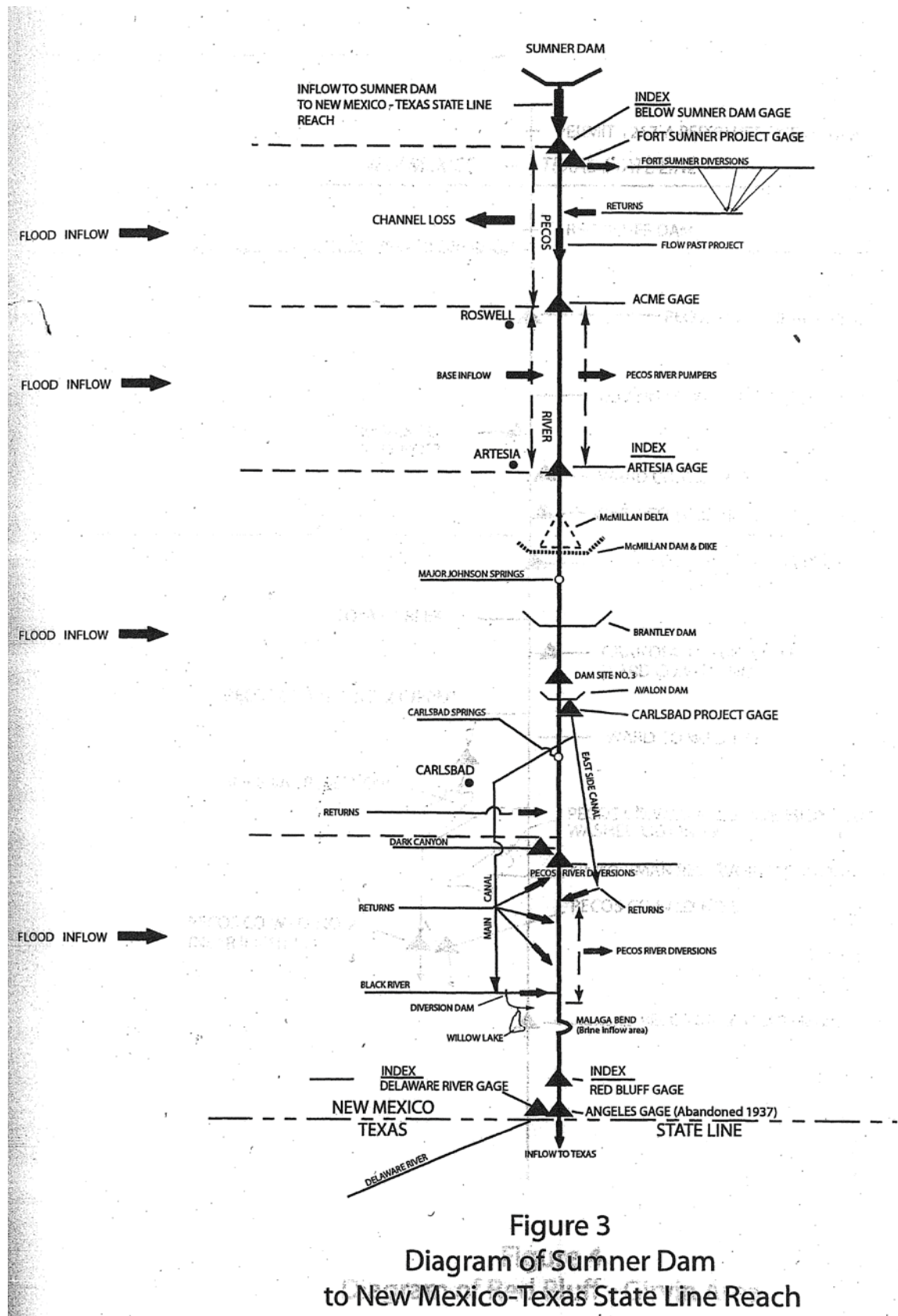


Figure 2
Diagram of Pecos River Near Pecos
to Sumner Dam



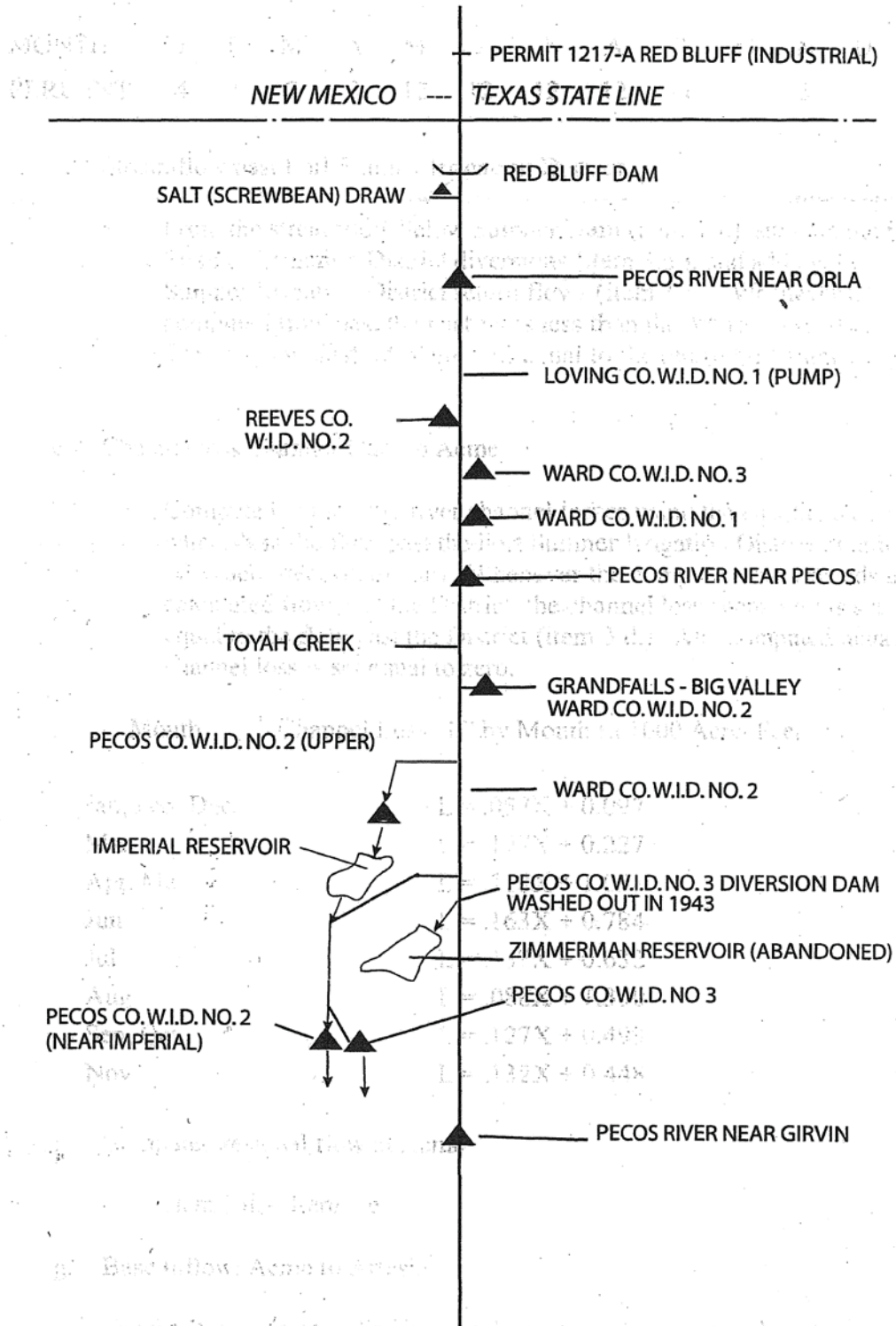


Figure 4

Diagram of Red Bluff - Girvin Area

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
PERCENT	4	3	7	8	12	12	12	12	11	10	5	4

d. Streamflow past Fort Sumner Irrigation District

From the streamflow below Sumner Dam (item 3.a.), subtract the Fort Sumner Irrigation District diversion (item 3.b.), and add the Fort Sumner Irrigation District return flows (item 3.c.). Whenever the computed flow past the District is less than the return flow, set the flow past the District (item 3.d.) equal to the return flow (item 3.c.).

e. Channel loss, Sumner Dam to Acme⁴

Compute the monthly river channel losses using the equations below, where X is the flow past the Fort Sumner Irrigation District in units of 1000 acre-feet (item 3.d.). Whenever the computed loss exceeds the calculated flow past the District, the channel loss (item 3.e.) is set equal to the flow past the District (item 3.d.). Any computed negative channel loss is set equal to zero.

Month Channel Loss "L" by Month in 1000 Acre-Feet

Jan, Feb, Dec	$L = .057X + 0.097$
Mar	$L = .177X + 0.227$
Apr, May	$L = .118X + 1.098$
Jun	$L = .163X + 0.784$
Jul	$L = .137X + 0.632$
Aug	$L = .088X + 1.350$
Sept, Oct	$L = .127X + 0.499$
Nov	$L = .132X + 0.448$

f. Computed residual flow at Acme

Item 3.d. – Item 3.e.

g. Base Inflow, Acme to Artesia⁵

For the River Master's Preliminary Report use the monthly base inflow quantities determined and furnished by the USGS. USGS will utilize the best available data and methods to estimate the total monthly base inflows accruing to the Acme to Artesia reach. In their report USGS will describe the data and methods used to estimate the base inflows and describe any unusual hydrologic events that occurred during the water year. After review of any objections to the USGS estimates by the states the River Master will make any adjustments deemed necessary to the base inflow estimates and determine the base inflow

⁴ Modified by Joint Motion of New Mexico and Texas, October 26, 1993.

⁵ Modified through Modification Determination, effective December 26, 1990.

quantities for the Final Report. If no monthly base inflow quantities are determined and furnished by USGS the River Master will prepare the estimates for the Preliminary Report.

h. River pump depletions, Acme to Artesia

Use monthly river pump diversion quantities compiled by USGS based upon river pumping from the Pecos River in the Acme to Artesia reach as reported by the New Mexico Pecos River Water Master.

i. Residual flow at Artesia

Item 3.f. + Item 3.g. – Item 3.h.

j. Streamflow, Pecos River near Artesia

Use the monthly USGS streamflow records for the gaging station, Pecos River near Artesia, N.M.

k. Flood inflow, Sumner Dam to Artesia

Item 3.j. – Item 3.i.

Table 1 shows sample computations for years 1982 and 1983 extracted from Texas Exhibit 79.

Table 1
Pecos River Compact. Summer Dam to Artesia Reach. Pecos River Basin, New Mexico
Estimated Flood Inflows in 1000 Acre-Feet Units, 1950-1983

Year	Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1982	(1) Gaged flow below Summer Dam	0.1	0.1	5.5	44.6	5.9	0.1	36.3	7.1	36.2	4.1	0	0	140.0
	(2) Ft Summer Diversions	0	0	4.7	4.7	5.3	4.9	5.1	5.9	5.8	3.6	0.2	0	40.2
	(3) Ft Summer Return Flow	0.9	0.6	1.5	1.7	2.6	2.5	2.5	2.6	2.3	2.1	1.1	0.9	21.3
	(4) Flow Past Project	1	0.7	2.3	41.6	3.2	5.7	33.7	3.8	32.7	2.6	0.9	0.9	129.1
	(5) Channel Loss, Ft Summer-Acme	0.4	0.2	0.7	6	1.5	2	5.1	1.7	4.7	0	0.3	0.3	22.9
	(6) Computed Residual Flow at Acme	0.6	0.5	1.6	35.6	1.7	3.7	28.6	2.1	28	1	0.6	0.6	104.6
	(7) Base Inflow Acme-Artesia	2.8	2.7	2.2	1.4	1.5	1.1	0	0.8	0.9	1.3	1.6	2.4	18.7
	(8) River Pump Depletion	0	0.2	0.4	2.3	1.3	0.7	2.4	1.1	1.1	0.2	0.1	0	9.8
	(9) Residual Flow at Artesia	3.4	3	3.4	34.7	1.9	4.1	27	1.8	27.8	2.9	2.1	3	115.1
	(10) Pecos River Near Artesia	4.2	3	2.2	24.5	9.3	0.6	29.1	1.2	27.3	7.6	3.2	3.9	116.1
	(11) Flood Inflow	0.8	0	-1.2	-10.2	7.4	-3.5	2.1	-0.6	-0.5	4.7	1.1	0.9	1.0
1983	(1) Gaged flow below Summer Dam	0	0	3.2	4.2	39.6	11.4	59.6	14.5	27.7	3.8	0	0	164.0
	(2) Ft Summer Diversions	0	0	2.8	3.7	5.8	5.5	6.4	5.7	4.9	2.8	0	0	37.6
	(3) Ft Summer Return Flow	0.8	0.6	1.4	1.6	2.4	2.3	2.4	2.4	2.2	2	1	0.8	19.9
	(4) Flow Past Project	0.8	0.6	1.8	2.1	36.2	8.2	55.6	11.2	25	3	1	0.8	146.3
	(5) Channel Loss, Ft Summer-Acme	0.3	0.2	0.6	1.4	5.4	2.4	8.5	2.5	3.7	0.8	0.3	0.3	26.4
	(6) Computed Residual Flow at Acme	0.5	0.4	1.2	0.7	30.8	5.8	47.1	8.7	21.3	2.2	0.7	0.5	119.9
	(7) Base Inflow Acme-Artesia	2.6	2.1	1.7	1.2	1.1	0.7	0.6	0.6	0.9	1.5	2	2.5	17.5
	(8) River Pump Depletion	0	0	0.2	0.5	2	1.2	2.6	1.6	1.9	0.2	0	0	10.2
	(9) Residual Flow at Artesia	3.1	2.5	2.7	1.4	29.9	5.3	45.1	7.7	20.3	3.5	2.7	3	127.2
	(10) Pecos River Near Artesia	4	3	2.1	2.1	28.6	1.5	40.8	2.2	25.4	7.7	9.9	4.2	131.5
	(11) Flood Inflow	0.9	0.5	-0.6	0.7	-1.3	-3.8	-4.3	-5.5	-5.1	4.2	7.2	1.2	4.3

Explanation of rows

- (1) Gaged streamflow at USGS index gaging station, Pecos River Below Summer Dam
- (2) From Table A-5-3, page S-16, RBD prior Mar 1954, measured diversions thereafter
- (3) Computed from 53 percent of annual quantity row (2) times monthly distribution from page 5-11 RBD
- (4) Row (1) - Row (2) + Row (3)
- (5) Computed from row 4 using monthly stipulated loss equations of July 3, 1985 (page A-5 of Appendix A)
- (6) Row (4) - Row (5)
- (7) Table A-18-1, page 8-5, RBD 1950-56, and 1957-83 as determined by USGS
- (8) Table A-7-6, pages 7-20 & 21, RBD 1950-56, and 1957-83 as tabulated by USGS from New Mexico diversion records
- (9) Row (6) + Row (7) - Row (8)
- (10) Revised USGS streamflow records Pecos River near Artesia
- (11) Row (10) - Row 9

4. Determination of Flood Inflows, Artesia to Carlsbad⁶

The flood Inflows for the Artesia to Carlsbad reach are computed as the sum of the flood inflows to the Artesia to Dam Site #3 reach and the flood Inflows to the Dam Site #3 to Carlsbad reach. Monthly quantities for each item will be measured or computed, and the annual quantities will be the sum of the monthly quantities. The computational items used to estimate the flood inflows for this 45.3 river mile reach of the Pecos River are listed below, followed by an explanation of each computation to be made:

- Flood Inflow, Artesia to Dam Site #3
- Flood Inflow, Dam Site #3 to Carlsbad
- Total inflow to the Dam Site #3 to Carlsbad Reach
- Streamflow, Pecos River at Dam Site #3
- Carlsbad Springs New Water
- Total outflow from the Dam Site #3 to Carlsbad Reach
- Lake Avalon Evaporation Loss
- Lake Avalon Change in Storage
- Net Carlsbad Irrigation District Diversions
- Other Depletions
- Streamflow, Pecos River at Carlsbad
- Flood Inflow, Artesia to Carlsbad

a. Flood Inflow, Artesia to Dam Site #3

Use the sum of the monthly flood flow quantities determined by hydrograph scalping of the daily USGS streamflow records for:

- (1) Rio Penasco at Dayton, NM;
- (2) Fourmile Draw near Lakewood, NM;
- (3) South Seven Rivers near Lakewood, NM;
- (4) Rocky Arroyo at Highway Bridge near Carlsbad, NM.

b. Flood Inflow, Dam Site #3 to Carlsbad

Compute the total inflow to the reach (item B.4.c.) and the total outflow from the reach (item B.4.d.). Subtract the total inflow from the reach (item c) from the total outflow (item d).

c. Total inflow to the dam Site #3 to Carlsbad Reach

Total inflow to the Dam Site #3 to Carlsbad Reach is computed as the sum of items (1) and (2) below:

- (1) Use USGS streamflow records for the Pecos River at Dam Site 3, near Carlsbad, N.M.
- (2) Carlsbad Springs New Water

⁶ Modified by Modification Determination dated December 7, 1992.

Use the following procedure to compute the monthly new water discharge quantities rounded to the nearest 100 acre-feet.

- (a) Use the annual streamflow records (expressed in cfs) furnished by the USGS for the gaging station, Pecos River below Dark Canyon, at Carlsbad, N.M.
- (b) Subtract tributary inflow from Dark Canyon Draw, furnished by USGS for the Dark Canyon Draw at Carlsbad gaging station.
- (c) Subtract releases and spills from Lake Avalon, which are furnished by USGS for gaging station, Pecos River below Avalon Dam, N.M.
- (d) Add 2 cfs for the annual depletions from the Pecos River from the Carlsbad canal flume to the Carlsbad gage. These depletions are caused by the power plant consumptive use, evaporation from Tansil and Bataan Lakes, and all diversions including the Carlsbad golf course, F.V. Dowling and E.J. Hines.
- (e) Subtract the lagged seepage from the main CID canal in cfs, which is computed to be 7 percent of the CID diversions measured at Avalon Dam by USGS for gaging station, Carlsbad Main Canal at Head, Carlsbad, N.M. This seepage will have a lagged distribution as follows: one-half in the current quarter; one-third in the following quarter; and one-sixth in the next quarter.
- (f) Subtract one cfs to represent the average annual return flow from surface water irrigation between Avalon Dam and the gaging station Pecos River at Carlsbad.
- (g) Subtract lagged leakage from Lake Avalon. The leakage from Lake Avalon is estimated by using the mean monthly gage height (H) in feet for Lake Avalon (published by USGS for Lake Avalon Near Carlsbad, N.M.), in the equation: Avalon leakage in cfs = $4.78 (H) - 62.0$. One half of this leakage is assumed to appear at Carlsbad Springs during the current quarter; with one-third to appear during the following quarter; and one-sixth during the next quarter.

- (h) Subtract 3 cfs to represent the average seepage loss from the Pecos River in the reach between Major Johnson Springs and the Dam Site No. 3 gage.
- (i) The annual new water in cfs is: (a) - (b) - (c) + (d) - (e) - (f) - (g) - (h).
- (j) Convert the new water in cfs, item (i) above, to units of 1000 acre-feet, and distribute equally to each month of the year.
- d. Total outflow from the Dam Site #3 to Carlsbad Reach is computed as the sum of items (1) through (5) below:
 - (1). Lake Avalon Evaporation Loss
 - (a) Compute the monthly evaporation loss by multiplying the net monthly evaporation rate times the average monthly surface area for Lake Avalon.
 - (b) Use the USGS elevation, area and capacity relationship for Lake Avalon to estimate the average monthly surface area for the lake. The 1997 area-capacity table based on the 1996 United States Bureau of Reclamation (USBR) sediment survey for Lake Avalon (Table 3) is to be used until a revised area-capacity table based on a new sediment survey performed by the USBR, the U.S. Army Corps of Engineers, USGS, U.S. Soil Conservation Service or a state-registered engineer is available.⁷
 - (c) For Lake Avalon evaporation and precipitation, use U.S. National Weather Service (USNWS) evaporation and precipitation data from Brantley Dam. When the U.S. National Weather Service data are not available, use USBR evaporation or precipitation data for Brantley Dam. If neither USNWS nor USBR precipitation data are available, use precipitation data from Carlsbad or Carlsbad Federal Aviation Administration Airport in that order.
 - (d) Missing monthly evaporation data at Brantley Reservoir are to be computed using the following equation:

$$EL = 2.5 * [(p * T / 100) * (114 - H) / 100] - 1.5$$

where EL is the lake evaporation in inches, p is the percentage of daytime hours at the approximate location of Avalon Reservoir, as given in the table below; T is the mean monthly temperature in degrees F, average of Artesia and Carlsbad; H is the average percent

⁷ Table 3 is not included because a revised area-capacity table has been issued by the US Bureau of Reclamation. The following note appeared on the original Table 3: "The gage height of 26.1 feet corresponds to an elevation of 3267.7 feet above the mean sea level with the datum of gage at 3241.6 feet above mean sea level."

humidity for the month computed from the data at 5AM, 11AM, 5PM and 11PM furnished by the National Weather Service.

Table of Percentage of Daytime Hours for Avalon Reservoir

January	7.17	July	9.80
February	6.95	August	9.29
March	8.36	September	8.34
April	8.76	October	7.92
May	9.65	November	7.08
June	9.62	December	7.02

If Brantley Reservoir evaporation data are not available, and humidity data at Roswell and other data are not available for estimating evaporation at Lake Avalon, and there is not more than one month missing between months for which data are available, estimate the evaporation by interpolation between monthly data. If complete evaporation data are missing for more than one month and data for all the above described methods are not available, find the average daily evaporation that is published for that month and estimate total evaporation by multiplying the average daily evaporation times the number of days in the month.

- (e) Monthly net evaporation in feet for Lake Avalon is determined by multiplying pan evaporation in inches by 0.77 to determine monthly lake surface evaporation, subtracting the monthly precipitation in inches, then converting to feet by dividing by 12.⁸

(2). Lake Avalon Change in Storage

Use data from USGS gage height records for Lake Avalon near Carlsbad, N.M., and gage height-area-capacity relationships shown in Table 3.⁹

(3). Net Carlsbad Irrigation District Diversions

Use 93 percent of the USGS published records for the gaging station, Carlsbad Main Canal at Head, Near Carlsbad, N.M.

(4). Other Depletions

For other depletions referenced in B.4.c.(l)(d) add 100 acre-feet for all months except July and August and 200 acre-feet for July and August.

⁸ In the future, if pan evaporation and precipitation data are available at the Brantley Dam site, use these data in estimating the evaporation rates. If data are not available for Brantley Reservoir, use the procedures described in B.4.d.(1). (Note modified by agreement between the States June 14, 1989. Section B.4.d.(l) was labeled B.4.f. in previous version of the Manual).

⁹ See previous note about Table 3.

(5). Streamflow, Pecos River at Carlsbad

Use the USGS gaging station records for Pecos River below Dark Canyon, at Carlsbad, N.M., minus the gaged streamflow at the USGS gaging station, Dark Canyon Draw at Carlsbad, N.M.

In 1970, the USGS discontinued the gaging station Pecos River at Carlsbad, N.M., and moved it to a new site about 0.8 mile downstream. The new “Carlsbad gage” was renamed Pecos River below Dark Canyon Draw and it now measures tributary inflow from Dark Canyon Draw that was not previously measured at the Carlsbad site. The total flow of Dark Canyon must be subtracted from the total flow Pecos River below Dark Canyon Draw in order to arrive at the equivalent total flow at the old location at Carlsbad.

e. Flood Inflow, Artesia to Carlsbad

Add items (a) and (b) above.

B. 5. Determination of Flood Inflows, Carlsbad to New Mexico–Texas State Line¹⁰

Because of the lack of sufficient data to accurately compute flood inflow in the Carlsbad to State Line reach by the inflow-outflow method, the flood inflow for this reach is to be determined by the hydrograph scalping method. Figure 5 shows the factors to be considered in scalping flood flows from the hydrographs. The computational items used to estimate flood inflows to the 54 river mile reach of the Pecos River are listed below, followed by an explanation of each computation to be made. Monthly quantities for each item will be computed from daily streamflow quantities. The annual quantities will be the sum of the computed monthly flood inflow quantities.

Flood inflow, Carlsbad to State Line not including Delaware River flood
Inflow (see a. below)

Flood inflow, Delaware River (see b. below)

Total flood inflow, Carlsbad to State Line (see c. below)

a. Flood Inflow, Carlsbad to USGS Gage at Red Bluff, N.M.

Use the following procedure:

- (1). Prepare hydrographs for daily flows at the USGS gaging stations Pecos River below Dark Canyon, at Carlsbad, New Mexico, and Pecos River at Red Bluff, New Mexico.

Identify apparent flood inflow events by correlating periods of significant daily precipitation within the reach or its tributaries with distinct hydrograph rises. Normally precipitation is considered significant when 0.05 inches or more has occurred in the Carlsbad-Red Bluff area, but other flood-inducing factors such as total areawide precipitation and antecedent moisture shall also be considered. On the hydrographs plot

¹⁰ Modified through Modification Determination dated November 25, 1991.

the rainfall in the area to aid in separating genuine periods of flood inflow from periods of operational rises. Study gaged tributary flows from Dark Canyon Draw at Carlsbad, N.M., Black River above Malaga, N.M., and Delaware River near Red Bluff, N.M. to aid in identifying flood periods caused by rainfall in the tributary drainage areas.

- (2). Compute the quantities of flood inflows by hydrograph scalping techniques. Compute the monthly flood inflows occurring between the upstream and downstream gaging stations as the difference between the scalped flood flow quantities of the two hydrographs. If the difference is a negative quantity set the flood inflow to zero.
- (3). Identify the periods when gaged inflows from Dark Canyon Draw are greater than zero. Determine for these periods if the difference in scalped flood flow quantities from (2) above is positive, zero or negative. If positive or zero add the gaged flows of Dark Canyon Draw to the difference in scalped flood inflows. If they are negative subtract the daily Dark Canyon Draw flows from the Pecos River Below Dark Canyon hydrograph and perform the scalping operation again to obtain adjusted flood inflows for these periods. If the difference in adjusted flood inflows is still negative set it to zero; if it is positive use it for this period of Dark Canyon Draw inflows.

b. Flood Inflow, Delaware River

Use the daily records furnished by the USGS for the gaging station, Delaware River near Red Bluff, N.M. and select flood inflows by inspection of daily data.

c. Flood Inflow, Carlsbad to State Line

Add the estimated flood inflows from item 5.a. to that quantity determined in item 5.b.

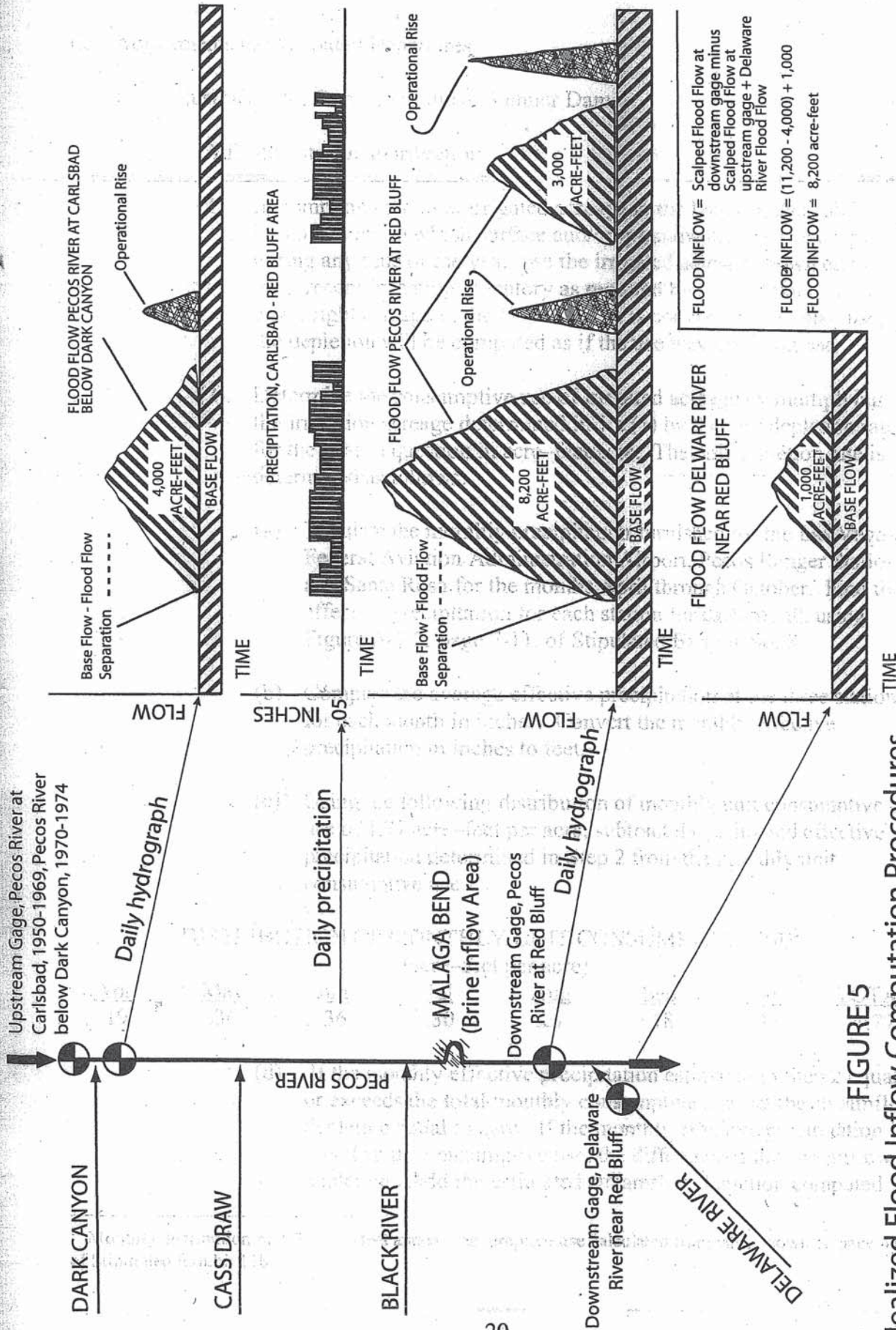


FIGURE 5
Idealized Flood Inflow Computation Procedures
Carlsbad to New Mexico - Texas State Line Reach

C. Adjustments to Computed Departures

1. Adjustments for Depletions above Sumner Dam

a. Adjustments due to irrigation

- (1). In computing the total irrigated acreage in the Upper Reach, above Sumner Dam, to which surface and/or groundwater has been applied during any time of the year, use the irrigated acreage shown on the most recent irrigation inventory as reported by New Mexico. If any water right acreage in the Upper Reach is converted to another use, the depletion will be computed as if the use was irrigation use.
- (2). Determine the consumptive use of irrigated acreage by multiplying the irrigation acreage determined in 1.a.(1) by the unit depletion rate for the year in question in acre-feet/acre. The unit depletion rate is determined as follows:
 - (a) Tabulate the monthly precipitation furnished for the Las Vegas Federal Aviation Administration Airport, Pecos Ranger Station and Santa Rosa for the months April through October. Find the effective precipitation for each station for each month using Figure A-7-2, page 7-11, of Stipulated Exhibit No. 8.
 - (b) Compute the average effective precipitation of the three stations for each month in inches. Convert the monthly effective precipitation in inches to feet.
 - (c) Using the following distribution of monthly unit consumptive use of 1.77 acre-feet per acre, subtract the estimated effective precipitation determined in Step 2 from the monthly unit consumptive use.

DISTRIBUTION OF MONTHLY UNIT CONSUMPTIVE USE¹¹

(acre-feet per acre)

<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>TOTAL</u>
.19	.36	.36	.30	.27	.18	.11	1.77

- (d) If the monthly effective precipitation estimated in Step 2 equals or exceeds the total monthly consumptive use, set the streamflow depletion equal to zero. If the monthly effective precipitation is less than the consumptive use, the difference is the streamflow depletion. Add the estimated streamflow depletion computed each month April through October to determine the annual streamflow

¹¹ Monthly distribution of 1.77 acre-feet annual consumptive use calculated from table shown on page 41 of Stipulated Exhibit 11b.

depletion rate to be applied to the historic irrigated acreage for the water year.

- (e) Multiply the streamflow depletion rate determined in Step 4 by the irrigated acreage for the water year to determine the total streamflow depletion of the irrigated lands in the upper reach.

- (3). Compare the 1947 Condition irrigation consumptive use (14,600 acres x 0.74 acre-feet/acre = 10,804 acre-feet per year) with Item (2). If the 1947 Condition use exceeds the actual use during the year computed in (2), the gaged streamflow below Sumner Dam will be reduced by the difference.

If the actual use computed in (2) exceeds the 1947 Condition use, i.e.,

- (4). 10,804 acre-feet per year, then add the difference to the gaged streamflow below Sunnier Dam.

Recompute New Mexico's 1947 Condition delivery obligation and Departures at the state line using the revised streamflow of Pecos River below Sumner Dam.

b. Depletions Due to Operation of Santa Rosa Reservoir

- (1). Determine the average monthly contents of Santa Rosa and Sumner Reservoirs and add these two contents to obtain the sum of contents. Use the gage height–area–capacity tables for each reservoir as shown in Appendices A-1 and A-3 of this Manual.

- (a) Use the latest gage height–area–capacity tables for Sumner Reservoir as published by the U.S. Bureau of Reclamation and in Appendix A-1 to this Manual until another survey is undertaken and area-capacity tables are published by the U.S. Bureau of Reclamation.

- (b) Use the latest gage height-area-capacity tables for Santa Rosa Lake (Lake Los Esteros) as published by the U.S. Army Corps of Engineers, Albuquerque District, August 1980, and extracted and shown in Appendix A-3 to this Manual, and currently used by the USGS until another sediment survey is undertaken and area-capacity tables published.

- (2). Compute the monthly historic evaporation losses from Sumner Reservoir using the historic average surface area of Sumner Reservoir by multiplying it by the net evaporation rate at Sumner Dam. Compute the monthly net evaporation rate at Sumner Dam as 0.77 times the monthly pan evaporation rate at Sumner Dam minus the monthly precipitation at Sumner Dam.

- (3). Compute the monthly historic evaporation losses from Lake Santa Rosa using the historic average surface area of Lake Santa Rosa

multiplying it by the net monthly evaporation rate at Lake Santa Rosa. Compute the net monthly evaporation rate at Lake Santa Rosa as 0.77 times the monthly pan evaporation rate at Lake Santa Rosa minus the monthly precipitation at Lake Santa Rosa.

New Mexico is to provide the pan evaporation and precipitation data for Lake Santa Rosa and Sumner Reservoir.

- (4). Add the two net monthly historic evaporation losses from Sumner and Santa Rosa Reservoirs computed in (2) and (3) above.

- (5). Compute the 1947 Condition net monthly evaporation loss from Sumner Reservoir by assuming its contents equal to the total historic contents of Lake Santa Rosa and Sumner Reservoirs determined in (1) above. Use the same net evaporation rate from Sumner Reservoir as computed in (2) above. (Use Table 3 of Texas Exhibit 68 for Sumner Reservoir). Use a limit of 4,600 acres for the maximum surface area for Sumner Reservoir in calculating the 1947 Condition.¹²

- (6). Subtract 1947 Condition net monthly evaporation loss from Sumner Reservoir computed in (5) above from the total historic net monthly evaporation loss from Sumner and Santa Rosa Reservoirs computed in (4) above. Add the 12 monthly values algebraically to make the annual adjustment for excess evaporation.

- (7). Compute the excess water held in these two reservoirs during the year over and above the 1947 Condition storage of 129,300 acre-feet by the following procedure:

- (a) Determine the end of the year combined contents for Santa Rosa and Sumner Reservoirs for the current year and the previous year. If both quantities are equal or less than 129,300 acre-feet then the adjustment for excess storage is zero;
- (b) If both end of year combined contents are in excess of 129,300 acre-feet, then subtract algebraically the previous year's combined end of year contents;
- (c) If the current year's end of year combined contents are less than 129,300 acre-feet and the previous year's end of year combined contents are in excess of 129,300 acre-feet, then subtract algebraically the previous year's combined end of year contents from 129,300 acre-feet; and
- (d) If the current year's end of year combined contents are in excess of 129,300 acre-feet but the previous year's end of year combined

¹² Last sentence added by Joint Motion, October 27, 1992.

contents are less than 129,300 acre-feet, then subtract 129,300 acre-feet from the current year's combined end of year contents.

- (8). Add algebraically the adjustment for excess evaporation loss computed in (6) above to the adjustment for excess storage held in these two reservoirs, computed in (7) above.
- (9). Add algebraically the adjustment computed in (8) to the annual gaged flow below Sumner Dam for computing the Index Inflows.

Recompute New Mexico's 1947 Condition delivery obligation and

- (10). departures at the state line using the adjusted Index Inflows.

- c. Transfer of Water Use by New Mexico to the Upper Reach Upstream from Sumner Dam

Add to the streamflow of the Pecos River below Sumner Dam, the effect of the amount of water diverted by New Mexico upstream of Sumner Dam transferred from the reach below Sumner Dam to the state line as reported by New Mexico. If the amount of the diversions is not reported by New Mexico by March 1, each year, assume the diversion equals the amount of water authorized for transfer in the permit.

Recompute New Mexico's 1947 Condition delivery obligation and departures at the state line using the revised streamflow of Pecos River below Sumner Dam.

2. Depletions Due to McMillan Dike

Credit the computed departures in B.1.d. with the quantities of depletions caused by the McMillan Dike.

Compute the depletions caused by the McMillan Dike using the following procedures:

- a. Use the Sumner Dam to New Mexico-Texas state line Index Inflow computed in B.1.a(2) for the computation year and compute the 1947 Condition outflow with McMillan Dike using the following equation:

$$Y = 0.046399 (X)^{1.430603}$$

where X is the Index Inflow and Y is the 1947 Condition outflow in units of 1000 acre-feet.

- b. Subtract the outflow computed in 2.a. above from the outflow quantity computed in B.1.b.
- c. Credit the departures in state line flows computed in B.1.d. by the quantity computed in 2.b. above.

3. Salvage Water Analysis Criteria and Procedures

- a. The term "water salvaged" means that quantity of water which may be recovered and made available for beneficial use and which quantity of water under the 1947 Condition was non-beneficially consumed by natural process.

- b. The water salvaged in New Mexico, measured at or near Avalon Dam, through the construction and operation of a project or projects by the United States or by joint undertakings of Texas and New Mexico is apportioned by the Compact as follows: forty-three percent (43%) to Texas and fifty-seven percent (57%) to New Mexico.
 - c. Any other water salvaged by New Mexico is apportioned by the Compact to New Mexico but will not have the effect of diminishing the quantity of water available to Texas under the 1947 Condition. Therefore the annual compact compliance computations are only concerned with the water salvage resulting from projects participated in by the United States or from joint Texas-New Mexico projects.
 - d. Study each water salvage project participated in by the United States and/or each joint Texas-New Mexico project. Determine the amount of water salvaged, if any, and convert it to a three-year running average quantity.
 - e. Route the water salvaged from place of occurrence to Avalon Dam, considering only non-beneficial consumption by natural processes. Forty- three percent (43%) of the routed water salvaged reaching Avalon Dam is apportioned to Texas. Add the total quantity of water salvaged that is apportioned to Texas to the delivery obligation of New Mexico at the New Mexico-Texas state line.
4. Unappropriated Flood Waters Analysis Criteria and Procedures
- The River Master shall determine and apportion any unappropriated flood waters using methodologies not inconsistent with applicable provisions of the Compact and this Manual.
5. Texas Water Stored in New Mexico Reservoirs
- If a quantity of the Texas allocation is stored in facilities constructed in New Mexico at the request of Texas, then to the extent not inconsistent with the conditions imposed pursuant to Article IV(e) of the Compact, this quantity will be reduced by the amount of reservoir losses attributable to its storage, and, when released for delivery to Texas, the quantity released less channel losses is to be delivered by New Mexico at the New Mexico- Texas state line.
6. Beneficial Consumptive Use of Waters of Delaware River by Texas
- Add to the computed departures at the New Mexico-Texas state line the amount of beneficial consumptive use of waters of the Delaware River by Texas. These uses shall be furnished by Texas by March 1 each year.

APPENDICES¹³**A-1 Compilation of modifications to the River Master's Manual**

Table A-1-1 presents a compilation of modifications made to the River Master's Manual since the original version was published on November 30, 1987.

Effective date	Modification	Summary
June 14, 1989	Joint Motion	Add phrase to Section B.4.f.(3)(c)
Dec 26, 1990	New Mexico's Amended First Motion	Modifies Section B.3.g. as to how River Master computes Base Inflow, Acme to Artesia.
Nov 25, 1991	New Mexico's Sixth Motion	Modifies Section B.5.a., Flood Inflow, Carlsbad to Red Bluff.
Oct 27, 1992	Joint Motion	Modifies Section C.1.b.(5) relating to 1947 Condition of Sumner Reservoir area.
Dec 7, 1992	New Mexico's Third Motion and Texas' Cross Motion	Replaces Section B.4 with language to account for water after construction of Brantley Reservoir.
Oct 26, 1993	Joint Motion to replace New Mexico's Fifth Motion and related motions	Modification of Section B.3.e. for computation of Channel Loss, Sumner Dam to Acme.
June 6, 2002	Agreed Request to Modify Section B.1.c.(1). Also includes modification to footnote in B.1.a.	Provides changes for salt harvesting project near Malaga, NM. Changes footnote to require rounding to 1 acre-foot rather than 100 acre-feet.

¹³ The tables listed below were published in the appendices of the River Master's Manual dated November 30, 1987 but not included in this version of the Manual. Tables for Lake Sumner and Lake Santa Rosa are not included in this version because they have been superceded by newer versions, which are updated periodically by the U.S. Bureau of Reclamation and U.S. Army Corps of Engineers. The current tables are incorporated by reference into this River Master's Manual. The tables for Brantley Reservoir are not included because they are not presently used in Compact accounting. Tables included as appendices in the original Manual were:

A-1 Gage Height-Area-Capacity Tables for Lake Sumner (Alamogordo Reservoir). Published by the US Bureau of Reclamation, November 1973.

A-2 Gage Height-Area-Capacity Tables for Brantley Reservoir. Published by the US Bureau of Reclamation, August 1981.

A-3 Gage Height-Area-Capacity Tables for Santa Rosa Reservoir. Published by the US Army Corps of Engineers, August 1980.

[388]

OCTOBER TERM, 1987

Per Curiam

485 U. S.

TEXAS *v.* NEW MEXICO

ON BILL OF COMPLAINT

No. 65, Orig. Decided May 19, 1980 and June 17, 1983—Order entered June 11, 1984—
Decided and decree entered June 8, 1987—Decided and amended decree and order
entered March 28, 1988

In this dispute between Texas and New Mexico over the extent of New Mexico's obligation to deliver water to Texas under the terms of the Pecos River Compact, New Mexico's exceptions to the Special Master's report are overruled, the report is approved, and an amended decree and order appointing a River Master are entered.

Exceptions overruled; amended decree and order entered.

Opinions reported: 446 U. S. 540, 462 U. S. 554; order reported: 467 U. S. 1238; opinion and decree reported: 482 U. S. 124.

PER CURIAM.

Last Term we issued a decree in this case which enjoined the State of New Mexico "to comply with its Article III(a) obligation under the Pecos River Compact and to determine the extent of its obligation in accordance with the formula approved by the decisions of this Court." *Texas v. New Mexico*, 482 U. S. 124, 133 (1987). We retained jurisdiction for the purpose of any order, direction, or modification of the decree as might be deemed proper. In particular, we approved the Special Master's recommendation that a River Master be appointed in this case, and requested that on remand the Special Master "recommend an amendment to the decree, specifying as he deems necessary the duties of the River Master and the consequences of his determinations. Any other suggestions for amendments should also be called to our attention." *Id.*, at 135.

The Special Master has now submitted a report, which includes a proposed amended decree. New Mexico's motion for leave to file a reply brief is granted. New Mexico's exceptions to the report are overruled. The report is approved and an amended decree will issue forthwith. The Special [389] Master has also recommended a person to serve as River Master. We accept that recommendation.

AMENDED DECREE

IT IS ORDERED, ADJUDGED, AND DECREED THAT:

I

DEFINITIONS

A. For purposes of this Decree:

1. “Accounting year” is the calendar year during which the River Master makes the calculations required by Article III.B.1. below; “water year” is the calendar year immediately preceding the accounting year.

2. “Manual” is the Pecos River Master’s Manual admitted into evidence as Texas Exhibit 108, which is an integral part of this Decree. The Manual may be modified from time to time in accordance with the terms of this Decree.

3. “Overage” is the amount of water delivered by New Mexico in any water year which exceeded the Article III(a) obligation for that year.

4. “Shortfall” is the amount by which the water delivered by New Mexico in any water year fell short of the Article III(a) obligation for that year.

II

INJUNCTION

A. The State of New Mexico, its officers, attorneys, agents, and employees are hereby enjoined:

1. To comply with Article III(a) of the Pecos River Compact and to meet the obligation thereof by delivering water to Texas at state line as prescribed in this Decree.

2. Within thirty (30) days of receipt of a final Report of the River Master identifying a shortfall, to submit to [390] the River Master a proposed plan providing for verifiable action by New Mexico that will increase the amount of water at state line prior to March 31 of the year following the accounting year by the amount of the shortfall. In order to identify the incremental amount of water being delivered to Texas to satisfy a prior shortfall, the plan shall:

(a) Identify the specific actions to be taken by New Mexico to increase the amount of water flowing to Texas, including, if applicable, the points at which water will enter the river or diversions will be curtailed;

(b) Specify the dates and times the actions will be taken;

(c) Provide a calculation under the procedures and equations set forth in the Manual of the amount of water that can be presumed to arrive at state line as a result of the actions;

(d) Identify the means by which the actions can be verified and provide assurances that documents and data necessary for verification will be submitted to the River Master within thirty (30) days from the date the actions are taken;

(e) Provide guarantees that the water to be delivered pursuant to the plan will not be diverted within New Mexico.

3. To comply prior to March 31 of the year following the accounting year with the terms of an Approved Plan to remedy any shortfall. Compliance with an Approved Plan will be deemed to satisfy the shortfall. Subject to the review provided in Article III.D. of this Decree, the calculations made pursuant to Article II.A.2(c), as approved by the River Master, shall be determinative of the amount of water delivered at state line.

[391]

III

RIVER MASTER

A. *Appointment.* The appointment of a River Master is made by the attached Order of Appointment.

B. *Duties.* The River Master shall perform the following duties:

1. Calculate in accounting year 1988, beginning with water year 1987, and continuing every year thereafter, pursuant to the methodology set forth in the Manual:

- (a) The Article III(a) obligation;

- (b) Any shortfall or overage, which calculation shall disregard deliveries of water pursuant to an Approved Plan;

- (c) The net shortfall, if any, after subtracting any overages accumulated in previous years, beginning with water year 1987.

2. Deliver to the parties a Preliminary Report setting forth the tentative results of the calculations required by Section III.B.1. of this Decree by May 15 of the accounting year;

3. Consider any written objections to the Preliminary Report submitted by the parties prior to June 15 of the accounting year;

4. Deliver to the parties a Final Report setting forth the final results of the calculations required by Section III.B.1. of this Decree by July 1 of the accounting year;

5. Review any plan proposed by New Mexico pursuant to Article II.A.2. of this Decree for its efficacy in satisfying any shortfall and consider any written objections to the plan which are submitted by Texas by September 1 of the accounting year.

6. Modify the proposed plan as is deemed necessary to ensure satisfaction of the shortfall and deliver to the parties such Approved Plan by October 1 of the accounting year; [392]

7. Deliver to the parties and file with this Court a Compliance Report by June 1 of the year following any accounting year in which there is an Approved Plan, which report shall include a finding of New Mexico's compliance or noncompliance with the terms of the Approved Plan and the reasons for such finding.

C. *Modification of Manual.*

1. The River Master shall modify the Manual in accordance with any written agreement of the parties. Such written agreement shall state the effective date of the modification and whether it is to be retroactive. If retroactive, the agreement shall specify the procedures for making the retroactive adjustments.

2. Absent written agreement of the parties, upon motion by either party and for good cause shown, the River Master may modify the Manual. Opposition to any such motion shall be submitted to the River Master in writing within thirty (30) days after service of the motion or within such extended time as may be allowed by the River Master. Additional written submissions and any oral presentation will be at the River Master's discretion. The River Master may adopt, reject, or amend the proposed modification and shall serve upon the parties his or her written Modification Determination and the

grounds therefor. The River Master may also defer decision on a proposed modification, but if no action is taken within one (1) year of its submission, the motion shall be deemed denied.

3. A modification of the Manual by motion shall be first applicable to the water year in which the modification becomes effective.

4. All modifications of the Manual shall be transmitted immediately to the Clerk of this Court and shall be retained in the files for this case.

[393] D. *Effect of River Master's Determination.* Unless stayed by this Court, any Final Report, Approved Plan, Compliance Report, or Modification Determination (hereinafter, collectively, "Final Determination") shall be effective upon its adoption, and shall be subject to review by this Court only on a showing that the Final Determination is clearly erroneous. A party seeking review of a Final Determination must file a motion with the Clerk of this Court within thirty (30) days of its adoption, which motion shall set forth the Final Determination on which review is sought and a concise statement of the basis of the claim that the Final Determination is clearly erroneous.

E. *Authority of Pecos River Commission.* Nothing in this Decree is intended to displace the authority of the Pecos River Commission to administer the Pecos River Compact, and if the Commissioners reach agreement on any matter, the parties shall advise the Court and seek an appropriate amendment to this Decree.

F. *Communication with River Master.* *Ex parte* communications with the River Master are forbidden. Any written communication with the River Master by motion or otherwise shall be simultaneously served by mail on the opposing party. Any oral communication with the River Master shall be made in the presence of the opposing party, whether by telephone conference call or in person.

G. *Distribution of Costs.* The compensation of, and the costs and expenses incurred by, the River Master shall be approved by the Court and borne equally by the State of Texas and the State of New Mexico.

IV

DISMISSAL OF UNITED STATES

A. The United States is dismissed from this proceeding without prejudice. [394]

V

RETENTION OF JURISDICTION

The Court retains jurisdiction of this suit for the purpose of any order, direction, or modification of the Decree, or any supplementary decree, that may at any time be deemed proper in relation to the subject matter in controversy.

ORDER APPOINTING RIVER MASTER

IT IS ORDERED that Neil S. Grigg be and he hereby is appointed River Master of the Pecos River for the purpose of performing the duties set forth in the Amended Decree of March 28, 1988.

IT IS FURTHER ORDERED that the River Master shall have the power and authority to subpoena information or data, compiled in reasonable usable form, which he deems necessary or desirable for the proper and efficient performance of his duties.

IT IS FURTHER ORDERED that the River Master is allowed his necessary expenses and reasonable fees for his services, statements for which shall be submitted quarterly to the Court for its approval. Upon Court approval, such statements will be paid by the State of New Mexico and the State of Texas.

IT IS FURTHER ORDERED that if the position of River Master becomes vacant during a recess of the Court, THE CHIEF JUSTICE shall have authority to make a new designation which shall have the same effect as if originally made by the Court.

JUSTICE STEVENS took no part in the consideration or decision of this case.

44a

No. 65, Original

◆

In The
Supreme Court Of The United States

◆

STATE OF TEXAS,

Plaintiff,

v.

STATE OF NEW MEXICO

Defendant.

◆

Before the Honorable Dr. Neil S. Grigg
River Master

◆

**NEW MEXICO’S MOTION TO RECONCILE AND ACCOUNT FOR TEXAS
WATER STORED IN NEW MEXICO DURING WATER YEARS 2014 AND 2015**

The State of New Mexico, pursuant to the provisions of *Texas v. New Mexico*, 485 U.S. 388, 392 (1988) (hereinafter referred to and cited as “Amended Decree”), moves the River Master of the Pecos River (“River Master”) to modify the Pecos River Master’s Manual (“Manual”) to affect a one-time adjustment of the Pecos River accounting in recognition of the impact of the 2014 storm event in the Pecos River Basin. In the alternative, New Mexico moves the River Master to adjust the final results for Water Year 2017 in recognition of the impact of the 2014 storm event in the Pecos Basin that gave rise to this controversy. In support of this motion, New Mexico states as follows:

BACKGROUND

1. New Mexico takes its obligations under the Pecos River Compact (“Compact”) and Amended Decree seriously, as demonstrated by its actions since the Amended Decree was issued. *See, e.g.*, NMSA 1978, §§ 72-1-2.4 (2002), 72-1-2.6 (2008) (State laws that provides for the purchase of water rights to ensure compliance with the Compact and Amended Decree).

2. Beginning in mid-September 2014, the remnants of Tropical Storm Odile resulted in widespread heavy rainfall in the Pecos River Basin in New Mexico and Texas (“2014 Storm Event”). The water from the 2014 Storm Event quickly filled Brantley Reservoir to the Carlsbad Project conservation storage limit.

3. The United States Bureau of Reclamation (“Reclamation”) began to curtail releases from Brantley and Avalon dams for public health and safety reasons. By

September 19, 2014, storage in Brantley Reservoir had exceeded the maximum authorized Carlsbad Project conservation storage limit, and by October 3, 2014, 36,419 acre-feet had been impounded above that limit.

4. By November 2014, there was no longer a public safety reason to continue to store water from the Storm Event in Brantley Reservoir, and New Mexico had no intention to use the water from the 2014 Storm Event. Texas, however, was interested in putting the water from the 2014 Storm Event to beneficial use. Unfortunately, after the flooding had subsided, Red Bluff Reservoir in Texas was full and had no available storage capacity. Consequently, on November 20, 2014, the Pecos River Commissioner for Texas, Mr. Frederic Tate, sent an official request for New Mexico to consent to continued storage of the water from the 2014 Storm Event in Brantley Reservoir for use by Texas. *See* November 20, 2014 Email from Rick Tate (attached as **Exhibit A**).

5. On January 26, 2015, the Pecos River Commissioner for New Mexico, Mr. Ray Willis, responded affirmatively to Texas' request, agreeing to temporarily store Texas' water in Brantley Reservoir subject to specified conditions. *See* January 26, 2015 Letter from Commissioner Ray Willis to Rick Tate (attached as **Exhibit B**). New Mexico supported such extended storage to promote interstate comity and cooperation, consistent with the Compact. *See id.*

6. However, Mr. Willis conditioned New Mexico's consent on the requirement that "Texas will assume responsibility for all evaporative losses on water stored in Brantley Reservoir above the Carlsbad Project's storage limitation." *See id.* New Mexico would not have concurred in the storage without that understanding. *See id.* (explaining that "[b]ut for Texas' request, New Mexico would have released" all of the water from the 2014 Storm Event).

7. Texas did not directly respond to the January 26, 2015 Letter, but through interstate communications, New Mexico understood that Texas consented to New Mexico's conditions. *See* Declaration of Hannah Riseley-White ¶ 11 (attached as **Exhibit C**).

8. Reclamation owns and operates Brantley Reservoir, which has a total storage capacity of approximately 300,000 acre-feet. With New Mexico's concurrence, Reclamation agreed to continue to store Texas' water. Including Carlsbad Project water, Brantley Reservoir reached a storage volume of over 85,000 acre-feet of water on March 25, 2015. Ultimately, between September 19, 2014 and September 8, 2015 approximately 51,000 acre-feet were stored for Texas in Brantley Reservoir. This storage resulted in evaporation of 21,071 acre-feet.

9. The Texas irrigation districts served by Red Bluff Reservoir did not call for water as expected at the start of the 2015 season.

10. That spring, Reclamation expressed concern over the extended storage of Texas water in Brantley Reservoir without a Warren Act Contract authorizing the storage. This concern was articulated in a July 10, 2015 email from Reclamation to Texas with the subject "Storage of Texas' water in Brantley." *See* July 10 Email from Carolyn Donnelly (attached as **Exhibit D**). Reclamation did not send a similar email to New Mexico.

11. Reclamation determined it could no longer hold the water and encouraged Texas to “either begin negotiating a contract or call for the release of the water.” *See id.* Texas did not express interest in pursuing a Warren Act Contract, so Reclamation coordinated the release of the water it had temporarily stored for Texas. Reclamation released approximately 29,946 acre-feet of water from Brantley Reservoir to Texas between August 5, 2015 and September 8, 2015.

12. Texas subsequently released 42,239 acre feet from Red Bluff Reservoir to accommodate Reclamation’s release of the 2014 Storm Event water from Brantley Reservoir.

13. In March and April of 2015, the States discussed the procedure for accounting for the 2014 Storm Event water. *See* Declaration of Hannah Riseley-White ¶ 12 (attached as **Exhibit C**). A conference call was held on April 16, 2015 among the two States and the River Master. *See id.* ¶ 13. The call resulted in an agreement that the Technical Advisors would evaluate the issues and develop a work plan and timeline to propose accounting procedures for the Storm Event water. *See id.*

14. On February 11, 2016, technical representatives from New Mexico and Texas met with the River Master in Fort Collins, Colorado to discuss the accounting adjustment necessary as a result of the storage of this water, and to attempt to reach an agreement on the adjustment. The states agreed at this meeting that the water from the 2014 Storm Event stored in Brantley Reservoir (1) should not be declared to be a unappropriated flood water, and (2) was stored on behalf of Texas at Texas’ request. *See* Notes from Meeting with Pecos River Master Neil Grigg ¶ 4 (attached as **Exhibit E**); Declaration of Hannah Riseley-White ¶¶ 16-17 (attached as **Exhibit C**). As a result of this collective decision, the States’ agreed that all evaporative losses from the stored water would be borne by Texas for accounting purposes.

15. Following the February 11, 2016 meeting, New Mexico and Texas had conversations and exchanged correspondence on the method to credit New Mexico for the evaporative losses. On May 6, 2016, New Mexico sent a draft joint motion to Texas, which reflected the collective decision to treat the water from the 2014 Storm Event as “Texas’ water stored at its request” in New Mexico. *See* Draft Joint Motion to Reconcile and Account for Texas Water Stored in New Mexico Reservoirs During Water Years 2014 and 2015 at 4 (attached as **Exhibit F**); May 6, 2016 Email from G. Lewis (attached as **Exhibit G**).

16. The draft joint motion memorialized the agreement made at the February 11, 2016 meeting and outlined the evaporative losses to be charged to Texas for Water Year 2015. *See generally* Draft Joint Motion to Reconcile and Account for Texas Water Stored in New Mexico Reservoirs During Water Years 2014 and 2015 (attached as **Exhibit F**).

17. Texas did not offer any feedback on the draft joint motion, but responded that it would be easier to account for evaporative losses to be charged to Texas in a single Water Year. *See* May 9, 2016 Email from Suzy Valentine (attached as **Exhibit H**).

18. In late summer 2016, Texas changed its position and suggested for the first time that it might seek to charge New Mexico with a portion of the evaporation associated with the water stored for Texas' benefit.

19. On January 11, 2017, Texas sent New Mexico a letter proposing an alternative accounting adjustment by which Texas and New Mexico would share the evaporation losses from the water stored above the Carlsbad Project conservation limit in Brantley Reservoir. *See* January 11, 2017 Letter From Jane Atwood to Amy Hass (attached as **Exhibit I**). New Mexico responded by letter on April 26, 2017, disagreeing with Texas' proposal. *See* April 26, 2017 Letter from Amy Hass to Jane Atwood (attached as **Exhibit J**).

20. Both states have asked the River Master to intervene and correct the Pecos River accounting in recognition of the 2014 Storm Event and subsequent storage of water at Texas' request.

As discussed below, New Mexico requests that the River Master modify the Manual to affect a one-time adjustment of the Pecos River accounting in recognition of the 2014 Storm Event and subsequent storage of water at Texas' request. In the alternative, New Mexico requests that the River Master adjust his final results for Water Year 2017.

II. THE RIVER MASTER HAS AUTHORITY TO MAKE A ONE-TIME ADJUSTMENT OF THE PECOS RIVER ACCOUNTING TO CREDIT NEW MEXICO FOR THE EVAPORATION ASSOCIATED WITH THE WATER STORED FOR TEXAS

As discussed below, the River Master is authorized to make necessary and equitable adjustments to account for the water from the 2014 Storm Event stored for Texas for three related reasons: (1) the River Master has authority to modify the Manual to affect a one-time adjustment; (2) the 2017 Water Year accounting is not yet final; and (3) an adjustment is warranted by the doctrine of equitable tolling.

A. The River Master May Modify the Manual to Affect a One-Time Adjustment of the Pecos River Accounting in Recognition of the Impact of the 2014 Storm Event in the Pecos River Basin

First, the River Master is authorized to modify the manual to affect a one-time adjustment of the Pecos River accounting to address the 2014 Storm Event.

On March 28, 1988, the United States Supreme Court issued the Amended Decree, which appointed a River Master to perform certain oversight duties related to the Compact. *See* Amended Decree at 389-90. To guide the River Master in the performance of these duties, the Amended Decree expressly incorporated the Manual. *See id.* Art. I(A)(2). The Amended Decree and the Manual do not limit the powers granted to the Pecos River Compact Commission ("Commission") by the Compact, but they do endow the River Master with certain powers as described therein. *See Texas v. New Mexico*, 482 U.S. 124, 133 (1987) ("Neither this opinion or the decree, however, displaces the authority of the Commission . . ."); Amended Decree, Art. III(D) ("Nothing in this Decree is intended to

displace the authority of the Pecos River Commission to administer the Pecos River Compact . . .”).

The Amended Decree requires that New Mexico comply with Article III(a) of the Compact, which requires delivery of a quantity of water by New Mexico to the New Mexico-Texas state line each year. *See* Amended Decree, Art. II(A)(1) (hereinafter “the Article III(a) Obligation”). In furtherance of this overarching requirement, the Amended Decree assigns duties to the River Master, including but not limited to:

1. Calculate in accounting year 1988 . . . and continuing every year thereafter, pursuant to the methodology set forth in the Manual: (a) The Article III(a) [O]bligation; (b) Any shortfall or overage . . . 2. Deliver to the parties a Preliminary Report setting forth the tentative results of the calculations [of the Article III(a) Obligation] by May 15 of the accounting year; 3. Consider any written objections to the Preliminary Report submitted by the parties prior to June 15 of the accounting year; [and] 4. Deliver to the parties a Final Report setting forth the final results of the calculations . . . by July 1 of the accounting year.

See Amended Decree, Art. III(B). The Manual provides the methodology that the River Master must undertake to calculate the Article III(a) Obligation, as well as any shortfall or overage. *See generally* Manual. The River Master is empowered to modify the Manual upon motion of either party. *See* Amended Decree, Art. III(C)(2).

The Manual has been modified numerous times beginning in 1989. *See* Manual at 27. These modifications have resulted both from joint motions from Texas and New Mexico, and from motions from one State alone. *See id.* The showing or standard required to justify a modification of the Manual is “good cause.” *See id.* Although “good cause” is not clearly defined in the Amended Decree, well-established principles of statutory construction apply to guide the analysis, and there is no reason to believe that the modification procedure provided is not both available and a sufficient vehicle by which to correct the accounting issues created by the 2014 Storm Event. *See* Black’s Law Dictionary 251 (9th ed. 2009) (defining “good cause” as “[a] legally sufficient reason”). Furthermore, the River Master, guided by input from Special Master Monte Pascoe, understands the standard in the context of modification requests and has applied it in the past. *See, e.g.*, December 26, 1990 Letter from River Master Neil S. Grigg to Francis J. Lorson (attached as **Exhibit K**).

In practice, the modification would simply be a stand-alone addition to Part C of the Manual. The addition would state the necessary adjustment or credit to New Mexico to account for the water from the 2014 Storm Event. Assuming, *arguendo*, that the River Master accepts New Mexico’s proposed accounting in full, the modification to the Manual would reflect a credit to New Mexico in the amount of 21,071 acre feet. New Mexico and Texas would thereby be made whole with respect to the other moving forward.

The 2014 Storm Event giving rise to this accounting issue is unlike any in the history of the Compact. Since the enactment of the Compact, there has never been a situation where Texas’ lack of storage capacity relative to its water supply required New Mexico to consent to the storage of Texas’ water in works located in New Mexico for an extended period of

time. The Commission or the River Master have never declared an unappropriated flood waters event, and accounting procedures do not exist for doing so. *See* Notes from Meeting with Pecos River Master Neil Grigg ¶ 4 (attached as **Exhibit E**) (stating that “no protocols are currently in place for dealing with UFW”). Nor do any protocols exist in the Manual. *See generally* Manual. Although the states reached agreement on this issue on February 11, 2016, the final results for Water Year 2015 and 2016 do not account for the issues raised by the 2014 Storm Event. In the interest of finally disposing of this issue, a one-time adjustment via the Manual modification process is appropriate.

B. Adjustments to the River Master’s Final Results for Prior Water Years Are Permitted

Alternatively, the River Master may adjust the final results of any water year within a three year averaging period under the language of the Compact, the Amended Decree and the Manual. As a threshold matter, the Compact itself establishes the significance of the three-year averaging period, stating “[u]nless otherwise determined by the Commission . . . state-line flows . . . shall be determined on the basis of three-year periods reckoned in continuing progressive series” Pecos River Compact, Art. VI(b). The methodology used to determine New Mexico’s Article III(a) Obligation requires that the River Master calculate the three-year average of “annual flood inflows,” which is then termed the “index inflow” and entered into a formula in order to determine the “index outflow.” *See* Manual at 1. The “index outflow” is a three-year average of New Mexico’s Article III(a) Obligation. *See id.*

The 2014 Storm Event, and Texas’ subsequent request, resulted in the accumulation, storage and subsequent release of water for which no clearly established accounting procedures exist in the Manual. *See* Notes from Meeting with Pecos River Master Neil Grigg ¶ 4 (attached as **Exhibit E**). But the absence of clearly established accounting procedures does not negate the River Master’s duty to calculate (1) New Mexico’s Article III(a) Obligation, and (2) any shortfall or overage for Water Year 2015 and beyond. By the time that it became apparent that a dispute existed as to the accounting for Water Year 2015, the River Master had already calculated a final result establishing the Article III(b) overage, but that overage omitted any calculation of evaporative losses to New Mexico’s credit. To the extent that the inability to account for the 2014 Storm Event resulted in the River Master’s calculations for Water Year 2015 being unfair or incorrect, that result should not be allowed to stand. Water Year 2017 is the last year affected by the three-year averaging that includes Water Year 2015. Because the accounting for Water Year 2017 has not yet been finalized, the River Master is authorized to make an adjustment to Water Year 2017 to account for the 2014 Storm Event and subsequent storage of water at Texas’ request.

The Amended Decree is akin to an order or judgment of a court, and is therefore subject to rules of interpretation of other written documents. *See Gurley v. Lindsley*, 459 F.2d 268, 275 (5th Cir. 1972) (“Ordinary principles of construction apply to judgments.”); 46 Am.Jur.2d Judgments § 66 (“As a general rule, judgments are to be construed like other written instruments and contracts.”). As with other written documents, when looking at

“the words of a judgment and order, we look at the entire order and construe that judgment as a whole to determine the court’s intent.” *In re Trentadue*, 837 F.3d 743, 750 (7th Cir. 2016). Here, the court’s intent in entering the Amended Decree was to “to determine the extent of [New Mexico’s] obligation in accordance with the formula approved by the decision of this Court.” Amended Decree at 388. If the stated intent of the Amended Decree is to determine New Mexico’s obligation under the Compact, as well as any shortfall or overage, it stands to reason that the court intended for these calculations each year to be fair and correct—including with respect to credits owed to New Mexico. For this reason, the Amended Decree and Manual inherently contemplate adjustments to River Master’s final results for prior water years within the three year averaging period. Indeed, if the River Master were precluded from adjusting erroneous calculations from prior years within the three year averaging period, he would be unable to carry out his overarching responsibility of correctly calculating New Mexico’s Article III(a) Obligation, and any shortfall or overage. This cannot be the intention of the Supreme Court in drafting the Amended Decree. A more logical interpretation of the Amended Decree is to conclude that the River Master is empowered to take steps necessary to carry out the overarching purpose of the Amended Decree—to correctly calculate New Mexico’s Article III(a) Obligation, as well as any shortfall or overage.

C. The River Master May Consider Whether to Adjust the Final Result of Water Year 2015 Under the Doctrine of Equitable Tolling

Despite its expressed desire for an adjustment of the final results of previous water years, Texas has recently expressed doubt that the River Master has the general authority to adjust final results from previous water years. As discussed above, this position is unfounded. However, even without general authority, the River Master may adjust the final results for Water Year 2017 in this specific case under the doctrine of equitable tolling.

The doctrine of equitable tolling functions to postpone deadlines for filing claims where a party has taken steps to preserve its rights despite failing to meet the legally mandated deadline. Here, the legally mandated deadline at issue is set out in Article III(D) of the Amended Decree. *See id.* (“A party seeking review of a Final Determination [by the River Master] must file a motion with the Clerk of this Court within thirty (30) days of its adoption.”). The doctrine of equitable tolling applies when a litigant is able to prove two elements: “(1) that he has been pursuing his rights diligently, and (2) that some extraordinary circumstance stood in his way and prevented timely filing.” *Menominee Indian Tribe of Wis. v. U.S.*, __ U.S. __, 136 S. Ct. 750, 756 (2016). Extraordinary circumstances “include conduct by a defendant that caused the plaintiff to refrain from filing an action during the applicable period.” *Robert v. Barreras*, 484 F.3d 1236, 1241 (10th Cir. 2007) (internal quotation marks and citation omitted).

Although this matter does not present a statutory or common law statute of limitations, the principle directly applies to the facts. The 2014 Storm Event resulted in heavy rainfall and widespread flooding in the Pecos River Basin. The water from the storm event was released from Brantley Reservoir in Water Year 2015. The required accounting related to this water was to take place in 2016, and the technical deadline for New Mexico

to appeal the final results of this accounting was thirty days after adoption of the River Master's final results for Water Year 2015. However, it was not until after that deadline expired that Texas disclosed its intent to abandon the agreement and attempt to charge New Mexico with evaporative losses. Thus, New Mexico was never afforded a meaningful opportunity to appeal.

On January 26, 2015, New Mexico provided conditional approval for Texas to store water from the 2014 Storm Event in New Mexico. *See* January 26, 2015 Letter from Commissioner Ray Willis to Rick Tate (attached as **Exhibit B**). One of these conditions was that all evaporative losses resulting from the storage would be charged to Texas. *See id.* Texas never disputed this condition. The storage from September 2014 to September 2015 resulted in evaporative losses of 21,071 feet. Texas failure to respond to or dispute New Mexico's conditional acceptance of the water until after the evaporative losses occurred alone justify holding Texas to the terms outlined in New Mexico's response letter. *See, e.g., McGurn v. Bell Microproducts, Inc.*, 284 F.3d 86, 91 (1st Cir. 2002) (holding that "silence in response to an offer may constitute an acceptance if an offeree who takes the benefit of offered services knew or had reason to know of the existence of the offer, and had a reasonable opportunity to reject it" (citing Restatement (Second of Contracts § 69(1)(a))); *Galloway v. Santander Consumer USA, Inc.*, 819 F.3d 89, 87 (4th Cir. 2016) (noting that an "offeree's silence can constitute acceptance if the offeree has accepted the benefit of the offer" (citation omitted)).

Then, on February 11, 2016, approximately 3 months before the preliminary calculations for Water Year 2015 were to be disseminated, New Mexico and Texas met with the River Master to discuss the accounting adjustment necessitated by the storage and subsequent release of the water from the 2014 Storm Event. At this meeting, the representatives from both New Mexico and Texas, as well as the River Master, agreed that the water stored in Brantley Reservoir (1) was not "unappropriated flood waters" as defined in the Compact, (2) was stored on behalf of Texas at Texas' request, and (3) that the evaporation loss would be borne entirely by Texas. *See* Notes from Meeting with Pecos River Master Neil Grigg ¶ 4 (attached as **Exhibit E**). These agreements were memorialized in the form of joint meeting notes. *See id.*

During the next several months, New Mexico embarked on a good faith and joint effort to calculate the appropriate adjustments to the River Master's preliminary calculations for Water Year 2015 in accordance with the agreement with Texas. These calculations were memorialized in the draft joint motion sent to Texas by email on May 6, 2016. *See generally* Draft Joint Motion to Reconcile and Account for Texas Water Stored in New Mexico Reservoirs During Water Years 2014 and 2015 (attached as **Exhibit F**). This motion reflected New Mexico's belief that the February 11, 2016 understanding between the states was guiding the accounting process, that Texas had agreed to assume the evaporative losses, and that the states were on a path to resolution.

This is the exact situation in which the doctrine of equitable tolling applies. Texas sent duly authorized representatives to engage in negotiations about how to properly account for the 2014 Storm Event water. An agreement was reached. Then, at some

unknown point between February 11, 2016, and January 11, 2017, Texas reversed its previously stated position. This reversal was memorialized in its January 11, 2017 letter to the New Mexico Interstate Stream Commission, in which Texas outlined its belief that the water from the 2014 Storm Event must be treated as unappropriated flood waters, and that the accounting adjustment outlined in the Draft Joint Motion was incorrect. *See* January 11, 2017 Letter From Jane Atwood to Amy Hass (attached as **Exhibit I**). Texas did not disclose its change in position until well after the appeal period outlined in the Amended Decree had passed, thereby robbing New Mexico of its opportunity to timely appeal. Texas now appears to argue that the final results of the water year(s) at issue may not be appealed because the deadline to file an appeal provided in the Amended Decree has passed.

Because New Mexico would have appealed the River Master's final results for Water Year 2015 in the absence of Texas' agreement to account for the 2014 Storm Event water as outlined at the February 16, 2016 meeting, New Mexico is entitled to have the River Master review his final results regardless of the passage of time or the deadline provided in the Amended Decree. *See* Declaration of Hannah Riseley-White ¶ 14 (attached as **Exhibit C**). Any other result would be inequitable and would reward Texas for negotiating in bad faith and delaying the resolution of this issue.

D. Conclusion

For the reasons discussed herein, the River Master may modify the Manual to affect a one-time adjustment of the Pecos River accounting in recognition of the impact of the 2014 Storm Event in the Pecos River Basin that gave rise to this controversy. In the alternative, the River Master may adjust the final results for Water Year 2017, which has not yet been finalized, in recognition of the impact of the 2014 Storm Event in the Pecos Basin that gave rise to this controversy. New Mexico respectfully requests that the River Master do so as outlined in **Parts III-IV**, *supra*.

III. ADJUSTMENTS TO THE PECOS RIVER ACCOUNTING ARE JUSTIFIED REGARDLESS OF WHETHER THE WATER FROM THE 2014 STORM EVENT IS DETERMINED TO BE UNAPPROPRIATED FLOOD WATERS

A. The Water at Issue Is Not Unappropriated Flood Waters as that Term Is Defined in the Compact

At the heart of the current dispute between New Mexico and Texas is whether or not the water from the 2014 Storm Event constitute unappropriated flood waters as that term is used in the Compact. While the term "unappropriated flood waters" is defined in the Compact, the Amended Decree and Manual show that it is the River Master alone that must make a determination as to whether the water from the 2014 Storm Event constitutes unappropriated flood waters under the facts of this case. The duty falls to the River Master, despite the Commission's ability to unanimously make such a determination, because New Mexico will not vote in favor of such a determination here. *See* Declaration of Hannah Riseley-White ¶ 20 (attached as **Exhibit C**). As such, the River Master makes the final determination in this case, using the Compact definition of unappropriated flood waters as a guide. In the absence of a determination by the River Master, the water from the 2014

Storm Event is inarguably not unappropriated flood waters. In addition to the River Master's sole authority in making such a determination under the facts of this case, the language of the Compact strongly supports New Mexico's position that the absence of historical conditions and/or certain conduct contemplated in the Compact negates even the possibility of determining that the water from the 2014 Storm Event is unappropriated flood waters as defined in the Compact.

1. The River Master Has the Sole Authority to Determine Whether Unappropriated Flood Waters Occurred in this Case

Texas' argument that the water from the 2014 Storm Event is unappropriated flood waters hinges on the definition provided in the Compact, as well as 1948 commentary by R.J. Tipton on the same topic. The essence of Texas' argument is that the Compact language and Tipton's commentary indicate that a determination of unappropriated flood waters occurs anytime water, "which if not impounded, would flow past Girvin, Texas." *See* Pecos River Compact, Art. II(i). This is a profoundly incomplete analysis.

In addition to other technical reasons (discussed immediately below) the existence of water "which if not impounded, would flow past Girvin, Texas" does not automatically give rise to a declaration of unappropriated flood waters. In fact, in the absence of an affirmative determination by the River Master, there can be no determination of unappropriated flood waters in this case at all. *See* Manual at 26 ("Unappropriated Flood Waters Analysis Criteria and Procedures. The River Master *shall determine* and apportion any unappropriated flood waters using the methodologies not inconsistent with the applicable provisions of the Compact and this Manual." (emphasis added)); Pecos River Compact, Art. V(a) (providing that any acts of the Commission require unanimous consent of the states); *see also* Declaration of Hannah Riseley-White ¶ 20 (attached as **Exhibit C**) (stating that New Mexico would not vote in favor of a determination that the 2014 Storm Event resulted in unappropriated flood waters).

The agreement reached by the states (with the River Master's assistance) that the water from the 2014 Storm Event was not unappropriated flood waters appears heavily influenced by (1) the absence of accounting protocol to deal with unappropriated flood waters, and (2) Texas' intent and conduct beginning at the onset of the 2014 Storm Event and continuing over the next several years. *See* Notes from Meeting with Pecos River Master Neil Grigg ¶ 4 (attached as **Exhibit E**). As discussed throughout this motion, on November 20, 2014, Texas requested that New Mexico authorize storage "of Texas' portion of the flows" from the 2014 Storm Event until the water "can be utilized in Red Bluff Reservoir." *See* November 20, 2014 Email from Rick Tate (attached as **Exhibit A**). New Mexico conditionally agreed to hold water in Brantley Reservoir above the Carlsbad Project's Water Year 2014 storage limit of 42,057 acre feet. *See* January 26, 2015 Letter from Commissioner Ray Willis to Rick Tate (attached as **Exhibit B**). These conditions were (1) that the water would be released from Brantley Reservoir before the end of March 2015, and (2) that all evaporative losses of water stored in Brantley Reservoir above the Carlsbad Project limit would be charged to Texas. *See id.* There is no indication that New Mexico considered any part of the water from the 2014 Storm Event to be stored for the benefit of

New Mexico. *See id.* Texas took minimal steps to make additional storage capacity available in Red Bluff Reservoir.

By late 2015, Reclamation notified Texas that, in the absence of a Warren Act Contract, Reclamation would begin releasing the water. *See* July 10 Email from Carolyn Donnelly (attached as **Exhibit D**). It did so in August and September 2015.

On February 11, 2016, New Mexico and Texas met with the River Master to determine how the 2014 Storm Event would be reflected in the Compact accounting for Water Years 2014 and 2015. The meeting included significant discussion as to the intent of the states in requesting/approving storage of the 2014 Storm Event water in Brantley Reservoir after public safety concerns abated, and whether or not the water should be determined to be unappropriated flood waters. *See* Declaration of Hannah Riseley-White ¶¶ 16-17 (attached as **Exhibit C**). The joint meeting notes from this meeting clearly indicate that all involved agreed that (1) the River Master should not declare an unappropriated flood waters event, and (2) the River Master would account for the storage of the 2014 Storm Event water as water stored for Texas. *See* Notes from Meeting with Pecos River Master Neil Grigg ¶ 4 (attached as **Exhibit E**).

In the absence of existing accounting protocol, it would be an extraordinary undertaking for the River Master to simply declare that the water from the 2014 Storm Event are unappropriated flood waters—particularly at this late date. Only now, after allowing approximately 21,071 acre feet of evaporative loss while its water sat in Brantley Reservoir, does Texas ask the River Master to reverse course. It is not inconsistent with the Compact or the Manual for the River Master to decline this request.

2. **The Absence of Historical Conditions and/or Certain Conduct Contemplated in the Compact Negates the Possibility of Determining that the Water from the 2014 Storm Event is Unappropriated Flood Waters as Defined in the Compact**

Even if the River Master were inclined to revisit the February 11, 2016 determination that the water from the 2014 Storm Event was not unappropriated flood waters, the absence of historical conditions and/or conduct contemplated in the Compact negates the possibility of such a determination. The Manual states that the River Master “shall determine . . . unappropriated flood waters using methodologies not inconsistent with the applicable provisions of the Compact and th[e] Manual.” *See* Manual at 26. Either of the following reasons precludes a determination by the River Master that the 2014 Storm Event produced unappropriated flood waters as that term is defined in the Compact.

a. *The 1947 Condition*

The complete definition of “unappropriated flood waters” in the Compact is as follows:

The term “unappropriated flood waters” means water originating in the Pecos River Basin above Red Bluff Dam in Texas, the impoundment of which will not deplete the water usable by the storage and diversion facilities

existing in either state under the 1947 condition and which if not impounded with flow past Girvin, Texas.

Pecos River Compact, Art. II(i). The term “1947 condition” means “that situation in the Pecos River Basin as described and defined in the Report of the Engineering Advisory Committee.” *Id.* at Art. II(g). More simply put, it means the condition that existed in 1947. When constructed, Red Bluff Reservoir had a capacity of approximately 300,000 acre-feet. In 1947, Red Bluff Reservoir in Texas had a storage capacity of approximately 270,000 acre feet. *See* Declaration of Hannah Riseley-White ¶¶ 7 (attached as **Exhibit C**); *see also* J. V. B. Wells, United States Department of the Interior, *Compilation of Records of Surface Waters of the United States through September 1950, Part 8. Western Gulf of Mexico Basins* 575 (1955) (showing a storage capacity at Red Bluff Reservoir at construction in 1937 of 307,000 acre-feet). For reasons unknown to New Mexico, between September 2014 and October 2015 Red Bluff Reservoir had a storage capacity of approximately 150,000 acre feet—less than half of what it had in 1947.

Texas’ position papers clearly indicate how the diminished capacity at Red Bluff Reservoir since 1947 played a substantial role in causing the accounting issues in this case. In its January 11, 2017 letter to New Mexico, Texas stated that the 2014 Storm Event caused the Red Bluff Reservoir to rise from about 50% full to four feet above its uncontrolled spill way. By Texas’ calculations, this inflow of water caused approximately 64,000 acre feet to spill through the service and principal spillways during September and November 2014. The reservoir remained at or near its entire capacity throughout the winter and into spring of 2015. After Reclamation announced that it would begin releasing the 2014 storm water from Brantley Reservoir due to Texas’ failure to have or obtain a Warren Act Contract, Texas released 42,239 acre-feet in order to accommodate the downstream flow of the 2014 storm water from Brantley Reservoir. As such, Texas “spilled” over 100,000 acre feet (not accounting for the water used for irrigation purposes). This water went unused past Girvin, Texas.

Texas claims that some or all of this water should be determined to be unappropriated flood waters under the Compact, but ignores the fact that that this water would not have “spilled” if Texas had the same storage capacity in Red Bluff Reservoir that it had in 1947. *See* Pecos River Compact, Art. II(i) (defining “unappropriated flood waters” by reference to the 1947 condition). If Red Bluff Reservoir was 50% full prior to the 2014 Storm Event, that means that, in 1947, the reservoir would have had a minimum of 195,000 acre feet of capacity before any spill would have occurred, or any water would have passed Girvin, Texas unused. Therefore, none of the water from the 2014 Storm Event meets the definition of unappropriated flood waters in the Compact. It would be inappropriate for the River Master to determine that water from the 2014 Storm Event is unappropriated flood waters where none of the water meets the definition.

b. *Beneficial Use*

Next, as previously discussed in New Mexico’s response to Texas’ position paper, the 2014 Storm Event water stored for Texas in Brantley Reservoir was not treated by New Mexico or Texas as Unappropriated Flood Waters. *See Tarrant Reg’l Water Dist. v.*

Herrmann, 569 U.S. 614, 636 (2013) (holding that “[a] party’s course of performance under [a water c]ompact is highly significant evidence” of its understanding of the terms). The states’ treatment of the water instead tracks the Compact’s declaration that unappropriated flood waters were to be used for the benefit of both states.

The term Unappropriated Flood Waters was put in the Compact for a specific purpose. As with the related term “salvaged water,” the drafters of the Compact envisioned that unappropriated flood waters would be impounded for the beneficial use of both states. Thus, the Compact provides that the “[b]eneficial consumptive use of unappropriated flood waters is hereby apportioned fifty percent (50%) to Texas and fifty percent (50%) to New Mexico.” Pecos River Compact, Art. III(f). To allow for the impoundment and distribution of such waters for the benefit of both states in the future, the Compact encouraged the states to construct additional reservoir capacity. *See* Pecos River Compact, Art. IV(c)(ii).

During the time that Reclamation stored the water, the states did not take any steps to apportion the stored water for the mutual benefit of both states under the Compact. Instead, the water was stored for Texas’ benefit alone. Without having apportioned the benefit of the water between the states, it would be illogical now to apportion the evaporation loss of that water between the states.

Neither the Commission nor the River Master have adopted any procedures for determining that storm water is (or is not) unappropriated flood waters. Nor have they adopted any procedures for measuring or allocating such waters. Neither Texas nor New Mexico has worked to obtain a Warren Act Contract for storage of such waters. Although the Compact expressly authorizes the Commission to adopt rules and regulations on this topic, none have been developed. Without any rules or procedures in place, it is not possible for the states (or the River Master or Commission) to conclude that water is or is not unappropriated flood waters.

Consequently, throughout the time that Reclamation stored the water from the 2014 Storm Event for Texas in Brantley Reservoir, neither state took any steps to apportion the stored water for the mutual benefit of both states as contemplated by the Compact. New Mexico did not use any—much less fifty percent—of the water for irrigation purposes or other beneficial uses. The water simply sat in Brantley Reservoir, at Texas’ request, waiting until Texas alone could put the water to beneficial use. Under such circumstances, it would be unjust to retroactively impose accounting penalties on New Mexico by determining that the water from the 2014 Storm Event is unappropriated flood waters after Texas’ conduct deprived New Mexico of the opportunity to either release its “share” of the water, or to put it to beneficial use.

B. Even if the Water at Issue Is Unappropriated Flood Waters as that Term Is Defined in the Compact, the Equities Weigh Against Allocating Any Evaporative Losses to New Mexico

Although New Mexico firmly believes that the water from the 2014 Storm Event is not unappropriated flood waters, the final determination is, to a degree, immaterial. This action is one to enforce the terms of an interstate water compact. The River Master’s

authority is derived from the Supreme Court’s original jurisdiction, and he possesses broad authority to craft an appropriate remedy. As stated in *Kansas v. Nebraska*, __ U.S. __, 135 S. Ct. 1042, 1062 (2015), when the Supreme Court is interpreting an interstate water compact, its “equitable authority to grant remedies is at its apex[.]” *See id.* at 1052 (“We may invoke equitable principles, so long as consistent with the compact itself, to devise fair solutions to the state-parties’ disputes and provide effective relief for their violations.” (quoting *Texas v. New Mexico*, 482 U.S. at 134) (alterations and omissions omitted)).

“The essence of equity jurisdiction has been the power of the [court] to do equity and to mould each decree to the necessities of the particular case.” *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982) (internal quotation marks and citation omitted). At its core, equity is about fairness. Here, it would be profoundly inequitable and unfair to penalize New Mexico for its attempt to assist its neighbor in a time of need. As articulated from its first correspondence on this topic, in the absence of Texas’ request that New Mexico allow water from the 2014 Storm Event to be stored until the waters could be utilized in Red Bluff Reservoir, New Mexico “would have released to the Texas state line all water above the Carlsbad Project storage limit” in Brantley Reservoir. *See* January 26, 2015 Letter from Commissioner Ray Willis to Rick Tate (attached as **Exhibit B**). Texas did not dispute the terms of New Mexico’s offer, and expressly agreed that all the water was stored for Texas’ benefit at the February 11, 2016 meeting between the states and the River Master. *See* Notes from Meeting with Pecos River Master Neil Grigg ¶ 4 (attached as **Exhibit E**). It is difficult to imagine a circumstance that would be more unfair than to allow Texas to belatedly shift the accounting burden for evaporative losses of this particular water when New Mexico made it exceedingly clear that it (1) had no interest in the water, and (2) would not voluntarily store the water without agreement on the topic of accounting for evaporative losses.

Storing the 2014 Storm Event water at Brantley Reservoir had no benefit to New Mexico under the Compact or otherwise. The water was not stored for the benefit of the Carlsbad Irrigation District. Nor was it stored for the benefit of any other water user in New Mexico. It was stored at the request of and for the sole benefit of Texas. Unless Texas is charged with the full evaporation loss associated with these waters, New Mexico will be penalized for cooperating with Texas. Such an outcome would be at odds with the stated purpose of the Compact to promote interstate comity and to resolve potential future controversies. Because the equities weigh against charging evaporative losses associated with the storage of the 2014 Storm Event water in Brantley Reservoir against New Mexico, New Mexico requests that the River Master decline any invitation to do so.

IV. NEW MEXICO’S ACCOUNTING PROPOSAL PROPERLY CALCULATES AND CHARGES THE EVAPORATIVE LOSSES RESULTING FROM THE WATER FROM THE 2014 STORM EVENT STORED AT TEXAS’ REQUEST AND FOR ITS BENEFIT

New Mexico has prepared a summation of the evaporation losses incurred by the 2014 Storm Event water stored in Brantley Reservoir for Texas, including evaporation losses solely from the Texas pool. These calculations are based on daily evaporation data

collected by the Brantley Reservoir dam tender and the 2013 Brantley Reservoir Area Capacity Tables provided by Reclamation. Texas' portion of the evaporation is calculated based on the increased surface area that resulted from storage above the Carlsbad Project's conservation storage limit between September 19, 2014 and September 8, 2015. Evaporation losses incurred from the Carlsbad Project pool are charged to New Mexico. A general summation of total evaporation, and a more detailed summation of daily evaporation, are attached hereto as **Exhibits L-M**. The total evaporation loss on the pool stored above the Carlsbad Project pool amounts to 21,071 acre feet of water. *See Exhibit L*.

These calculations, and New Mexico's proposed accounting adjustment, rely upon New Mexico's stated positions that either the water from the 2014 Storm Event cannot be determined to be unappropriated flood waters, or that such a determination is immaterial given the equities involved. If either position is correct, then the 2014 Storm Event waters are simply Texas' water stored in a Reclamation-owned reservoir in New Mexico. Under such circumstances, the Compact dictates the accounting procedures, stating "[t]he consumptive use of water by the United States or any of its agencies, instrumentalities or wards shall be charged as a use by the state in which the use is made; *provided, that such consumptive use incident to the diversion, impounding, or conveyance of water in one state for use in the other state shall be charged to such latter state.*" Pecos River Compact, Art. XII (emphasis added).

With respect to New Mexico's calculation of evaporation losses chargeable to both New Mexico and Texas pools during the relevant time period, both the Compact and Manual contemplates that Texas should be charged with losses attributable to its storage. *See Manual at 26* ("If a quantity of the Texas allocation is stored in facilities constructed in New Mexico at the request of Texas . . . this quantity will be reduced by the amount of reservoir losses attributable to its storage"); Pecos River Compact, Art. XII ("The consumptive use of water by the United States or any of its agencies, instrumentalities or wards shall be charged as a use by the state in which the use is made; provided, that such consumptive use incident to the diversion, impounding, or conveyance of water in one state for use in the other state shall be charged to such latter state."); Pecos River Compact, Art. VI(d)(i) ("In case of a spill from a reservoir constructed in and operated by New Mexico, the water stored to the credit of Texas will be considered the first to spill.").

In this case, Brantley Reservoir was at the Carlsbad Project's capacity prior to the 2014 Storm Event. Therefore, all of the water from the 2014 Storm Event is properly considered to be that at the top of the reservoir, while New Mexico's Carlsbad Project water is properly considered to be that at the bottom of the reservoir. Water in excess of the Carlsbad Project capacity in Brantley Reservoir necessarily incurs increased evaporation per volume than that at the bottom because when the volume of water stored in Brantley exceeds capacity, the surface area on the reservoir increases significantly. This results in a greater evaporation loss. New Mexico should not be debited for evaporation loss simply because it agreed to Reclamation's storage of the 2014 Storm Event water for the benefit of Texas.

As stated above, New Mexico proffers that the necessary accounting adjustment could happen in various ways. First, the River Master could modify the Manual to affect a one-time adjustment of the Pecos River accounting, resulting in a 21,071 acre-foot credit to New Mexico proposed in the attached summation of evaporation losses. *See Exhibit L.* In the alternative, the evaporative losses could be accounted for by adjusting the final results for Water Year 2017, which has not been finalized, by the same amount.

New Mexico recognizes that public safety concerns existed in both states during September, October and early November of 2014. Therefore, New Mexico believes that it would be reasonable to share the evaporative losses during that period. New Mexico calculates that the evaporative losses from the 2014 Storm Event above the Carlsbad Project storage limit between September 19, and November 20, 2014, were 2,590 acre-feet. *See Exhibit N.* Sharing those losses results in a necessary credit to New Mexico for the entire period of storage for Texas in Brantley Reservoir of 19,776 acre-feet.

V. TEXAS' ACCOUNTING PROPOSAL CHARGES NEW MEXICO FOR WATER WHOLLY "LOST" IN TEXAS, AND INACCURATELY STATES ITS EFFECT ON NEW MEXICO'S FINAL RESULTS FOR WATER YEAR 2017

A. Waters "Lost" in Texas

One of Texas' arguments following its repudiation of the agreement reached prior to and at the February 11, 2016 meeting appears to be that New Mexico is liable for the loss of water either spilled from Red Bluff Reservoir during the 2014 Storm Event, or released from Red Bluff Reservoir to create capacity for the water after its release by Reclamation in August and September 2015.

If Texas' argument were adopted, New Mexico would be charged for water that was "lost" entirely within Texas. New Mexico has no control over the disposition of water once that water has been delivered to the state line. Texas' proposal would penalize New Mexico for Texas' failure to put its own water to beneficial use. To do so would be unreasonable.

B. Texas' Accounting Proposal Inaccurately States Its Effect on New Mexico's Final Results for Water Year 2017

Finally, Texas' accounting proposal would result in a cumulative debit to New Mexico of nearly 30,000 acre-feet of water through Water Year 2017. In comparison to New Mexico's proposal, Texas' proposed adjustment for Water Years 2014 and 2015 would result in a much larger debit to New Mexico in those years, and due to the three-year averaging would further compound debits to New Mexico in Water Years 2016 and 2017. Summaries of these results are attached as **Exhibit O.**

Texas also claims that its accounting proposal would result in an additional credit to New Mexico of 3,100 acre-feet of water in Water Year 2015. This is not the case. Texas' accounting proposal would actually result in a reduction to New Mexico's credit of approximately 15,500 acre-feet in Water Year 2015. In addition, due to the three-year averaging used in Compact accounting, Texas' adjustments to inflows and outflows in Water Years 2014 and 2015 would result in decreases to New Mexico's credit through Water Year 2017 of almost 30,000 acre-feet which includes both reductions due to evaporative

losses from water stored for Texas in Brantley Reservoir and reductions due to the “lost” water released from Red Bluff Reservoir.

VI. CONCLUSION

For all of the reasons discussed herein, New Mexico respectfully requests that the River Master (1) determine that New Mexico is entitled to an adjustment of the Pecos River accounting in the amount of 21,071 acre-feet, and (2) affect this adjustment in the manner determined to be most efficient and consistent with the Compact, the Amended Decree, and the Manual.

Dated: July 13, 2018

Respectfully submitted,

FOR THE STATE OF NEW MEXICO

/s/ Jeffrey J. Wechsler

JEFFREY J. WECHSLER

Montgomery & Andrews, P.A.

P.O. Box 2307

Santa Fe, New Mexico 87504-2307

DOMINIQUE WORK

New Mexico Interstate Stream Commission

P.O. Box 25102

Santa Fe, New Mexico 87504-5102

HANNAH RISELEY-WHITE

Technical Representative for the State

of New Mexico

CERTIFICATE OF SERVICE

I hereby certify that on July 13, 2018, the foregoing New Mexico’s Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 And 2015 was sent by electronic mail and U.S. Mail, postage prepaid to the following:

Neil S. Grigg, Professor
Department of Civil and Environmental
Engineering
Colorado State University
Campus Delivery 1371
Fort Collins CO 80523-1372
Neil.Grigg@colostate.edu

Mary E. Smith
Assistant Attorney General
Environmental Protection Division
Office of the Attorney General of Texas
P.O. Box 12548
Capitol Station
Austin, Texas 78711-2548
Mary.Smith@aog.texas.gov

Counsel for the State of Texas

By: /s/ Jeffrey J. Wechsler
Jeffrey J. Wechsler

From: Suzy Valentine
To: Lewis, Greg J., OSE; Haas, Amy, OSE; ravw@dfn.com
Cc: Rick Tate; Suzy Valentine
Subject: FW: Texas request for storage
Date: Thursday, November 20, 2014 3:18:29 PM

Please find the request for storage from Commissioner Tate below.

Thanks!

Suzy

Suzy Valentine, P.E., CFM
Texas Commission on Environmental Quality
Interstate River Compacts
P. O. Box 13087, MC-160
Austin, Texas 78711
512-239-4730 office
512-239-2214 fax
512-461-1093 mobile
Suzy.valentine@tceq.texas.gov

-----Original Message-----

From: Rick Tate [<mailto:tatecattle@sbcglobal.net>]
Sent: Thursday, November 20, 2014 3:46 PM
To: Suzy Valentine
Subject: Re: Texas request for storage

Dear Commissioner Willis,

Due to the recent flood events in the Pecos River basin, the large amounts of flows generated, and the resulting conditions in the Pecos River, it is my request that New Mexico store Texas' portion of the flows until such time as they can be utilized in Red Bluff Reservoir. It is my understanding that the losses due to storage will be allocated in accordance with the Pecos River Master Manual.

Thank you very much.

Rick Tate

Pecos River Compact Commissioner

PECOS RIVER COMMISSION	INTERSTATE STREAM
Ray Willis	COMM
New Mexico Commissioner	STATE ENGINEER
P.O. Box 758	OFFICE
Roswell, New Mexico 88202	SANTE FE, NEW
	MEXICO
	2015 JAN 29 AM 10: 10

January 26, 2015

Mr. Frederic Tate
Texas Commissioner
Pecos River Commission
P.O. Box 969
Marfa, Texas 79843

Re: Your Request that New Mexico Store Texas' Water in Brantley Reservoir

Dear Commissioner Tate:

Thank you for your November 20, 2014 request that New Mexico store water belonging to Texas in New Mexico Reservoirs. Specifically, you requested "that New Mexico store Texas' portion of the flows until such time as they can be utilized in Red Bluff Reservoir." The impetus for your request was flood events that occurred in the Pecos Basin in mid-September 2014. Those flood events filled Red Bluff Reservoir; correspondingly, there was no additional storage space available on the Pecos River in Texas.

Background

As I believe you know, in light of the extraordinary hydrologic conditions that have occurred on the Pecos River since the September storm events, New Mexico has had no objection to holding water in Brantley Reservoir on Texas' behalf this year. In fact, New Mexico and the U.S. Bureau of Reclamation verbally agreed to do so as soon as it was recognized that Red Bluff Reservoir was likely to fill and spill, which it did, spilling from approximately September 21 through October 3, 2014. The water elevation in Red Bluff Reservoir has been below the service spillway since that time. It is my understanding that the current water-level elevation in Red Bluff Reservoir is only about 3 feet below the service spillway elevation.

Therefore, under current operating conditions, there is still no additional storage capacity in Red Bluff Reservoir without further compromising its flood-control capability. I have been advised that water could be released from Red Bluff Reservoir at a higher rate through the dam's outlet works and that doing so would further draw down water levels. I also understand the Red Bluff Water and Power Control District (Red Bluff WPCD) prefers not to do so because it would preclude use of the released water by downstream irrigators served by Red Bluff WPCD.

EXHIBIT B

Mr. Frederic Tate
January 26, 2015

Page 2

Thus, New Mexico's concurrence with temporary storage of water in Brantley Reservoir was initially based on public safety (flooding) concerns, while the basis for continued concurrence has evolved to being primarily a matter of comity between New Mexico and Texas. It is my opinion that both bases for storage of Texas' water in Brantley Reservoir are appropriate.

Unappropriated Flood Waters

It is my understanding that the Pecos River Commission engineer advisors from Texas and New Mexico, Ms. Suzy Valentine and Mr. Greg Lewis, respectively, are in agreement that the water held in Brantley Reservoir above its Carlsbad Project storage limitation as a result of the September 2014 storm events is likely Unappropriated Flood Waters, as defined in Article II(i) of the 1948 Pecos River Compact. I also understand that, in accordance with Section C.4. of the Pecos River Master's Manual, it is the responsibility of the federal River Master to "determine and apportion any unappropriated flood waters using methodologies not inconsistent with applicable provisions of the Compact and this (Pecos River Master's) Manual." Accordingly, official designation of the water under discussion as Unappropriated Flood Waters may only be granted by the River Master.

Assuming the water under discussion to indeed be Unappropriated Flood Waters, it is New Mexico's position that all water in Brantley Reservoir above the Carlsbad Project storage limit (i.e., 42,057 acre-feet) belongs to Texas. But for Texas' request, New Mexico would have released to the Texas state line all water above the Carlsbad Project storage limit. Evaporative losses on all water above the Carlsbad Project storage limit should thus be borne by Texas. This position is consistent with the Compact: with respect to apportioning evaporative losses on Unappropriated Flood Waters stored in New Mexico reservoirs, Pecos River Compact Article VI(d)(iii) states "Reservoir losses shall be charged to each state in proportion to the quantity of water belonging to that state in storage at the time the losses occur."

Summary

Presuming that the River Master will designate the water at issue as Unappropriated Flood Waters, New Mexico does not object to storage of Texas's water in Brantley Reservoir until it can be utilized by the Red Bluff WPCD in the 2015 irrigation season. In my mind, that means releasing to the state line Texas' water stored in Brantley before the end of March, 2015. Additionally, New Mexico expects that Texas will assume responsibility for all evaporative losses on water stored in Brantley Reservoir above the Carlsbad Project's storage limitation.

I recommend that the Pecos River Commission engineer advisors work together to develop an accounting mechanism for Texas' water stored in Brantley Reservoir that incorporates calculation of evaporative depletions and also establishes how the state line delivery shall be determined for Pecos River Compact accounting purposes. That mechanism may then

be presented to the federal River Master for his consideration. Additionally, the Engineer Advisors should discuss with the River Master the determination of Unappropriated Flood Waters.

Mr. Frederic Tate

January 26, 2015

Page 3

I look forward to working with you and the engineer advisors to develop appropriate accounting procedures for Texas' water in Brantley Reservoir. If you have any questions or would like to discuss this matter further, do not hesitate to contact me.

Sincerely,

/s/

Ray Willis

New Mexico Commissioner

Pecos River Commission

cc: Greg Lewis, New Mexico PRC Engineer Advisor

Amy Haas, Legal advisor for New Mexico

Suzy Valentine, Texas PRC Engineer Advisor

Jane Atwood, Legal Advisor for Texas

65a

No. 65, Original

◆

In The
Supreme Court Of The United States

◆

STATE OF TEXAS,

Plaintiff,

v.

STATE OF NEW MEXICO

Defendant.

◆

Before the Honorable Dr. Neil S. Grigg
River Master

◆

**DECLARATION OF HANNAH RISELEY-WHITE IN SUPPORT OF NEW
MEXICO'S MOTION TO RECONCILE AND ACCOUNT FOR TEXAS
WATER STORED IN NEW MEXICO DURING WATER YEARS 2014 AND 2015**

Comes now Hannah Riseley-White, pursuant to 28 U.S.C. § 1746, and states as follows:

1. I am over 18 years of age and have personal knowledge of the facts stated herein. I have been employed by the New Mexico Interstate Stream Commission ("NMISC") since August 25, 2014. The NMISC serves as the primary agency overseeing interstate water compacts for the State of New Mexico.

2. From August 25, 2014 until July 31, 2016 I served as Pecos Bureau technical staff for the NMISC. As such, my responsibilities included technical analysis of the Pecos River Compact and accounting for New Mexico's obligations and deliveries under the Compact, the Amended Decree, and the River Master Manual. Part of my responsibilities also included interacting and communicating with representatives for the State of Texas.

3. On July 31, 2016, I was appointed as the Technical Representative for the State of New Mexico for the Pecos River Compact. I continue to serve in that role today. As Technical Representative, I have primary responsibility for all technical issues arising under the Compact.

EXHIBIT C

4. Beginning in mid-September 2014, widespread heavy rainfall occurred in the Pecos River Basin in New Mexico and Texas (“Storm Event”). The United States Bureau of Reclamation began to curtail releases from Brantley Reservoir for public health and safety reasons. By September 19, 2014, storage in Brantley Reservoir had exceeded the maximum authorized Carlsbad Project conservation storage limit, and by October 3, 2014, 36,419 acre-feet had been impounded above that limit.

5. By mid-November 2014, there was no longer a public safety reason to continue to store water from the Storm Event in Brantley Reservoir. At that time the water above the Carlsbad Project conservation limit in Brantley Reservoir could have been released to Texas.

6. The State of New Mexico has no authority to store water in Brantley Reservoir, and had no intention of putting any of the water from the Storm Event above the Carlsbad Project conservation limit to beneficial use in New Mexico.

7. The Report of the Engineering Advisory Committee to the Pecos River Compact Commission in January, 1948 states that the capacity of Red Bluff Reservoir, in Texas, at its spillway elevation was 270,000 acre-feet. The current capacity of Red Bluff Reservoir is less than 150,000 acre-feet. Texas has not been able to return Red Bluff Reservoir to its full original capacity. As a result, in 2014, Texas did not have sufficient capacity in Red Bluff Reservoir, and on November 20, 2014, Commissioner for Texas, Mr. Rick Tate, sent an official request for New Mexico to consent to continued storage of the water from the Storm Event in Brantley Reservoir for Texas.

8. On January 26, 2015, New Mexico Commissioner Ray Willis consented to Texas’ request by letter. I was part of the team that drafted that letter.

9. In the January 26th letter, New Mexico agreed to Texas’ request, but made very clear that “[b]ut for Texas’ request, New Mexico would have released” all of the water from the Storm Event above the Carlsbad Project conservation limit. As a result, New Mexico conditioned its consent on Texas’ agreement that “[e]vaporative losses on all water above the Carlsbad Project storage limit” would be “borne by Texas.”

10. New Mexico would not have agreed to Texas’ request without this condition, and would not have agreed to Texas’ request if it would have adversely affected New Mexico in any way. This was true whether or not the water was identified as unappropriated flood waters, water stored for Texas in New Mexico, or some other category of water.

11. Following the January 26th letter, Pecos Bureau staff, including myself, were in communication with Texas on numerous occasions. Based on the letter and those communications, it was my understanding that Texas consented to New Mexico’s conditions. It was generally understood that the water from the Storm Event above the Carlsbad Project conservation limit was water stored for Texas, whether or not it was unappropriated flood waters, and that Texas would assume all evaporative losses.

12. In early 2015, the States discussed possible accounting for the Storm Event water. On April 9, 2015, the States informed the River Master of the Storm Event and of the ongoing discussions.

13. A conference call was held on April 16, 2015 among the two States and the River Master. The call resulted in an agreement that the Technical Advisors would evaluate the issues and develop a work plan and timeline to propose accounting procedures for the Storm Event water.

14. On May 9, 2015, the River Master issued the Preliminary Report for Water Year 2014. New Mexico did not object to the accounting related to the Storm Event in 2015 (or any subsequent year) because it understood that the States and River Master had agreed to a process for developing the Storm Event accounting.

15. The States continued discussions regarding the Storm Event accounting in the fall of 2015. On December 15, 2015, the States jointly contacted the River Master to provide a status update on the accounting discussions.

16. On February 11, 2016, the Technical Advisors met with the River Master to discuss the Storm Event accounting. At that meeting the States discussed technical challenges with identifying unappropriated flood waters, the lack of protocols for unappropriated flood waters, and the intent of the parties for the continued storage of water.

17. Both States agreed that water from the Storm Event should be treated as water stored for Texas in New Mexico. Both States agreed upon notes memorializing that meeting. Those notes are attached to New Mexico's Motion as **Exhibit E**. Those notes reflect the "decision" to "account for the 2014/2015 storage in Brantley as water stored for Texas."

18. Following that meeting, New Mexico was tasked with drafting a motion reflecting the decision to treat the Storm Event water stored above the Carlsbad Project limit as water stored for Texas in New Mexico. On May 6, 2016, New Mexico transmitted a draft Joint Motion executing the decision.

19. Texas did not formally comment on that draft Joint Motion. New Mexico understood that Texas intended to honor the joint decision to treat the Storm Event water as water stored for Texas in New Mexico. It was not until Texas responded in January 2017, that New Mexico learned of Texas' new position on the accounting for the Storm Event.

20. The Pecos River Compact empowers New Mexico and Texas to unanimously determine that the water from the 2014 Storm Event is unappropriated flood waters. New Mexico has not, and will not, agree to such a determination under the circumstances.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 13, 2018

/s/
Hannah Riseley-White

Riseley-White, Hannah, OSE

From: Lewis, Greg J., OSE
Sent: Friday, July 10, 2015 4:05 PM
To: Davis, Daniel, OSE; Riseley-White, Hannah, OSE
Subject: FW: Storage of Texas' water in Brantley

Greg Lewis
 Pecos Basin Manager
 New Mexico Interstate Stream Commission
 P.O. Box 25102
 Santa Fe, New Mexico 87504-5102
 (505) 827-7867 v
 (505) 476-0399 f

From: Donnelly, Carolyn [mailto:cdonnelly@usbr.gov]
Sent: Friday, July 10, 2015 4:00 PM
To: Suzy Valentine
Cc: Lewis, Greg J., OSE; Robin Prewit <redbluff@windstream.net>
 (redbluff@windstream.net); Dale Ballard; Jennifer Faler; Kenneth Rice

Subject: Storage of Texas' water in Brantley

Suzy,

At the time of last September's large storms, Reclamation understood the need to hold the resulting floodwater in Brantley to prevent further damage to Red Bluffs service spillway, and also to reduce the chance of damage downstream of Red Bluff Reservoir. Because Brantley has a large capacity, and because of safety concerns related to Pecos River crossings in Eddy County, New Mexico, we were happy to do this while Red Bluff completed work on the spillway and Eddy County secured their river crossings.

We have spent some time reviewing this use of our facility in light of Reclamation's existing authorities. Flood control is an authorized purpose of the Brantley Project, so Reclamation is authorized to re-regulate this water. Under this authority, however, we are not authorized to store this floodwater.

Under the authority of the Warren Act, Reclamation may store water for entities with which it has a contract. Article VI of the Pecos River Compact discusses storage of floodwater for Texas in facilities in New Mexico. The floodwater currently in Brantley has been re-regulated, but if this water were to remain in Brantley we would consider it to be stored for the State of Texas and therefore it would require a Warren Act contract. As we do not have a Warren Act contract with Texas to store water in Brantley, and, as the water has remained in Brantley for about 9 months, we feel that we are moving from re-regulation to storage, and Texas should either begin negotiating a contract or call for the release of the water.

We therefore ask that Texas begin moving this water out of Brantley in the first week of August. We will work with all involved parties to determine appropriate release rates and conditions surrounding the release of this water, but, without a contract, Reclamation does not have the authority to hold this water in Brantley any longer.

Carolyn

Meeting with Pecos River Master Neil Grigg

Fort Collins, CO - February 11, 2016

Attendance: Dr. Neil Grigg, Suzy Valentine, Chris Peters (TCEQ), Greg Lewis and Hannah Riseley-White (ISC)

1) Pecos River Master Reviews January 2016 Memo

Dr. Grigg reviewed the content of his memo emailed to the states in January 2016, including the events that led up to the storage of water in Brantley Reservoir beginning on September 19, 2014. A historical overview was offered, including his involvement early on, changes since 1947, including increased storage capacity in NM's reservoirs (apart from administrative constraints limiting NM storage to the 1947 condition of 176,500 acre-feet), and accounting considerations preceding and later incorporated within the River Master Manual.

2) Options for a way forward:

- a. Need for an agreement on how to account for the 2014 event
 - i. Possible one- time adjustment to 2015 accounting? Are adjustment to 2014 and 2015 accounting needed?
 - ii. Considerations of possible precedent setting. Is this a trial run for future accounting, or could it be a case specific event given the exigency of the situation?
- b. In the future, given large flood events:
 - i. What triggers a declaration of 'Unappropriated Flood Waters' as outlined by the compact?
 - ii. Need for federal authorization for additional storage by both states
 - iii. TX can request storage in NM facilities
 - 1. Under what circumstances would this request be made?
 - 2. Circumstances in which NM would agree / not agree?
 - iv. What would accounting for UFW look like? Could UFW originate below Brantley and under what conditions?
- c. Additional needs to addressed/evaluated:
 - i. Dark Canyon adjustments for 2014
 - ii. Accounting for evaporative losses in Brantley
 - iii. Accounting for conveyance losses between Brantley and the state-line

- 3) RM goes through interpretations of three options, outlined below:
 - a. 2014-2015 Stored Water as TX Water
 - i. Not UFW
 - ii. Total evaporation of that stored water charged to TX
 - iii. Delivered at request of TX at state-line less conveyance losses
-Discussion of ways to estimate losses.
 - b. 2014-2015 Stored Water Declared UFW
 - i. Would be split 50/50 between the states
 - ii. Evaporation charged proportionally
 - iii. TX portion delivered at request of TX at state-line less conveyance losses
 - iv. (Current administrative limitations prevent NM from storing water above the 1947 condition of 176,500 acre-feet)
 - c. Hypothetical Accounting as if Water was Passed through in 2014

There was acknowledgement of the need to outline criteria for when UFW are declared, what criteria would need to be met, and what would constitute a declaration. Would NM reservoirs cumulative storage have to fill full 176,500 or any given reservoir being above designated conservation storage? An additional need to outline the accounting for UFW is needed.

4) Decision for 2014-2015 Event

In this instance, because no protocols are currently in place for dealing with UFW, the decision was made not to declare an UFW event, to account for the 2014/2015 storage in Brantley as water stored for Texas. This was based in part on a discussion of the intent of the states at time the water was stored, including both: the request as triggered by primarily by public safety concerns, and later comity between the states.

Three quantities of water need to be determined: 1) evaporative loss, 2) delivery, 3) conveyance loss. RM suggested capturing monthly. Additional detail could be added to Table 12 to track these volumes. Adjustments to 2014 accounting would include evaporative losses only and could be added to row C.5. in the accounting workbook. For 2015 there is a need to ensure capturing the delivery of stored water is not double counted for NM.

5) UFW Future Considerations

The states agreed to work together this year to determine protocol for UFW in the future, including:

- a. All issues related to UFW yet to be resolved, including such as:
 - i. How to deal with flood flows below Brantley
 - ii. Question of changed conditions since 1947
- b. Criteria for designating UFW
- c. Accounting to be used for UFW

6) Additional Discussion Items:

- a. Precip stations used in current accounting
 - i. Concept of consistency is basis for RM's evaluations
 - ii. Agreement to use Bat Draw RAWS data in substitute for Carlsbad Caverns NP weather station
- b. Rounding protocol
 - i. Intent of language added to RM Manual
 - ii. Rounding as calculations go into Table 1 only? Ok with all present.
 - iii. USGS methodologies / access to calculations
 - iv. Possible shared spreadsheet in the future
- c. Sumner 2013 ACAP
- d. Need for gain loss study below Brantley (USGS)

IN THE SUPREME COURT OF THE UNITED STATES

STATE OF TEXAS, Plaintiff,

v.

STATE OF NEW MEXICO, Defendant,

Before the River Master: Neil S. Grigg, P.E.

**JOINT MOTION TO RECONCILE AND ACCOUNT FOR
TEXAS WATER STORED IN NEW MEXICO RESERVOIRS
DURING WATER YEARS 2014 AND 2015**

PURSUANT TO communications between the states of New Mexico and Texas (the States), the States present this joint motion to the River Master to account for certain Texas waters stored in New Mexico reservoirs over the period of September 2014 through August 2015.

I. BACKGROUND

Unusual hydrologic conditions occurred in the Pecos River Basin during 2014. Extraordinarily heavy monsoon rains in September completely filled Red Bluff Reservoir resulting in an uncontrolled spill from its service spillway over the period of September 19 through October 3, 2014. During that time, over 90,000 acre-feet of water was spilled through the service spillway at Red Bluff Dam to the Pecos River. In response to flooding concerns during the period of heavy rainfall, New Mexico curtailed releases from Brantley Dam on September 8, 2014. Subsequently, due to the absence of available reservoir storage in Texas and ongoing flooding in the Red Bluff Reservoir area, New Mexico continued to hold water back in Brantley Reservoir. Total Brantley Reservoir storage capacity is approximately 300,000 acre-feet. As a consequence, by September 19, 2014, Brantley Reservoir had exceeded its 42,057 acre-feet maximum authorized Carlsbad Project conservation storage limit, and storage continued to increase to over 85,000 acre-feet until the Carlsbad Irrigation District started its first release of the season from Brantley Reservoir on March 30, 2015.

On November 20, 2014, Texas' commissioner to the Pecos River Commission, Mr. Rick Tate, requested that New Mexico continue to store waters that would otherwise have been delivered to Texas "until such time as they can be utilized in Red Bluff Reservoir." New Mexico's commissioner to the Pecos River Commission, Mr. Ray Willis, responded affirmatively to Texas' request on January 26, 2015.

A total of approximately 51,000 acre-feet was held in New Mexico at Texas' request between September 19, 2014 and September 8, 2015. The water was held in Brantley Reservoir until there was no further downstream flooding risk, and there was sufficient storage space in Red Bluff Reservoir to accommodate Texas' additional water. Approximately 29,946 acre-feet of water was released from Brantley Reservoir to Texas beginning on August 5, 2015, and concluding on September 8, 2015. About 21,071 acre-feet of water evaporated over the period of storage in Brantley Reservoir. See Table I, below.

Table 1. Texas Water in Brantley Reservoir September 2014 to September 2015

Texas Water	Volume (<i>acre-feet</i>)
Evaporated Water	21,071
Wet Water Delivered	29,946
Total =	51,017

Storage of Texas water in a New Mexico facility heretofore was unprecedented, and specific accounting procedures for such water do not exist. One of the primary issues requiring resolution was whether the water stored in Brantley Reservoir above the Carlsbad Project's conservation storage limit was "Unappropriated Flood Waters" as described in the 1948 Pecos Compact and the River Master's Manual. New Mexico, Texas, and the federal River Master worked closely together to determine the most appropriate way to characterize the stored water.

At a February 11, 2016 meeting in Fort Collins, Colorado, attended by New Mexico, Texas, and the River Master, potential accounting alternatives were evaluated and discussed. The collective decision was that the stored water was not Unappropriated Flood Waters, but instead was Texas water stored at its request in a New Mexico facility. Accounting particulars were also discussed at the February 11, 2016 meeting, and it was determined that the storage and release of Texas' water held in Brantley Reservoir would not affect the Pecos Compact accounting procedures except that the volume evaporated from Texas' water while it was held in Brantley Reservoir would be added as delivery to Texas by New Mexico. As shown in Table 1, that volume is 21,071 acre-feet.

Two principal factors informed this decision. First, there are currently no established protocols to clearly define under what conditions Unappropriated Flood Waters would be present; accordingly, significant uncertainty surrounds any such definition. Second, neither New Mexico nor Texas currently has authorization from the U.S. Bureau of Reclamation (Reclamation) to store water in Brantley Reservoir above the Carlsbad Project's conservation storage limit. Reclamation has informed New Mexico and Texas that such storage authorization would require obtaining a "Warren Act Contract" (referring to the 1911 Warren Act; 43 U.S. Code § 523) between each state and Reclamation. Thus, given these constraints, the states believe it is currently infeasible for New Mexico or Texas to store Unappropriated Flood Waters in Brantley Reservoir.

Reclamation allowed storage of flood water in 2014 and 2015 because emergency conditions necessitated its storage; that is, the water presented a public safety threat if

released from Brantley Reservoir before Texas had sufficient space in Red Bluff Reservoir. But for that public safety threat, New Mexico would have released water from Brantley Reservoir as required to keep its contents equal to or less than the Carlsbad Project's conservation storage limit.

II. REQUESTED ACTION

New Mexico and Texas respectfully request that the River Master amend his Report for Water Year 2015 to include, as water delivered by New Mexico to Texas, 21,071 acre-feet of water evaporated from Texas's water while it was stored in New Mexico's Brantley Reservoir between September 19, 2014 and September 8, 2015.

From: Suzy Valentine
To: Lewis, Greg J., OSE
Cc: Davis, Daniel. OSE; Riseley-White, Hannah, OSE
Subject: RE: River Master Brantley Storage Draft Motion
Date: Monday, May 09, 2016 11:46:40 AM

Greg,

Thank you for drafting this up. I think it looks good although I think we still have a couple of things to clear up. One is to verify how the storage and release is included in the accounting. I have not reviewed the scalping yet.

The other thing concerns the evaporation. I have convinced myself that it is the same impact over the long term no matter what method is used. At this point, I prefer to just include it in the year it occurred and not to go with the averaging. That way it is simple, easily accounted for and more straightforward so it doesn't affect other years' delivery requirements, etc. I would be interested in what Dr. Grigg and you have to say about that.

I will get back to you as soon as I can.

Thanks again!

Suzy

From: Lewis, Greg J., OSE [mailto:greg.lewis@state.nm.us]
Sent: Friday, May 06, 2016 5:55 PM
To: Suzy Valentine <Suzy.Valentine@tceq.texas.gov>
Cc: Davis, Daniel, OSE <Daniel.Davis@state.nm.us>; Riseley-White, Hannah, OSE <Hannah.Riseley-White@state.nm.us>
Subject: River Master Brantley Storage Draft Motion

Hi, Suzy:

I lost control of my week. Finally, here's a draft motion for the River Master. My thinking is we attach the Brantley accounting worksheet to the motion (once we're thorough QAing it after including the final USGS data).

Since we seem to be in agreement regarding evaporation accounting in that it really doesn't matter how we do it ☺, I suggest letting the River Master decide the method he feels to be most appropriate. I'd be interested in your thoughts on that.

Have a great weekend!

Greg

Greg Lewis
 Pecos Basin Manager
 New Mexico Interstate Stream Commission
 P.O. Box 25102
 Santa Fe, New Mexico 87504-5102
 (505) 827-7867 v

EXHIBIT G

From: Suzy Valentine
To: Lewis, Greg J., OSE
Cc: Davis, Daniel. OSE; Riseley-White, Hannah, OSE
Subject: RE: River Master Brantley Storage Draft Motion
Date: Monday, May 09, 2016 11:46:40 AM

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I will get back to you as soon as I can.

Thanks again!

Suzy

From: Lewis, Greg J., OSE [mailto:greg.lewis@state.nm.us]
Sent: Friday, May 06, 2016 5:55 PM
To: Suzy Valentine <Suzy.Valentine@tceq.texas.gov>
Cc: Davis, Daniel, OSE <Daniel.Davis@state.nm.us>; Riseley-White, Hannah, OSE <Hannah.Riseley-White@state.nm.us>
Subject: River Master Brantley Storage Draft Motion

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I lost control of my week. Finally, here's a draft motion for the River Master. My thinking is we attach the Brantley accounting worksheet to the motion (once we're thorough QAing it after including the final USGS data).

Since we seem to be in agreement regarding evaporation accounting in that it really doesn't matter how we do it ☺, I suggest letting the River Master decide the method he feels to be most appropriate. I'd be interested in your thoughts on that.

Have a great weekend!

Greg

Greg Lewis
Pecos Basin Manager
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504-5102
(505) 827-7867 v

EXHIBIT H



KEN PAXTON
ATTORNEY GENERAL OF TEXAS

January 11, 2017

Amy Haas
Legal Advisor
New Mexico Interstate Stream Commission
P. O. Box 25102
Santa Fe, New Mexico 87504

RE: Proposal to Revise Accounting for WY 2014-2015, Pecos River Compact

Dear Amy:

After reviewing New Mexico's request for credit for evaporative losses from water stored in Brantley Reservoir in 2014 and the Pecos River Master's Water Year ("WY") 2015 accounting, Texas now believes that the equitable apportionment of water in WY 2014 and WY 2015 requires the treatment of certain flows as unappropriated flood water. This position is consistent with your request for evaporation credit because Article VI(d) of the Pecos River Compact provides that reservoir losses can only be charged "[i]f *unappropriated flood waters* apportioned to Texas are stored in facilities constructed in New Mexico."¹

Texas seeks common ground on a fair apportionment for only WY 2014 and WY 2015. We do not propose the development of new River Master accounting procedures for future unappropriated flood water events. Attachment 1 contains revised river master accounting summary tables for WY 2014 and WY 2015 and a detailed list of the proposed modifications to the current accounting. We are also providing copies of the spreadsheets referenced in this proposal for your review.

In short, our proposal results in a net credit to New Mexico from the current 2014-2015 accounting of 3.1 AF.²

To our knowledge, no flood waters in the Pecos have ever been apportioned as unappropriated flood water, however, the extraordinary flood flows in 2014 and the eventual waste of much of this water present the exact situation the states envisioned in the

¹ Pecos River Compact, Art. VI(d)(emphasis added).

² The proposal modifies the WY 2014 departure from 0.7 to -16.9 AF (including corrections for Dark Canyon) and modifies the WY 2015 departure from 11.9 to 33.8. See Attachment 1.

EXHIBIT I

Pecos River Compact's unappropriated flood water provisions. The Pecos River Compact reflects an agreement that when flood flows are so large that water passes Red Bluff Reservoir and Girvin, Texas, unused and wasted, the states will split the loss by apportioning these unappropriated flood waters fifty percent to each state. As set forth in 1948 by R. J. Tipton, Engineer Advisor to the Federal Compact Representative:

“There is a quantity of floodwater that is unappropriated in the basin. It wastes to the Gulf of Mexico unused. That quantity of water is that water which spills from Red Bluff Reservoir and is not used in the Texas area above Girvin. That water belongs to neither State. It can be made usable by the construction of additional storage facilities. The two States at this moment have agreed to apportion that on a 50-50 basis. I think that is eminently fair. I can see no other basis for doing that.”³

The states also agreed that unappropriated flood water included water stored in New Mexico that would otherwise spill over Red Bluff Reservoir unused. In the Compact, unappropriated flood water includes water, which if not impounded, would flow past Girvin, Texas.⁴ The Pecos River Commission interpreted this definition as it applied to water stored in Brantley Reservoir in a resolution stating that water can only be stored in Brantley above 40,000 AF (adjusted for sedimentation) for purposes of flood control or as unappropriated flood water.⁵

The 2014 Flood Event

A review of the 2014 Flood Event and its aftermath support the first ever application of the unappropriated flood water provisions of the Pecos River Compact. In mid-September 2014, the remnants of Tropical Storm Odile resulted in widespread heavy rainfall in the Pecos River Basin in New Mexico and Texas from September 19 through October 3, 2014. In an effort to control the heavy rainfall and resulting flood, New Mexico began to curtail releases from Brantley and Avalon dams on September 8, 2014, and continued to hold water in Brantley Reservoir throughout the rest of 2014. By September 19, 2014, Brantley Reservoir had exceeded its 42,057 acre-feet (AF) maximum authorized Brantley Project conservation storage limit and by October 3, 2014, reached over 78,000 AF.⁶ The reservoir ultimately impounded 35,687 AF above 42,057 AF from September 19 through October 12, 2014, during the actual storm event, and 43,173 AF in both WY 2014 and WY 2015. By the end of 2014, Brantley Reservoir reached 81,095 AF⁷ and eventually reached a maximum storage of over 85,000 AF on March 25, 2015.⁸

During the 2014 Flood Event, Red Bluff Reservoir rose from about 50 percent full prior to the storm event and began spilling on September 21, 2014. Ultimately, Red Bluff Reservoir rose to a depth of over four feet above its uncontrolled service spillway, and

³ Transcript, Pecos River Commission Meeting, Nov. 8-13, 1948, at 98.

⁴ Pecos River Compact, Art. II(i).

⁵ Pecos River Commission Resolution of March 6, 1984.

⁶ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at D35.

⁷ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at D124.

⁸ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at B86.

spilled about 64,000 AF through the service and principal spillways to the Pecos River wasted and unused from September 19 through November 21, 2014.⁹

On November 20, 2014, the Texas Commissioner to the Pecos River Commission, Rick Tate, sent an email requesting that New Mexico continue to store waters that would otherwise have been released downstream to Texas “until such time as they can be utilized in Red Bluff Reservoir.” New Mexico’s commissioner to the Pecos River Commission, Ray Willis, formally responded affirmatively to Texas’s request on January 26, 2015.

Red Bluff Reservoir remained above an elevation of 2,824.5 feet (NGVD, USGS data) through March 2015.¹⁰ With less than three feet of freeboard below the service spillway elevation, there was still not a sufficient factor of safety for the reservoir to receive the deliveries of water from the 2014 and 2015 storage without releasing water downstream unused. Therefore, Red Bluff Water Power Control District (Red Bluff) requested that New Mexico and the Bureau of Reclamation (Reclamation) continue to hold water in Brantley Reservoir as long as possible until the deliveries could be stored in Red Bluff Reservoir and beneficially used as indicated in Texas’s request letter of November 20, 2014.

Reclamation, New Mexico and Texas met several times by conference call between February and March of 2015, during which Reclamation indicated it could no longer hold water in Brantley Reservoir without a contract under the Warren Act and would, therefore, release water from Brantley even if Red Bluff Reservoir was full and would have to pass flows downstream. In response, on March 8, 2015, Red Bluff began to release water to make room for the additional inflows of the planned deliveries. Red Bluff released 29,710 AF¹¹ between March 8 and June 15, 2015, when irrigation releases (11,361 AF)¹² also began. In October 2015, Red Bluff again made releases, ultimately releasing a total of 42,239 AF unused to allow room for the deliveries from Brantley Reservoir.¹³

Proposed Revisions to WY 2014 and WY 2015 Accounting

1. Correction of Dark Canyon Draw Flood Inflows

As Texas and New Mexico have previously agreed, the flood inflows contained in the current WY 2014 accounting have an incorrect figure based on the streamflow values estimated by the USGS for the Dark Canyon Draw gage (08405105) during the 2014 Flood Event. We propose submitting the agreed Dark Canyon correction to the River Master along with any agreement we reach on the proposal for treatment of unappropriated flood water.¹⁴

⁹ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at O127.

¹⁰ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, Red Bluff Capacity at G460.

¹¹ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at M369.

¹² Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at L368.

¹³ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at M368.

¹⁴ See Dark Canyon Approved 9.2014.xlsx. Adjustments for using the final USGS flows for Dark Canyon Draw during the 2014 flood event resulted in a reduction of the credit for New Mexico from 1.9 thousand acre-feet (TAF) to 0.7 TAF.

2. Revised Apportionment as Unappropriated Flood Water of the Water Stored in Brantley Reservoir and Evaporative Loss Credit

To properly apportion the water stored in Brantley Reservoir and, as discussed above, to provide New Mexico with reservoir loss credit for the stored unappropriated flood water, Texas proposes apportioning as unappropriated flood water all of the water stored in Brantley Reservoir in WY 2014 and WY 2015 above the allowable amount for Carlsbad Irrigation District's (CID's) storage in Brantley Reservoir.¹⁵ As discussed in more detail below, once the amount stored is determined, then the unappropriated flood water must be removed from index inflows apportioned with the 1947 index formula and the average historical (gaged) outflow in both WY 2014 and WY 2015.¹⁶ After removing the flows from the index apportionment, the proposal treats the Texas portion of the WY 2014 unappropriated flood water stored in Brantley Reservoir (fifty percent of the total unappropriated flood water) as a delivery debit in WY 2014 for later delivery to Texas (see line C.4) and credits New Mexico for evaporation occurring in WY 2014 from the Texas stored water (see line C.5).¹⁷

In WY 2015, when the stored water was released to Texas, the proposal credits New Mexico for delivery of the Texas portion of the stored unappropriated flood water.¹⁸ This amount was calculated as fifty percent of the total amount stored (see line C.4). The evaporation occurring in WY 2015 from the Texas water stored in Brantley Reservoir is also credited to New Mexico (see line C.5).¹⁹

a. Calculation of the Amount of Stored Unappropriated Flood Water

The proposed amount stored of 43,173 AF is calculated as the peak storage through the last day of continuously accumulated storage in Brantley Reservoir on March 25, 2015. As shown in the attached spreadsheet, of this 39,083 AF accumulated in WY 2014 and 4,135 AF accumulated in WY 2015.²⁰ This stored unappropriated flood water was then deducted from Brantley storage inflows in Table 2 (Flood inflow Sumner Dam to Artesia) and Table 3 (Flood Inflow Artesia to Carlsbad) for the amount in WY 2014 and Table 2 for the amount in WY 2015.²¹

In WY 2015 when New Mexico released the stored water, a total of 29,946 AF was subtracted from the gaged outflows in the Pecos River gages below Brantley to Red Bluff in Tables 7 and 12, with reductions for channel losses downstream. The elevation and storage at Avalon was also adjusted to remove these flows.²² Almost all of the released

¹⁵ Allowable CID storage was 42,057 AF for WY 2014 and 42,196 AF for WY 2015.

¹⁶ See Attachment 1, Table 1 for WY 2014 and WY 2015; WY2014 Accounting Tables UFW Final.xlsx and WY2015 Accounting Tables UFW Final.xlsx.

¹⁷ See Attachment 1, Table 1 for WY 2014; WY2014 Accounting Tables UFW Final.xlsx.

¹⁸ See Attachment 1, Table 1 for WY 2015; WY2015 Accounting Tables UFW Final.xlsx. Note that New Mexico is credited for the full amount stored; Texas absorbs the channel losses.

¹⁹ *Id.*

²⁰ Brantley and Red Bluff Reservoir Operations 2014-2015.xlsx, 2014 Table at E128, 2015 Table at C370.

²¹ See Attachment I, Table 1 for WY 2014 and WY 2015; 2014 Accounting Tables UFW Final.xlsx and WY2015 Accounting Tables UFW Final.xlsx.

²² See WY2015 Accounting Tables UFW Final.xlsx, Table 12 at J23.

stored water passed Red Bluff Reservoir wasted and unused in WY 2015, again demonstrating the need to account for the stored water as unappropriated flood water.²³

b. Calculation of the Reservoir Loss or Evaporation Credit

The calculation of the reservoir loss or evaporation credit proposed here varies from the calculated evaporation and crediting in New Mexico's proposal. We disagree with New Mexico's proposed evaporation credit because it doesn't charge the losses to each state in proportion to the stored water allocated to each state and it incorrectly allocates too much water to Texas.

New Mexico's calculation of an evaporation credit for the water stored in Brantley above the maximum allowable for the CID project incorrectly allocates evaporation to the Texas portion of the stored water. As set forth in the Pecos River Compact, "[r]eservoir losses shall be charged to each state in proportion to the quantity of water belonging to the state in storage at the time the losses occur."²⁴ In its proposal, New Mexico calculated evaporation with a "stacked" methodology by first calculating the evaporation as if the reservoir was at the maximum allowable volume and then allocating all of the remaining evaporation up to the actual reservoir level to Texas. This method incorrectly charges Texas for all of the evaporation at the top layer of the reservoir and its larger area instead of allocating the total evaporation for the reservoir in proportion to the amount of water in the reservoir allocated to each state.

Our proposed evaporation credit begins with calculating the total reservoir evaporation based on the pan evaporation and reservoir area. The amount of allowable storage for New Mexico is then subtracted from the daily total storage in Brantley Reservoir between September 19, 2014 and September 13, 2015, when the deliveries to Texas have been completed and the unappropriated flood waters are reduced to zero, to determine the evaporation related to storage of unappropriated flood water stored for each year.²⁵ The total evaporation for each water year is then divided on volume percentage between the CID storage and the stored unappropriated flood water. One-half of the evaporation for unappropriated flood water stored was then apportioned and credited to

²³ During WY 2015, Red Bluff Reservoir released about 29,710 AF of the 29,946 AF of stored unappropriated flood water that was released downstream from Avalon Reservoir because Red Bluff could not accommodate the deliveries. Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at M369.

²⁴ Pecos River Compact, Art. VI(d)(iii).

²⁵ Note that the evaporation is accumulated until all the stored water was released in September 2015, whereas the stored total is based on the maximum level of Brantley Reservoir in March of 2015. Pro-rated Evap 2014-2015 Final.xlsx, Evap Summary and Brantley Accounting Table

New Mexico in each accounting year. As shown in the attached spreadsheet, the amount for 2014 was 3.297 TAF and 2015 was 15.251 TAF based on this method.²⁶

3. Revised Apportionment of Unappropriated Flood Water that Passed Red Bluff Reservoir and Girvin, Texas, Unused During the 2014 Flood Event

In addition to water stored in Brantley Reservoir from the 2014 Flood Event, approximately 63,862 AF passed through Red Bluff Reservoir and flowed past Girvin, Texas, wasted and unused during the 2014 Flood Event.²⁷ Our proposal also seeks to have this water apportioned as unappropriated flood water per the Pecos River Compact.²⁸ To make this correction, similar to the stored water, this unappropriated flood water is removed from the index inputs that are apportioned with the 1947 condition index formula and from the deliveries that are compared to the 1947 index output to determine departures. This water does not appear in any later credit or debit in the accounting; it is simply removed from the accounting entirely as both states split the lost water.

The proposal calculates this unappropriated flood water as the sum of Red Bluff Reservoir spills and releases during the 2014 Flood Event for a total of 63,862 AF.²⁹ This unappropriated flood water was removed from the regular flood inflows in Table 4 (Flood inflow Carlsbad to State Line) and from the gaged flows for the Pecos River at Red Bluff in Table 12 in the accounting tables for WY 2014.³⁰ As shown in the proposed new Table 1 for WY 2014, the proposal reduces the total annual regular flood inflow from 348.7 TAF to 245.8 TAF, and the Average Historical Outflow from 195.1 TAF to 131.3 TAF.³¹

We look forward to discussing this proposal and resolving the issues presented when we meet with you on January 26th.

Sincerely,

/s/ Jane E. Atwood

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Environmental Protection Division
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²⁶ Evap Summary, Pro-rated Evap 2014-2015 Final.xlsx. This spreadsheet provides a summary and comparison of the evaporation amounts, and the attached table "Brantley accounting table" contains the calculations.

²⁷ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at 0127. Red Bluff Water Power Control District provided the flow data in this spreadsheet.

²⁸ Pecos River Compact, Art. II (i)(definition); Art. VI, (c)(iv) (Unappropriated floodwaters not stored should be calculated with inflow-outflow method).

²⁹ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at 0127.

³⁰ See WY2014 Accounting Tables UFW Final.xlsx, Table 4 at 124; Table 12 at P 17.

³¹ Attachment I, Table J for WY 2014; 2014 Accounting Tables UFW Final.xlsx.

Cc: Suzy Valentine, P.E., Texas Commission on Environmental Quality, Technical
Advisor for the State of Texas
Hannah Riseley-White, New Mexico Interstate Stream Commission, Technical
Advisor for the State of New Mexico

Attachment 1

**Revisions to WY 2014 and WY 2015 accounting tables for
Unappropriated Flood Waters**

1. Revisions related to the change in Dark Canyon Draw USGS data for 2014:
 - a. This is straight-forward change in the Dark Canyon flows and re-scalping the reach from Carlsbad to Red Bluff. NM has already agreed to this change in WY 2014 Tables 1, 3, 4, 7, and 12.⁽¹⁾ The result of this change in the original accounting is to reduce the credit from 1.9 TAF to 0.7 TAF. These changes were incorporated into the revised analyses for unappropriated flood water (UFW) in WY 2014 and WY 2015 as described below.
2. Considering the storage held in Brantley above the CID allowable maximums for each year to be UFW, as defined in the Pecos River Compact and the 1984 Resolution related to how Brantley will be operated:
 - a. 2014: Removing UFW inflows into Brantley from index inflows (Tables 1, 2, 3, and 12)⁽¹⁾
 - i. Inflows are based on increase in storage in Brantley above CID/NM allowable storage of 42,057 AF in 2014 = 39,038 AF
 - b. 2015: Removing UFW inflows into Brantley from index inflows (Tables 1, 2, and 12)⁽²⁾
 - i. Inflows are based on change in storage in Brantley when storage was above CID/NM allowable storage of 42,196 AF in 2015 until the reservoir peak in March and when NM began to release for CID = 4,135 AF⁽³⁾
 - c. 2015: Removing 2014 UFW NM releases to Red Bluff in 2015 from the inflows and outflows (below Avalon) (Tables 1, 3, 7, 9, 10, 11 and 12)
 - i. Inflows based on releases to Texas in 2015 as reported by NM ISC = 29,946 AF (from Avalon)⁽³⁾
 - ii. Adjustments were also made to elevation of Avalon in the accounting tables to account for lower elevations during months if no releases were made⁽²⁾
 - d. 2014: Subtracting $\frac{1}{2}$ of the 2014 stored UFW flows, since it has not been delivered yet (Table 1, C.4) = $0.5 \times 39,038 = 19,519$ AF⁽¹⁾
 - e. 2015: Adding $\frac{1}{2}$ of the 2014 plus 2015 stored UFW (when it was delivered) (Table 1, C.4) = $0.5 \times (39,038 + 4,135) = 21,587$ AF⁽²⁾
3. Revising the evaporation on the additional storage of UFW in Brantley by pro-rating the daily evaporation according to the percentage of each volume for the CID/NM storage and the additional UFW storage:

⁽¹⁾ WY2014 Accounting Tables UFW Final.xlsx

⁽²⁾ WY2015 Accounting Tables UFW Final.xlsx

⁽³⁾ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx

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- a. 2014: Adding $\frac{1}{2}$ of evaporation (Table 1, C.5), $.5 \times 3,297 \text{ AF} = 1,649 \text{ AF}^{(4)}$
 - b. 2015: Adding $\frac{1}{2}$ of evaporation (Table 1, C.5), $.5 \times 15,251 \text{ AF} = 7,626 \text{ AF}^{(4)}$
4. Considering the flood water generated below Brantley in 2014 which spilled from Red Bluff to be UFW per the Compact definition:
- a. 2014: Removing the amount spilled and released from Red Bluff in 2014 during the storm event (63,862 AF)⁽³⁾ from the flood inflows from Carlsbad to State Line (Tables 1 and 4)⁽¹⁾
 - b. 2014: Removing the amount spilled and released from Red Bluff (63,862 AF) from Pecos River at Red Bluff gage outflows. This water simply goes away as UFW because it is split 50-50 between the states (Tables 1 and 12)⁽¹⁾

⁽⁴⁾ Pro-rated Evap 2014-2015 Final.xlsx

Table 1. General Calculation of Annual Departures (B.1)

WY (CY) 2014

With Brantley storage removed, Red Bluff spills removed, and minus 1/2 storage plus 1/2 evap and DC Adj

Prep: Suzy Valentine, P.E.
 Tod: 01/10/17

2014

Final Est. of CY Departure =

1.9

0.7

-16.9

TAF

	Final RM Values		RM	DC	UFW Rev	Notes
	2012	2013	Original 2014	Adjusted 2014	and DC Adj 2014	
B.1.a. Index Inflows						
(1) Annual flood inflow						
(a) Gaged flow Pecos R blw Sumner Dam (Table 12)	64.9	63.6	120.6	120.6	120.6	
(b) Flood inflow Sumner Dam to Artesia (Table 2)	-17.2	54.4	57.3	57.3	22.3	35,038 removed Brantley storage
(c) Flood inflow Artesia to Carlsbad (Table 3)	11.2	39.9	42.5	42.5	38.4	4.0 removed Brantley storage removed spills and
(d) Flood inflow Carlsbad to State Line (Table 4)	3.2	23.2	122.8	128.3	64.4	63,862 releases from Red Bluff
Total annual flood inflow	62.1	181.1	343.23	348.73	245.7	
(2) Index inflow (3-year average)			195.5	197.3	163.0	
B.1.b. 1947- Condition Delivery Obligation			89.3	90.5	68.9	
B.1.c. Average Historical (Gaged) Outflow						
(1) Annual historical outflow						
(a) Gaged flow Pecos R at Red Bluff, NM (Table 12)	17.7	51.0	146.6	146.6	82.8	63,862 removed spills and releases from Red Bluff
(b) Gaged flow Delaware R nr Red Bluff, NM (Table 12)	1.7	12.2	48.3	48.3	48.3	
(c) Annual diversions for C-2713, SWS, (Table 12)	0.0	0.2	0.2	0.2	0.2	
Total annual historical outflow	19.4	63.4	195.1	195.1	131.3	
(2) Average historical outflow (3-year average)			92.6	92.6	71.4	
B.1.d. Annual Departure			3.4	2.2	2.4	
C. Adjustments to Computed Departure						
(1) Adjustments for depletions above Sumner Dam						
(a) Depletions due to irrigation (Table 5)	3.2	2.0	-0.2	-0.2	-0.2	
(b) Depl from operation of Santa Rosa Res (Table 6)	1.0	8.6	-1.7	-1.7	-1.7	
(c) Transf. water use to upstr. Sumner Dam (Table 12)	0.0	0.0	0.0	0.0	0.0	
C.1. Recomputed Index Inflows						
(1) Annual flood inflow						
(a) Gaged flow Pecos R blw Sumner Dam	69.1	74.2	118.7	118.8	118.8	
(b) Flood inflow Sumner Dam to Artesia	-17.2	54.4	57.3	57.3	22.3	35,038 removed Brantley storage
(c) Flood inflow Artesia to Carlsbad (Table 3)	11.2	39.9	42.5	42.5	38.4	4.0 removed Brantley storage removed spills and
(d) Flood inflow Carlsbad to State Line	3.2	23.2	122.8	128.3	64.4	63,862 releases from Red Bluff
Total annual flood inflow	66.3	191.7	341.3	346.9	243.9	
Recomputed index inflow (3-year average)			199.8	201.6	167.3	
C.1.c. Recomputed 1947-Condition Delivery Obligation (Recomputed Index Outflow)			92.1	93.3	71.5	
Recomputed Annual Departures			0.6	-0.7	-0.2	
Credits to New Mexico						
C.2. Depletions due to McMillan Dike			1.4	1.4	1.1	
C.3. Salvage water analysis (Table 12)			0.0	0.0	0.0	
Subtotal			1.9	0.7	1.0	
C.4. Unappropriated flood waters			0.0	0.0	-19.5	subtract 1/2 of Brantley storage not yet delivered
C.5. Texas water stored in NM reservoirs (Table 12)			0.0	0.0	1.6	add 1/2 Brantley
C.6. Beneficial CU of Delaware River water (Table 12)			0.0	0.0	0.0	3.3 additional evap for 2014
Final Calculated Departure, TAF			1.9	0.7	-16.9	

Table 1. General Calculation of Annual Departures in TAF (B.1) (WY 2015)

ADJUSTED FOR UNAPPROPRIATED FLOOD FLOWS

2015


Prep. by: Suzy Valentine, P.E.

Date: 01/11/17

0.7	-16.9	11.9	33.8
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	Final RM Values	Revised RM Values *	Removed RB Spills, Brantley storage removed, 1/2 evap added *	Final RM Values	Removed Brantley Releases, with 1/2 Storage and 1/2 Evap Added	Notes
	2013	2014	2014	2015	2015	
B.1.a. Index Inflows						
(1) Annual flood inflow						
(a) Gaged flow Pecos R blw Sumner Dam (Table 12)	63.6	120.6	120.6	100.7	100.7	
(b) Flood inflow Sumner Dam to Artesia (Table 2)	54.4	57.3	22.3	28.5	24.4	4,135 remove Brantley 2015 storage
(c) Flood inflow Artesia to Carlsbad (Table 3)	39.9	42.5	38.4	3.2	2.1	29.9 remove Avalon 2015 releases
(d) Flood inflow Carlsbad to State Line (Table 4)	23.2	122.8	64.4	6.2	6.2	
Total annual flood inflow	181.1	343.2	245.7	138.6	133.3	
(2) Index inflow (3-year average)		195.5	163.0	221.0	186.7	
B.1.b. 1947- Condition Delivery Obligation (Index Outflow Eqn)		89.3	68.9	106.3	83.6	
B.1.c. Average Historical (Gaged) Outflow						
(1) Annual historical outflow						
(a) Gaged flow Pecos R at Red Bluff, NM (Table 12)	51.0	146.6	82.8	101.1	74.9	29.9 remove Avalon 2015 releases
(b) Gaged flow Delaware R nr Red Bluff, NM (Table 12)	12.2	48.3	48.3	5.4	5.4	
(c) Annual diversions for C-2713, Brine Partners, (Table 12)	0.2	0.2	0.2	0.2	0.2	
Total annual historical outflow	63.4	195.1	131.3	106.7	80.5	
(2) Average historical outflow (3-year average)		92.6	71.4	121.7	91.7	
B.1.d. Annual Departure		3.4	2.4	15.4	8.1	
Adjustments to Computed Departure						
(1) Adjustments for depletions above Sumner Dam						
(a) Depletions due to irrigation (Table 5)	2.0	-0.2	-0.2	-3.2	-3.2	
(b) Depl from operation of Santa Rosa Reservoir (Table 6)	8.6	-1.7	-1.7	16.7	16.7	
(c) Transfer water use to upstream Sumner Dam (Table 12)	0.0	0.0	0.0	0.0	0.0	
C.1. Recomputed Index Inflows						
(1) Annual flood inflow						
(a) Gaged flow Pecos R blw Sumner Dam	74.2	118.7	118.7	114.2	114.2	
(b) Flood inflow Sumner Dam to Artesia	54.4	57.3	22.3	28.5	24.4	
(c) Flood inflow Artesia to Carlsbad (Table 3)	39.9	42.5	38.4	3.2	2.1	
(d) Flood inflow Carlsbad to State Line	23.2	122.8	64.4	6.2	6.2	
Total annual flood inflow	191.7	341.3	243.8	152.0	146.8	
Recomputed index inflow (3-year average)		199.8	167.3	228.3	194.1	
C.1.c. Recomputed 1947-Condition Delivery Obligation (Recomputed Index Outflow)		93.3	71.5	111.4	88.4	
Recomputed Annual Departures		-0.7	-0.2	10.3	3.3	
Credits to New Mexico						
C.2. Depletions due to McMillan Dike		1.4	1.1	1.5	1.3	
C.3. Salvage water analysis (Table 12)		0.0	0.0	0.0	0.0	
Subtotal		0.7	1.0	11.9	4.6	
C.4. Unappropriated flood waters		0.0	-19.5	0.0	21.6	add 1/2 of Brantley storage for 43.2 both 2014 and 2015
C.5. Texas water stored in NM reservoirs (Table 12)		0.0	1.6	0.0	7.6	add 1/2 Brantley additional pro-
C.6. Beneficial CU of Delaware River water (Table 12)		0.0	0.0	0.0	0.0	15.2 rated evap for 2015
Final Calculated Departure, TAF		0.7	-16.9	11.9	33.8	

NEW MEXICO INTERSTATE STREAM COMMISSION

COMMISSION MEMBERS CALEB CHANDLER, Chairman, Clovis TOM BLAINE, P.E. Secretary JIM DUNLAP, Farmington BLANE SANCHEZ, Isleta MARK SANCHEZ, Albuquerque JAMES WILCOX, Carlsbad TOPPER THORPE, Cliff		BATAAN MEMORIAL BUILDING, ROOM 101 POST OFFICE BOX 25102 SANTA FE, NEW MEXICO 87504-5102 (505) 827-6160 FAX: (505) 827-6188
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April 26, 2017

Jane E. Atwood
Assistant Attorney General
Office of the Attorney General of Texas
Environmental Protection Division
P.O. Box 12548
Austin, Texas 78711-2548

Re: Texas' Proposal to Revise Pecos River Compact Accounting for WY 2014-2015

Dear Jane:

Thank you for your January 11, 2017, letter ("Letter") regarding revisions to Pecos River Compact accounting for water years 2014 and 2015 ("WY 2014-2015"), including the accounting of waters stored for Texas in Brantley Reservoir during those years. New Mexico also appreciates your visit to Albuquerque on January 26, 2017, to explain in detail the proposal contained in your Letter.

New Mexico agrees with Texas in seeking common ground on a fair accounting for the unprecedented storm events of September 2014 and resulting storage in Brantley Reservoir in WY 2014-2015 ("the 2014 Event"). The states are also in agreement with regard to the proposed incorporation of revised 2014 Dark Canyon Draw gage data provided by the U.S. Geological Survey in June 2015.

However, New Mexico does not agree with Texas' suggested treatment of the 2014 Event because it is inconsistent with the 1948 Pecos River Compact ("Compact") and supporting documents. In addition, your proposal would penalize New Mexico for accommodating Texas' request to store water on Texas' behalf. Accordingly, Texas' proposal is contrary to the spirit of coordination and comity between the states that is encouraged by the Compact. Had New Mexico known that Texas would later take this position, waters stored in Brantley Reservoir would have been released to the state line as soon as safely feasible.

Your proposed accounting for WY 2014-2015 fails to acknowledge that the current 2016 Pecos River Master accounting does not incorporate the approximately 21,000 acre-feet of evaporative losses incurred at Brantley Reservoir during 2014 and 2015 from water

EXHIBIT J

stored exclusively for Texas. Since the states' February 11, 2016 meeting with the River Master, he has been waiting for a joint proposal on how to incorporate those losses into his accounting. At that meeting, the parties agreed that New Mexico would be credited for the additional evaporative losses, as had been discussed by the parties since storage began in 2014. Your statement that your proposal results in a net credit to New Mexico of 3,100 acre-feet disregards the mutual understanding that the River Master will adjust his 2016 Compact accounting due to the 2014 Event to include crediting New Mexico for those losses. Compared to New Mexico's accounting for WY 2014-2015, which is based on the 2016 meeting, your proposal would result in a Compact credit reduction to New Mexico of 16,800 acre-feet. (See summary table included as Attachment 1.)

In response to your Letter, New Mexico offers its perspective and suggested next steps for addressing this unprecedented event.

Background

The storm events of September 2014 resulted in significant flooding along the Pecos River in southeastern New Mexico and in the Red Bluff area of west Texas. Starting in mid-September 2014, the U.S. Bureau of Reclamation ("Reclamation") held frequent conference calls with New Mexico, through the Interstate Stream Commission (ISC) staff, the Carlsbad Irrigation District, Red Bluff Water and Power Control District ("Red Bluff"), and Texas to monitor and discuss the situation. Reclamation owns and directs operations at Brantley Reservoir for the benefit of the Carlsbad Irrigation District, a federal Reclamation Project, and for flood control operations. Based on public safety concerns expressed by Red Bluff, Reclamation agreed to hold water in Brantley above the Carlsbad Project's conservation storage limit of 42,057 acre-feet. New Mexico supported this. Brantley Reservoir has a total capacity of approximately 350,000 acre-feet, therefore the storage of this water did not compromise the reservoir's continued flood-control capability. By October 3, 2014, Red Bluff Reservoir ceased spilling and the immediate public safety concern was obviated. However, no additional storage capacity was available in Red Bluff Reservoir unless it released large volumes of water. That water would have been unused since Red Bluff irrigators had no need for it at that time.

On November 20, 2014, Texas' Pecos River Commissioner, Mr. Frederic Tate, sent an official request that "New Mexico store Texas' portion of the flows until such time as they can be utilized in Red Bluff Reservoir." On January 26, 2015, New Mexico's Pecos River Commissioner, Mr. Ray Willis, responded that New Mexico did not object to storage of Texas' water in Brantley Reservoir. In his response, Commissioner Willis noted that New Mexico's concurrence with temporary storage of water in Brantley Reservoir was initially based on public safety (flooding) concerns, but had evolved to being primarily a matter of comity between the states. He also acknowledged that there was still no additional storage capacity in Red Bluff Reservoir and even though water could be released from the Reservoir through the dam's outlet works, Red Bluff preferred not to do so because that would preclude use of the released water by downstream irrigators served by Red Bluff. Commissioner Willis emphasized two crucial points. First, he indicated that storing "until the water could be utilized" by Red Bluff meant that the water would be released to the

state line before the end of March 2015. Second, he stressed that New Mexico expected that Texas would assume all evaporative losses on water stored in Brantley Reservoir above the Carlsbad Project's storage limitation. Texas did not respond to Commissioner Willis's letter and never indicated that it had any reservations about any of the statements it contained. New Mexico supported the storage of water for Texas by Reclamation until such time as it could be utilized by Red Bluff irrigators. However, by late July 2015, diversions by Red Bluff irrigators had not been sufficient to make room for the water stored in Brantley Reservoir. Because neither state has a Warren Act Contract authorizing the United States to store non-project water in a federal facility, Reclamation determined it needed to begin releases from Brantley Reservoir to Red Bluff Reservoir. Understanding that Red Bluff irrigators had no need for the water, New Mexico, through ISC staff, urged Reclamation to continue storing the water, but to no avail. Between August 8 and September 9, 2015, 29,710 acre-feet were released from Brantley Reservoir to Texas. Including the approximately 21,000 acre-feet of evaporative losses incurred from the Texas pool during 2014 and 2015, a total of approximately 50,000 acre-feet of water were stored in Brantley Reservoir for Texas.

On February 11, 2016, technical representatives from Texas and New Mexico met with Dr. Neil Grigg, the Pecos River Master, to determine how the 2014 Event would be reflected in the Pecos River Compact accounting for WY 2014-2015. This meeting included significant discussion with the River Master of whether or not the waters stored in Brantley Reservoir above the Carlsbad Project's storage limit in 2014-2015 were "unappropriated flood waters" under the Compact. At the time of this meeting, the states agreed that the water was Texas' water stored in New Mexico, not "unappropriated flood waters."

Attached to this letter, as Attachment 2, is a copy of the notes made collectively and agreed to by the parties, during the February 11, 2016 meeting. I call your attention specifically to the language on the second page, paragraph 4: "because no protocols are currently in place for dealing with [unappropriated flood waters], the decision was made not to declare an [unappropriated flood waters] event, to account for the 2014/2015 storage in Brantley as water stored for Texas. This was based in part on a discussion of the intent of the states at time the water was stored." The parties also agreed that New Mexico would be credited for the evaporative losses associated with storage of that water. Finally, the states agreed that additional cooperative work was needed to clarify the meaning of "unappropriated flood waters," and how such waters would be declared and accounted for under the Compact in the future.

The states worked together during the spring of 2016, including at a meeting following the March 8, 2016 Engineer Advisors to the Pecos River Commission meeting, to finalize the specific approach for incorporating the 2014 Event into the 2014 and 2015 Compact accounting. New Mexico volunteered to draft a joint motion to the River Master summarizing the decisions reached on February 11, 2016, and in subsequent discussions. New Mexico transmitted the draft joint motion to Texas on May 6, 2016. Texas responded on January 11, 2017.

Determination of "Unappropriated Flood Waters" in WY 2014-2015

New Mexico disagrees with Texas' position that the waters from the 2014 Event are "unappropriated flood waters." It is New Mexico's position that no flows in the Pecos River, including the extraordinary flows of the 2014 Event, can be termed "unappropriated flood waters" unless and until the steps envisioned in the Compact, and discussed below, have occurred.

The Compact apportioned Pecos River flows between the states based on the 1947 condition. However, it also allowed for the possibility that the states could increase available supplies through the salvage of waters "non-beneficially consumed by natural process" (II.h.) or by capturing "unappropriated flood waters". The beneficial consumptive use of these unappropriated flood waters, once impounded, would be "apportioned fifty percent (50%) to Texas and fifty percent (50%) to New Mexico" (III.f.). Article IV allowed for the construction, by either state, of "additional reservoir capacity for the utilization of water salvaged and unappropriated flood waters apportioned by this Compact to such state" (IV.ii). Finally, the Compact also called for the Pecos River Commission to "make findings as to quantities of unappropriated flood waters" (V.d.8.). No further work was done regarding unappropriated flood waters: The Commission never made any findings, and the states never worked together to capture and apportion those waters. New Mexico agrees with Texas that no flood waters in the Pecos have ever been apportioned as "unappropriated flood waters."

However, New Mexico maintains that no flows in the Pecos River, including the extraordinary flows of the 2014 Event, can be "unappropriated flood waters" unless and until the steps envisioned by the Compact have occurred. Storage of water above the Carlsbad Project's conservation storage limit of 42,057 acre-feet in 2014 occurred solely in response to public safety concerns. New Mexico made no request for storage. Neither state has authority to store water in Brantley Reservoir. Therefore, a designation of "unappropriated flood waters" to be shared by the states, as provided for in the Compact is not possible.

Evaporative Credit for New Mexico in WY 2014-2015

Storage of water for Texas in Brantley Reservoir between September 19, 2014 and September 8, 2015 resulted in 21,071 acre-feet of additional evaporative losses above those incurred by the water in storage for the Carlsbad Project. But for Texas' storage request, those waters would have been released to the state line as soon as acute public safety concerns had subsided.

In his January 2015 letter, Commissioner Willis was unequivocal that New Mexico expected Texas to assume responsibility for all evaporative losses on the water held on Texas' behalf. If Texas did not agree to this statement, it should have so indicated at the time. New Mexico's expectation was clear.

In your Letter, you state that reservoir losses can only be charged "if unappropriated flood waters apportioned to Texas are stored in facilities constructed in NM." That interpretation is incorrect. Rather, the Compact provides that "the Commission may determine the conditions under which Texas may store water in works constructed in and operated by

New Mexico” (IV.e.) The Compact also empowers the Commission to make findings as to the quantities of reservoir losses from New Mexico reservoirs used for the benefit of both states, and as to the share thereof charged to each state. (V.d.10). Finally, Article XII states that the consumptive use of water by the United States and any use “incident to the diversion, impounding, or conveyance of water in one state for use in the other state shall be charged to such latter state.” As the owner and operator of Brantley Reservoir, Reclamation held water in New Mexico for Texas in 2014 and 2015. This resulted in evaporative losses above those incurred by the Carlsbad Project. Based on the Compact, those evaporative losses must be borne entirely by Texas.

From the time Texas contacted New Mexico on November 20, 2014, to request that the waters of the 2014 Event be held in New Mexico for utilization in Red Bluff Reservoir, they became Texas’ water stored in New Mexico. But for Texas’ request, New Mexico would have released those waters to the state line. In fact, New Mexico simply concurred in Texas’ request that Reclamation hold those waters in Brantley Reservoir.

Losses from Red Bluff Reservoir in WY 2014-2015

New Mexico disagrees with Texas’ characterization that, “when flood flows are so large that water passes Red Bluff Reservoir and Girvin, Texas, unused and wasted, the states will split the loss by apportioning these unappropriated flood waters fifty percent to each state.” The Compact clearly provided for the measurement of “unappropriated flood waters” so as to enable the states to plan for their impoundment to the mutual benefit of the states. However, the Compact is silent regarding any apportionment of wasted water.

Apportionment of “unappropriated flood waters” is necessarily contingent upon their impoundment. In his 1949 letter to Congress, Acting Secretary of the Interior, Oscar Chapman, stated that “the compact has many desirable features in that it will permit the future construction of reservoirs to conserve unused floodwaters.” (SD109, p. XV). The comments by Mr. Royce Tipton cited in your Letter refer to “supply,” not loss. Under the Compact, it is the beneficial consumptive use of “unappropriated flood waters” that will be apportioned 50-50 between the states.

In addition, New Mexico should not share in losses that have resulted from a reduction in demand in Texas. Over the last twenty years (1996 through 2015) average annual water released to Red Bluff irrigators has been approximately 40,000 acre-feet. This amount differs from the 1947 assumed requirement below Red Bluff Reservoir of 165,000 acre-feet as discussed in the 1948 Report of the Engineering Advisory Committee to the Pecos River Compact Commission (SD109, p.11). Water was spilled from Red Bluff Reservoir during and after the 2014 Event in significant part because of reduced irrigation demand and concomitantly higher storage in Red Bluff Reservoir. Spills from Red Bluff Reservoir resulting from this reduction in demand are not New Mexico’s responsibility.

Next Steps

New Mexico proposes a meeting with the Pecos River Master at the earliest possible date. Issues associated with the WY 2014 and 2015 accounting should be resolved in advance of the Pecos River Master’s final accounting for WY 2016, which is due by July 1, 2017.

The Compact provides for New Mexico to be credited for the evaporative losses associated with storage of water for Texas in Brantley Reservoir in 2014 and 2015. It is our view that until the process for declaring and accounting for “unappropriated flood waters” is determined, no such waters can exist.

In addition, New Mexico recommends that the states work together to 1) obtain the necessary federal authorities for the possible future storage of excess flood waters in Brantley Reservoir for beneficial use in both states, and 2) craft language to put in place the necessary protocols to clearly define “unappropriated flood waters” and their accounting.

The main purpose of the Pecos Compact was to provide an equitable division and apportionment of the waters of the Pecos River between New Mexico and Texas. However, Texas’ proposed calculation regarding the waters of the 2014 Event unfairly penalizes New Mexico for being a good neighbor. It is my hope that we can resolve this matter in a way that will benefit both states in the future.

If you have any questions or comments, please contact me.

Sincerely,

/s/ Amy I. Haas

Amy I. Haas, General Counsel

md

Attachments: Summary Table for 2014 Event
Meeting with Pecos River Master Neil Grigg 11 Feb 2016

cc w/attachments:

Suzy Valentine, P.E., Texas Commission on Environmental Quality, and Engineer
Advisor for the State of Texas

Hannah Riseley-White, New Mexico Interstate Stream Commission, Engineer
Advisor for the State of New Mexico

Frederic Tate, Pecos River Commission, Commissioner for the State of Texas

Ray Willis, Pecos River Commission, Commissioner for the State of New Mexico

Attachment 1

Pecos River Compact
Summary Table - Accounting for 2014-2015 Event
in Thousands of Acre-Feet (TAF)

Accounting Year	Pecos River Master ⁽¹⁾ (TAF)	New Mexico (TAF)	Texas (TAF)
WY 2013			
Accumulated Overage or Shortall	95.7	95.7	95.7
WY 2014			
Annual Overage or Shortfall	1.9	0.7	-16.9
Accumulated Overage or Shortall	97.6	96.4	78.8
WY 2015			
Annual Overage or Shortfall ⁽²⁾	11.9	33.0	33.8
Accumulated Overage or Shortall	109.5	129.4	112.6
Difference NM & TX⁽³⁾		-16.8	

1. The Pecos River Master is currently waiting for the states to make a recommendation on how to include the 2014 - 2015 event in Pecos River Compact accounting.

2. New Mexico's Annual Overage for 2015 includes the 21,071 acre-feet of evaporative losses incurred by the storage of additional water for Texas in Brantley Reservoir during 2014 and 2015.

3. Texas' accounting results in a decrease in New Mexico's cumulative compact credit of 16,800 acre-feet.

Attachment 2

Meeting with Pecos River Master Neil Grigg

Fort Collins, CO - February 11, 2016

Attendance: Dr. Neil Grigg, Suzy Valentine, Chris Peters (TCEQ), Greg Lewis and Hannah Riseley-White (ISC)

- 1) Pecos River Master Reviews January 2016 Memo
Dr. Grigg reviewed the content of his memo emailed to the states in January 2016, including the events that led up to the storage of water in Brantley Reservoir beginning on September 19, 2014. A historical overview was offered, including his involvement early on, changes since 1947, including increased storage capacity in NM's reservoirs (apart from administrative constraints limiting NM storage to the 1947 condition of 176,500 acre-feet), and accounting considerations preceding and later incorporated within the River Master Manual.
- 2) Options for a way forward:
 - a. Need for an agreement on how to account for the 2014 event
 - i. Possible one- time adjustment to 2015 accounting? Are adjustment to 2014 and 2015 accounting needed?
 - ii. Considerations of possible precedent setting. Is this a trial run for future accounting, or could it be a case specific event given the exigency of the situation?
 - b. In the future, given large flood events:
 - i. What triggers a declaration of 'Unappropriated Flood Waters' as outlined by the compact?
 - ii. Need for federal authorization for additional storage by both states
 - iii. TX can request storage in NM facilities
 1. Under what circumstances would this request be made?
 2. Circumstances in which NM would agree / not agree?
 - iv. What would accounting for UFW look like? Could UFW originate below Brantley and under what conditions?
 - c. Additional needs to addressed/evaluated:
 - i. Dark Canyon adjustments for 2014
 - ii. Accounting for evaporative losses in Brantley
 - iii. Accounting for conveyance losses between Brantley and the state-line
- 3) RM goes through interpretations of three options, outlined below:
 - a. 2014-2015 Stored Water as TX Water
 - i. Not UFW
 - ii. Total evaporation of that stored water charged to TX
 - iii. Delivered at request of TX at state-line less conveyance losses
-Discussion of ways to estimate losses.

- b. 2014-2015 Stored Water Declared UFW
 - i. Would be split 50/50 between the states
 - ii. Evaporation charged proportionally
 - iii. TX portion delivered at request of TX at state-line less conveyance losses
 - iv. (Current administrative limitations prevent NM from storing water above the 1947 condition of 176,500 acre-feet)
- c. Hypothetical Accounting as if Water was Passed through in 2014

There was acknowledgement of the need to outline criteria for when UFW are declared, what criteria would need to be met, and what would constitute a declaration. Would NM reservoirs cumulative storage have to fill full 176,500 or any given reservoir being above designated conservation storage? An additional need to outline the accounting for UFW is needed.

4) Decision for 2014-2015 Event

In this instance, because no protocols are currently in place for dealing with UFW, the decision was made not to declare an UFW event, to account for the 2014/2015 storage in Brantley as water stored for Texas. This was based in part on a discussion of the intent of the states at time the water was stored, including both: the request as triggered by primarily by public safety concerns, and later comity between the states.

Three quantities of water need to be determined: 1) evaporative loss, 2) delivery, 3) conveyance loss. RM suggested capturing monthly. Additional detail could be added to Table 12 to track these volumes. Adjustments to 2014 accounting would include evaporative losses only and could be added to row C.5. in the accounting workbook. For 2015 there is a need to ensure capturing the delivery of stored water is not double counted for NM.

5) UFW Future Considerations

The states agreed to work together this year to determine protocol for UFW in the future, including:

- a. All issues related to UFW yet to be resolved, including such as:
 - i. How to deal with flood flows below Brantley
 - ii. Question of changed conditions since 1947
- b. Criteria for designating UFW
- c. Accounting to be used for UFW

6) Additional Discussion Items:

- a. Precip stations used in current accounting
 - i. Concept of consistency is basis for RM's evaluations
 - ii. Agreement to use Bat Draw RAWS data in substitute for Carlsbad Caverns NP weather station
- b. Rounding protocol
 - i. Intent of language added to RM Manual

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- ii. Rounding as calculations go into Table 1 only? Ok with all present.
 - iii. USGS methodologies / access to calculations
 - iv. Possible shared spreadsheet in the future
- c. Sumner 2013 ACAP
- d. Need for gain loss study below Brantley (USGS)

99a
NEIL S. GRIGG
PROFESSIONAL ENGINEER
P.O. BOX 8581
FORT COLLINS, COLORADO 80524

(303) 484-5923

December 26, 1990

Mr. Francis J. Lorson, Chief Deputy Clerk
Supreme Court of the United States
Office of the Clerk
Washington DC 20543

Re: Texas v. New Mexico, No. 65, Original

Dear Mr. Lorson:

The Amended Decree for Texas v. New Mexico, No. 65, Original states that all modifications of the Manual shall be transmitted immediately to the Clerk and shall be retained in the files for this case.

On December 9, 1988 New Mexico filed an Amended First Motion to Modify the River Master's Manual. I deferred action on this motion until I received a reply from Special Master Monte Pascoe to my query about what constitutes "good cause" to modify the Manual. After receiving his reply I issued a Draft Modification Determination. On December 20, 1990 I heard from both New Mexico and Texas that they agreed with my draft Modification Determination regarding this motion, and I have issued a final Modification Determination and modified the Manual. According to the Amended Decree this modification will be first applicable to Water Year 1990.

This information is furnished for your information and files.

Yours very truly,

/s/

Neil S. Grigg
River Master of the Pecos River

enclosure: Modification Determination

cc: Peter Thomas White, Legal Representative for New Mexico
Nancy N. Lynch, Legal Representative for Texas

EXHIBIT K

TABLE A
SUMMARY OF EVAPORATION LOSS FROM
THE TEXAS AND NEW MEXICO POOLS
IN BRANTLEY RESERVOIR
AND DELIVERY OF WATER TO TEXAS
September 19, 2014 through September 8, 2015

Evaporation Loss (acre-feet)	2014	2015	Total
From the Texas Pool	3,827	17,244	21,071
From the New Mexico Pool	3,431	14,774	18,205

Delivery of Water to Texas (acre-feet)	-	29,946	29,946
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TABLE B
BRANTLEY RESERVOIR STORAGE OF WATER FOR TEXAS AND THE CARLSBAD PROJECT
September 19, 2014 through October 10, 2015

Date	Water Elevation ⁽¹⁾ (ft msl)	Total Reservoir Surface Area ⁽²⁾ (acres)	Pan Evap. ⁽³⁾ (in)	Total Reservoir Corp. (acre-feet)	CARLSBAD PROJECT WATER						TEXAS WATER						PECOS SETTLEMENT DELIVERY WATER				DELIVERIES TO STATE LINE ⁽¹²⁾	
					Water Volume ⁽⁴⁾ (acre-feet)	Elevation ⁽⁵⁾ (ft msl)	Surface Area ⁽⁶⁾ (acres)	Evap. ⁽⁷⁾ (acre-feet)	Water Volume ⁽⁸⁾ (acre-feet)	Evap. ⁽⁹⁾ (acre-feet)	Cumulative Evap. ⁽¹⁰⁾ (acre-feet)	Water Volume ⁽¹¹⁾ (acre-feet)	Evap. ⁽¹³⁾ (acre-feet)	Cumulative Evap. ⁽¹⁴⁾ (acre-feet)	Water Volume ⁽¹⁵⁾ (acre-feet)	Evap. ⁽¹⁶⁾ (acre-feet)	Cumulative Evap. ⁽¹⁷⁾ (acre-feet)	TOTAL DELIVERED ⁽¹⁸⁾ (acre-feet)	TOTAL TO BE DELIVERED ⁽¹⁹⁾ (acre-feet)	Texas Water (acre-feet)	2015 State Line Delivery Water (acre-feet)	
09/19/14	2,356.37	44,508	0.13	84.3	42,097	2,356.32	2,094	57.6	2,401	2	2	2	2,401	57.6	2	2	-	-	0	0		
09/20/14	2,357.70	47,558	0.13	84.8	42,097	2,356.32	2,094	57.6	2,401	15	15	15	2,401	57.6	15	15	-	-	0	0		
09/21/14	2,359.13	50,608	0.13	85.3	42,097	2,356.32	2,094	57.6	2,401	30	30	30	2,401	57.6	30	30	-	-	0	0		
09/22/14	2,360.56	53,658	0.13	85.8	42,097	2,356.32	2,094	57.6	2,401	45	45	45	2,401	57.6	45	45	-	-	0	0		
09/23/14	2,361.99	56,708	0.13	86.3	42,097	2,356.32	2,094	57.6	2,401	60	60	60	2,401	57.6	60	60	-	-	0	0		
09/24/14	2,363.42	59,758	0.13	86.8	42,097	2,356.32	2,094	57.6	2,401	75	75	75	2,401	57.6	75	75	-	-	0	0		
09/25/14	2,364.85	62,808	0.13	87.3	42,097	2,356.32	2,094	57.6	2,401	90	90	90	2,401	57.6	90	90	-	-	0	0		
09/26/14	2,366.28	65,858	0.13	87.8	42,097	2,356.32	2,094	57.6	2,401	105	105	105	2,401	57.6	105	105	-	-	0	0		
09/27/14	2,367.71	68,908	0.13	88.3	42,097	2,356.32	2,094	57.6	2,401	120	120	120	2,401	57.6	120	120	-	-	0	0		
09/28/14	2,369.14	71,958	0.13	88.8	42,097	2,356.32	2,094	57.6	2,401	135	135	135	2,401	57.6	135	135	-	-	0	0		
09/29/14	2,370.57	75,008	0.13	89.3	42,097	2,356.32	2,094	57.6	2,401	150	150	150	2,401	57.6	150	150	-	-	0	0		
09/30/14	2,372.00	78,058	0.13	89.8	42,097	2,356.32	2,094	57.6	2,401	165	165	165	2,401	57.6	165	165	-	-	0	0		
10/01/14	2,373.43	81,108	0.13	90.3	42,097	2,356.32	2,094	57.6	2,401	180	180	180	2,401	57.6	180	180	-	-	0	0		
10/02/14	2,374.86	84,158	0.13	90.8	42,097	2,356.32	2,094	57.6	2,401	195	195	195	2,401	57.6	195	195	-	-	0	0		
10/03/14	2,376.29	87,208	0.13	91.3	42,097	2,356.32	2,094	57.6	2,401	210	210	210	2,401	57.6	210	210	-	-	0	0		
10/04/14	2,377.72	90,258	0.13	91.8	42,097	2,356.32	2,094	57.6	2,401	225	225	225	2,401	57.6	225	225	-	-	0	0		
10/05/14	2,379.15	93,308	0.13	92.3	42,097	2,356.32	2,094	57.6	2,401	240	240	240	2,401	57.6	240	240	-	-	0	0		
10/06/14	2,380.58	96,358	0.13	92.8	42,097	2,356.32	2,094	57.6	2,401	255	255	255	2,401	57.6	255	255	-	-	0	0		
10/07/14	2,382.01	99,408	0.13	93.3	42,097	2,356.32	2,094	57.6	2,401	270	270	270	2,401	57.6	270	270	-	-	0	0		
10/08/14	2,383.44	102,458	0.13	93.8	42,097	2,356.32	2,094	57.6	2,401	285	285	285	2,401	57.6	285	285	-	-	0	0		
10/09/14	2,384.87	105,508	0.13	94.3	42,097	2,356.32	2,094	57.6	2,401	300	300	300	2,401	57.6	300	300	-	-	0	0		
10/10/14	2,386.30	108,558	0.13	94.8	42,097	2,356.32	2,094	57.6	2,401	315	315	315	2,401	57.6	315	315	-	-	0	0		
10/11/14	2,387.73	111,608	0.13	95.3	42,097	2,356.32	2,094	57.6	2,401	330	330	330	2,401	57.6	330	330	-	-	0	0		
10/12/14	2,389.16	114,658	0.13	95.8	42,097	2,356.32	2,094	57.6	2,401	345	345	345	2,401	57.6	345	345	-	-	0	0		
10/13/14	2,390.59	117,708	0.13	96.3	42,097	2,356.32	2,094	57.6	2,401	360	360	360	2,401	57.6	360	360	-	-	0	0		
10/14/14	2,392.02	120,758	0.13	96.8	42,097	2,356.32	2,094	57.6	2,401	375	375	375	2,401	57.6	375	375	-	-	0	0		
10/15/14	2,393.45	123,808	0.13	97.3	42,097	2,356.32	2,094	57.6	2,401	390	390	390	2,401	57.6	390	390	-	-	0	0		
10/16/14	2,394.88	126,858	0.13	97.8	42,097	2,356.32	2,094	57.6	2,401	405	405	405	2,401	57.6	405	405	-	-	0	0		
10/17/14	2,396.31	129,908	0.13	98.3	42,097	2,356.32	2,094	57.6	2,401	420	420	420	2,401	57.6	420	420	-	-	0	0		
10/18/14	2,397.74	132,958	0.13	98.8	42,097	2,356.32	2,094	57.6	2,401	435	435	435	2,401	57.6	435	435	-	-	0	0		
10/19/14	2,399.17	136,008	0.13	99.3	42,097	2,356.32	2,094	57.6	2,401	450	450	450	2,401	57.6	450	450	-	-	0	0		
10/20/14	2,400.60	139,058	0.13	99.8	42,097	2,356.32	2,094	57.6	2,401	465	465	465	2,401	57.6	465	465	-	-	0	0		
10/21/14	2,402.03	142,108	0.13	100.3	42,097	2,356.32	2,094	57.6	2,401	480	480	480	2,401	57.6	480	480	-	-	0	0		
10/22/14	2,403.46	145,158	0.13	100.8	42,097	2,356.32	2,094	57.6	2,401	495	495	495	2,401	57.6	495	495	-	-	0	0		
10/23/14	2,404.89	148,208	0.13	101.3	42,097	2,356.32	2,094	57.6	2,401	510	510	510	2,401	57.6	510	510	-	-	0	0		
10/24/14	2,406.32	151,258	0.13	101.8	42,097	2,356.32	2,094	57.6	2,401	525	525	525	2,401	57.6	525	525	-	-	0	0		
10/25/14	2,407.75	154,308	0.13	102.3	42,097	2,356.32	2,094	57.6	2,401	540	540	540	2,401	57.6	540	540	-	-	0	0		
10/26/14	2,409.18	157,358	0.13	102.8	42,097	2,356.32	2,094	57.6	2,401	555	555	555	2,401	57.6	555	555	-	-	0	0		
10/27/14	2,410.61	160,408	0.13	103.3	42,097	2,356.32	2,094	57.6	2,401	570	570	570	2,401	57.6	570	570	-	-	0	0		
10/28/14	2,412.04	163,458	0.13	103.8	42,097	2,356.32	2,094	57.6	2,401	585	585	585	2,401	57.6	585	585	-	-	0	0		
10/29/14	2,413.47	166,508	0.13	104.3	42,097	2,356.32	2,094	57.6	2,401	600	600	600	2,401	57.6	600	600	-	-	0	0		
10/30/14	2,414.90	169,558	0.13	104.8	42,097	2,356.32	2,094	57.6	2,401	615	615	615	2,401	57.6	615	615	-	-	0	0		
10/31/14	2,416.33	172,608	0.13	105.3	42,097	2,356.32	2,094	57.6	2,401	630	630	630	2,401	57.6	630	630	-	-	0	0		
11/01/14	2,417.76	175,658	0.13	105.8	42,097	2,356.32	2,094	57.6	2,401	645	645	645	2,401	57.6	645	645	-	-	0	0		
11/02/14	2,419.19	178,708	0.13	106.3	42,097	2,356.32	2,094	57.6	2,401	660	660	660	2,401	57.6	660	660	-	-	0	0		
11/03/14	2,420.62	181,758	0.13	106.8	42,097	2,356.32	2,094	57.6	2,401	675	675	675	2,401	57.6	675	675	-	-	0	0		
11/04/14	2,422.05	184,808	0.13	107.3	42,097	2,356.32	2,094	57.6	2,401	690	690	690	2,401	57.6	690	690	-	-	0	0		
11/05/14	2,423.48	187,858	0.13	107.8	42,097	2,356.32	2,094	57.6	2,401	705	705	705	2,401	57.6	705	705	-	-	0	0		
11/06/14	2,424.91	190,908	0.13	108.3	42,097	2,356.32	2,094	57.6	2,401	720	720	720	2,401	57.6	720	720	-	-	0	0		
11/07/14	2,426.34	193,958	0.13	108.8	42,097	2,356.32	2,094	57.6	2,401	735	735	735	2,401	57.6	735	735	-	-	0	0		
11/08/14	2,427.77	197,008	0.13	109.3	42,097	2,356.32	2,094	57.6	2,401	750	750	750	2,401	57.6	750	750	-	-	0	0		
11/09/14	2,429.20	200,058	0.13	109.8	42,097	2,356.32	2,094	57.6	2,401	765	765	765	2,401	57.6	765	765	-	-	0	0		
11/10/14	2,430.63	203,108	0.13	110.3	42,097	2,356.32	2,0															

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TABLE B
BRANTLEY RESERVOIR STORAGE OF WATER FOR TEXAS AND THE CARLSBAD PROJECT
September 19, 2014 through October 10, 2015

Date	Water Elevation ⁽¹⁾ [ft msl]	Water Volume ⁽²⁾ [acre-feet]	Total Reservoir Surface Area ⁽³⁾ [acres]	Pond Exp. ⁽⁴⁾ [in]	Total Reservoir Exp. [acre-feet]	CARLSBAD PROJECT WATER					TEXAS WATER			PECOS SETTLEMENT DELIVERY WATER					DELIVERIES TO STATE LINE ⁽¹²⁾	
						Water Volume ⁽⁵⁾ [acre-feet]	Elevation ⁽⁶⁾ [ft msl]	Surface Area ⁽⁷⁾ [acres]	Exp. ⁽⁸⁾ [acre-feet]	Water Volume ⁽⁹⁾ [acre-feet]	Exp. ⁽¹⁰⁾ [acre-feet]	Cumulative Exp. [acre-feet]	Water Volume ⁽¹¹⁾ [acre-feet]	Elevation ⁽¹⁴⁾ [ft msl]	Surface Area ⁽¹³⁾ [acres]	Exp. ⁽¹⁴⁾ [acre-feet]	Cumulative Exp. [acre-feet]	TOTAL DELIVERED ⁽¹⁴⁾ [acre-feet]	TOTAL TO BE DELIVERED ⁽¹⁶⁾ [acre-feet]	Texas Water [acre-feet]
09/18/15	2448.38	22,656	2,002	0.22	86.0	22,656	2,048.38	2,002	86.0	-	-	-	-	-	20,055	4,235	-	830		
09/20/15	2447.98	22,672	2,002	0.28	86.0	22,672	2,047.98	1,911	86.6	-	-	-	-	-	20,065	3,975	-	1,047		
09/26/15	2447.55	22,673	2,002	0.37	86.0	22,673	2,047.55	1,857	84.6	-	-	-	-	-	22,218	2,287	-	962		
10/02/15	2447.13	20,246	1,857	0.32	84.6	20,246	2,047.13	1,857	84.6	-	-	-	-	-	22,218	2,285	-	938		
10/02/15	2446.93	19,556	1,857	0.35	84.6	19,556	2,046.93	1,825	84.0	-	-	-	-	-	22,218	2,285	-	911		
10/02/15	2446.83	19,711	1,855	0.36	84.6	19,712	2,046.83	1,855	84.6	-	-	-	-	-	22,218	2,285	-	877		
10/02/15	2447.25	20,249	1,856	0.36	84.6	20,249	2,047.11	1,855	84.8	-	-	-	-	-	24,521	292	-	45		
10/06/15	2447.43	20,250	1,854	0.33	84.6	20,250	2,047.43	1,854	85.6	-	-	-	-	-	24,521	317	-	5		
10/06/15	2447.43	20,250	1,854	0.33	-	20,310	2,047.48	1,848	-	-	-	-	-	-	24,602	322	-	0		

Notes: 1. Brantley Reservoir elevations are the daily 7:00 AM readings by the Brantley Dam reader.

2. The volume of water stored is determined from the 2013 Brantley Reservoir Area Capacity Tables [BOK, 2013].

3. The reservoir surface area is determined from the 2013 Brantley Reservoir Area Capacity Tables [BOK, 2013] and is used to calculate the total volumetric evaporative loss.

4. Pond evaporation rates are daily readings by the Brantley Dam reader. Due to freezing temperatures, daily evaporation estimates are used November through February.

5. The daily volumetric evaporation of Carlsbad Project water is calculated by multiplying the total daily volumetric reservoir evaporation by the ratio of Carlsbad Project water to total reservoir water.

6. Carlsbad Project water in Brantley Reservoir equals the 40,000 acre-foot maximum authorized conservation storage volume from September 15, 2014, and the first CDO release from Brantley on March 30, 2015. The reservoir elevation corresponding to that volume of "net water" is adjusted annually by BOK to account for sedimentation. During 2014 the maximum conservation storage was 42,057 acre-feet [BOK, 2014]; in 2015 this value was adjusted to 42,196 acre-feet [BOK, 2015].

7. On March 30, 2015, CDO started its first 2015 Brantley release. The Texas share of water on that day was the difference between the total reservoir volume of 16,000 acre-feet and the Carlsbad Project's maximum conservation storage of 42,196 acre-feet. A three-day "paper spot" of approximately 214 acre-feet resulted.

8. On June 4, 2015, the Carlsbad Project was again below its conservation maximum. It is assumed that the change in total reservoir volume in the CDO pool volume from the previous day, and then adding the daily evaporation loss caused by storage of Texas' pool.

9. The 2013 Brantley Reservoir Area Capacity Tables [BOK, 2013] are used to determine the elevation of the Carlsbad Project pool.

10. The daily volumetric evaporation of Carlsbad Project water is calculated by multiplying the total daily volumetric reservoir evaporation by the ratio of Carlsbad Project water to total reservoir water.

11. The Texas share of water delivered from Brantley Reservoir to the Pecos River below Afton Dam is calculated by subtracting the daily Carlsbad Project pool evaporation from the total reservoir evaporation. Beginning on July 2, 2015, evaporation from the Texas pool is calculated by subtracting the daily Carlsbad Project and the Pecos Settlement Delivery pool (see note 14-16) evaporation from the total reservoir evaporation.

12. Daily volume of water delivered from Afton Reservoir is adjusted from USGS gage 08403020, PECOS RIVER BELOW AVULON DAM, NM.

13. The Texas share of water delivered from Brantley Reservoir to the Pecos River below Afton Dam is calculated by subtracting the daily Carlsbad Project pool evaporation from the total reservoir evaporation. Beginning on July 2, 2015, evaporation from the Texas pool is calculated by subtracting the daily Carlsbad Project and the Pecos Settlement Delivery pool (see note 14-16) evaporation from the total reservoir evaporation.

14. On July 16, 2015, CDO delivered 14,000 acre-feet of water as part of its 2015 Pecos Settlement delivery obligation. This effectively transferred 16,000 acre-feet from the Carlsbad Project pool to the Pecos Settlement Delivery pool.

15. The elevation of Pecos Settlement Delivery pool is determined from the combined daily water volume in the Carlsbad Project pool and the Pecos Settlement pool based on the 2013 Brantley Reservoir Area Capacity Tables [BOK, 2013]. The elevation is used to determine the surface area of this pool.

16. The surface area of the Pecos Settlement Delivery pool is calculated by subtracting the surface area of the Carlsbad Project pool from the surface area of the combined pools based on the 2013 Brantley Reservoir Area Capacity Tables [BOK, 2013]. The surface area is used to determine this pool's proportional evaporative loss.

17. Total Delivered is the amount of water delivered by CDO per the terms of the 2013 Settlement Agreement and includes both the Pecos Settlement Delivery pool and the Carlsbad Project pool.

18. As of early 2015 CDO's 2015 Pecos Settlement delivery obligation was estimated to be 24,280 acre-feet. The total to be delivered is the difference between 24,280 acre-feet and the total in the total delivered column. On September 24, 2015 release of the Pecos Settlement Delivery pool was complete and delivery of the remaining settlement obligation began out of the Carlsbad Project pool. Negative numbers reflect the volume delivered above the estimated 2015 obligation and will be credited to CDO.

EVAPORATION CREDIT TO NEW MEXICO FOR WATERS STORED FOR TEXAS ABOVE THE CARLSBAD PROJECT POOL IN BRANTLEY RESERVOIR <i>September 19, 2014 through September 8, 2015</i>	
Evaporation Period	Losses (acre-feet)
<i>September 19, 2014 to November 20, 2014</i>	
Total from Pool Above the Carlsbad Project Pool	2,590
Split between the States	1,295
<i>November 21, 2014 to September 8, 2015</i>	
Total from Pool Stored at Texas' Request	18,481
TOTAL =	19,776

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Date	Water Elevation ⁽¹⁾ (ft msl)	Water Volume ⁽²⁾ (acre-feet)	Total Reservoir Surface Area ⁽³⁾ (acres)	Pan Evap. ⁽⁴⁾ (in)	Total Reservoir Evap. (acre-feet)	CARLSBAD PROJECT WATER				TEXAS WATER				PECOS SETTLEMENT DELIVERY WATER				DELIVERIES TO STATE LINE ⁽¹²⁾	
						Water Volume ⁽²⁾ (acre-feet)	Elevation ⁽⁵⁾ (ft msl)	Surface Area ⁽⁶⁾ (acres)	Evap. ⁽⁴⁾ (acre-feet)	Water Volume ⁽²⁾ (acre-feet)	Evap. ⁽¹¹⁾ (acre-feet)	Cumulative Evap. (acre-feet)	Elevation ⁽¹⁰⁾ (ft msl)	Surface Area ⁽⁹⁾ (acres)	Evap. ⁽¹⁰⁾ (acre-feet)	Cumulative Evap. (acre-feet)	TOTAL TO BE DELIVERED ⁽⁸⁾ (acre-feet)	TOTAL DELIVERED ⁽⁹⁾ (acre-feet)	2015 State Line Delivery Water (acre-feet)
06/02/15	216.506	75,642	6,541	0.35	184.7	18,912	2,514.8	2,631	24.0	48,520	113.7	18,791	2,514.7	-	-	-	-	0	0
06/03/15	216.517	75,645	6,541	0.35	185.0	18,915	2,515.1	2,631	24.0	48,523	113.7	18,794	2,515.0	-	-	-	-	0	0
06/04/15	216.527	75,648	6,541	0.35	185.3	18,918	2,515.4	2,631	24.0	48,526	113.7	18,797	2,515.3	-	-	-	-	0	0
06/05/15	216.537	75,651	6,541	0.35	185.6	18,921	2,515.7	2,631	24.0	48,529	113.7	18,800	2,515.6	-	-	-	-	0	0
06/06/15	216.547	75,654	6,541	0.35	185.9	18,924	2,516.0	2,631	24.0	48,532	113.7	18,803	2,515.9	-	-	-	-	0	0
06/07/15	216.557	75,657	6,541	0.35	186.2	18,927	2,516.3	2,631	24.0	48,535	113.7	18,806	2,516.2	-	-	-	-	0	0
06/08/15	216.567	75,660	6,541	0.35	186.5	18,930	2,516.6	2,631	24.0	48,538	113.7	18,809	2,516.5	-	-	-	-	0	0
06/09/15	216.577	75,663	6,541	0.35	186.8	18,933	2,516.9	2,631	24.0	48,541	113.7	18,812	2,516.8	-	-	-	-	0	0
06/10/15	216.587	75,666	6,541	0.35	187.1	18,936	2,517.2	2,631	24.0	48,544	113.7	18,815	2,517.1	-	-	-	-	0	0
06/11/15	216.597	75,669	6,541	0.35	187.4	18,939	2,517.5	2,631	24.0	48,547	113.7	18,818	2,517.4	-	-	-	-	0	0
06/12/15	216.607	75,672	6,541	0.35	187.7	18,942	2,517.8	2,631	24.0	48,550	113.7	18,821	2,517.7	-	-	-	-	0	0
06/13/15	216.617	75,675	6,541	0.35	188.0	18,945	2,518.1	2,631	24.0	48,553	113.7	18,824	2,518.0	-	-	-	-	0	0
06/14/15	216.627	75,678	6,541	0.35	188.3	18,948	2,518.4	2,631	24.0	48,556	113.7	18,827	2,518.3	-	-	-	-	0	0
06/15/15	216.637	75,681	6,541	0.35	188.6	18,951	2,518.7	2,631	24.0	48,559	113.7	18,830	2,518.6	-	-	-	-	0	0
06/16/15	216.647	75,684	6,541	0.35	188.9	18,954	2,519.0	2,631	24.0	48,562	113.7	18,833	2,518.9	-	-	-	-	0	0
06/17/15	216.657	75,687	6,541	0.35	189.2	18,957	2,519.3	2,631	24.0	48,565	113.7	18,836	2,519.2	-	-	-	-	0	0
06/18/15	216.667	75,690	6,541	0.35	189.5	18,960	2,519.6	2,631	24.0	48,568	113.7	18,839	2,519.5	-	-	-	-	0	0
06/19/15	216.677	75,693	6,541	0.35	189.8	18,963	2,519.9	2,631	24.0	48,571	113.7	18,842	2,519.8	-	-	-	-	0	0
06/20/15	216.687	75,696	6,541	0.35	190.1	18,966	2,520.2	2,631	24.0	48,574	113.7	18,845	2,520.1	-	-	-	-	0	0
06/21/15	216.697	75,699	6,541	0.35	190.4	18,969	2,520.5	2,631	24.0	48,577	113.7	18,848	2,520.4	-	-	-	-	0	0
06/22/15	216.707	75,702	6,541	0.35	190.7	18,972	2,520.8	2,631	24.0	48,580	113.7	18,851	2,520.7	-	-	-	-	0	0
06/23/15	216.717	75,705	6,541	0.35	191.0	18,975	2,521.1	2,631	24.0	48,583	113.7	18,854	2,521.0	-	-	-	-	0	0
06/24/15	216.727	75,708	6,541	0.35	191.3	18,978	2,521.4	2,631	24.0	48,586	113.7	18,857	2,521.3	-	-	-	-	0	0
06/25/15	216.737	75,711	6,541	0.35	191.6	18,981	2,521.7	2,631	24.0	48,589	113.7	18,860	2,521.6	-	-	-	-	0	0
06/26/15	216.747	75,714	6,541	0.35	191.9	18,984	2,522.0	2,631	24.0	48,592	113.7	18,863	2,521.9	-	-	-	-	0	0
06/27/15	216.757	75,717	6,541	0.35	192.2	18,987	2,522.3	2,631	24.0	48,595	113.7	18,866	2,522.2	-	-	-	-	0	0
06/28/15	216.767	75,720	6,541	0.35	192.5	18,990	2,522.6	2,631	24.0	48,598	113.7	18,869	2,522.5	-	-	-	-	0	0
06/29/15	216.777	75,723	6,541	0.35	192.8	18,993	2,522.9	2,631	24.0	48,601	113.7	18,872	2,522.8	-	-	-	-	0	0
06/30/15	216.787	75,726	6,541	0.35	193.1	18,996	2,523.2	2,631	24.0	48,604	113.7	18,875	2,523.1	-	-	-	-	0	0
06/01/15	216.797	75,729	6,541	0.35	193.4	18,999	2,523.5	2,631	24.0	48,607	113.7	18,878	2,523.4	-	-	-	-	0	0
06/02/15	216.807	75,732	6,541	0.35	193.7	19,002	2,523.8	2,631	24.0	48,610	113.7	18,881	2,523.7	-	-	-	-	0	0
06/03/15	216.817	75,735	6,541	0.35	194.0	19,005	2,524.1	2,631	24.0	48,613	113.7	18,884	2,524.0	-	-	-	-	0	0
06/04/15	216.827	75,738	6,541	0.35	194.3	19,008	2,524.4	2,631	24.0	48,616	113.7	18,887	2,524.3	-	-	-	-	0	0
06/05/15	216.837	75,741	6,541	0.35	194.6	19,011	2,524.7	2,631	24.0	48,619	113.7	18,890	2,524.6	-	-	-	-	0	0
06/06/15	216.847	75,744	6,541	0.35	194.9	19,014	2,525.0	2,631	24.0	48,622	113.7	18,893	2,524.9	-	-	-	-	0	0
06/07/15	216.857	75,747	6,541	0.35	195.2	19,017	2,525.3	2,631	24.0	48,625	113.7	18,896	2,525.2	-	-	-	-	0	0
06/08/15	216.867	75,750	6,541	0.35	195.5	19,020	2,525.6	2,631	24.0	48,628	113.7	18,899	2,525.5	-	-	-	-	0	0
06/09/15	216.877	75,753	6,541	0.35	195.8	19,023	2,525.9	2,631	24.0	48,631	113.7	18,902	2,525.8	-	-	-	-	0	0
06/10/15	216.887	75,756	6,541	0.35	196.1	19,026	2,526.2	2,631	24.0	48,634	113.7	18,905	2,526.1	-	-	-	-	0	0
06/11/15	216.897	75,759	6,541	0.35	196.4	19,029	2,526.5	2,631	24.0	48,637	113.7	18,908	2,526.4	-	-	-	-	0	0
06/12/15	216.907	75,762	6,541	0.35	196.7	19,032	2,526.8	2,631	24.0	48,640	113.7	18,911	2,526.7	-	-	-	-	0	0
06/13/15	216.917	75,765	6,541	0.35	197.0	19,035	2,527.1	2,631	24.0	48,643	113.7	18,914	2,527.0	-	-	-	-	0	0
06/14/15	216.927	75,768	6,541	0.35	197.3	19,038	2,527.4	2,631	24.0	48,646	113.7	18,917	2,527.3	-	-	-	-	0	0
06/15/15	216.937	75,771	6,541	0.35	197.6	19,041	2,527.7	2,631	24.0	48,649	113.7	18,920	2,527.6	-	-	-	-	0	0
06/16/15	216.947	75,774	6,541	0.35	197.9	19,044	2,528.0	2,631	24.0	48,652	113.7	18,923	2,527.9	-	-	-	-	0	0
06/17/15	216.957	75,777	6,541	0.35	198.2	19,047	2,528.3	2,631	24.0	48,655	113.7	18,926	2,528.2	-	-	-	-	0	0
06/18/15	216.967	75,780	6,541	0.35	198.5	19,050	2,528.6	2,631	24.0	48,658	113.7	18,929	2,528.5	-	-	-	-	0	0
06/19/15	216.977	75,783	6,541	0.35	198.8	19,053	2,528.9	2,631	24.0	48,661	113.7	18,932	2,528.8	-	-	-	-	0	0
06/20/15	216.987	75,786	6,541	0.35	199.1	19,056	2,529.2	2,631	24.0	48,664	113.7	18,935	2,529.1	-	-	-	-	0	0
06/21/15	216.997	75,789	6,541	0.35	199.4	19,059	2,529.5	2,631	24.0	48,667	113.7	18,938	2,529.4	-	-	-	-	0	0
06/22/15	217.007	75,792	6,541	0.35	199.7	19,062	2,529.8	2,631	24.0	48,670	113.7	18,941	2,529.7	-	-	-	-	0	0
06/23/15	217.017	75,795	6,541	0.35	200.0	19,065	2,530.1	2,631	24.0	48,673	113.7	18,944	2,530.0	-	-	-	-	0	0
06/24/15	217.027	75,798	6,541	0.35	200.3	19,068	2,530.4	2,631	24.0	48,676	113.7	18,947	2,530.3	-	-	-	-	0	0
06/25/15	217.037	75,801	6,541	0.35	200.6	19,071	2,530.7	2,631	24.0	48,679	113.7	18,950	2,530.6	-	-	-	-	0	0
06/26/15	217.047	75,804	6,541	0.35	200.9	19,074	2,531.0	2,631	24.0	48,682	113.7	18,953	2,530.9	-	-	-	-	0	0
06/27/15	217.057	75,807	6,541	0.35	201.2	19,077	2,531.3	2,631	24.0	48,685	113.7	18,956	2,531.2	-	-	-	-	0	0
06/28/15	217.067	75,810	6,541	0.35	201.5	19,080	2,531.6	2,631	24.0	48,688	113.7	18,959	2,531.5	-	-	-	-	0	0
06/29/15	217.077	75,813	6,541	0.35	201.8	19,083	2,531.9	2,631	24.0	48,691	113.7	18,962	2,531.8	-	-	-	-	0	0
06/30/15	217.087	75,816	6,541	0.35	202.1	19,086	2,532.2	2,631	24.0	48,694	113.7	18,965	2,532.1	-	-	-	-	0	0
06/01/15	217.097	75,819	6,541	0.35	202.4	19,089	2,532.5	2,631	24.0	48,697	113.7	18,968	2,532.4	-	-	-	-	0	0
06/02/15	217.107	75,822	6,541	0.35	202.7	19,092	2,532.8	2,631	24.0	48,700	113.7	18,971	2,532.7	-	-	-	-	0	0
06/03/15	217.117	75,825	6,541	0.35	203.0	19,095	2,533.1	2,631	24.0	48,703	113.7	18,974	2,533.0	-	-	-	-		

1990

Date	Water Elevation ⁽¹⁾ (ft msl)	Water Volume ⁽²⁾ (acre-feet)	Total Reservoir Surface Area ⁽³⁾ (acres)	Pan Exp. ⁽⁴⁾ (in)	Total Reservoir Exp. (acre-feet)	CARLSBAD PROJECT WATER				TEXAS WATER				PECOS SETTLEMENT DELIVERY WATER				DELIVERIES TO STATE LINE ⁽¹¹⁾		
						Water Volume ⁽⁵⁾ (acre-feet)	Elevation ⁽⁶⁾ (ft msl)	Surface Area ⁽⁷⁾ (acres)	Exp. ⁽⁸⁾ (acre-feet)	Water Volume ⁽⁹⁾ (acre-feet)	Exp. ⁽¹⁰⁾ (acre-feet)	Cumulative Exp. (acre-feet)	Water Volume ⁽¹²⁾ (acre-feet)	Elevation ⁽¹³⁾ (ft msl)	Surface Area ⁽¹⁴⁾ (acres)	Exp. ⁽¹⁵⁾ (acre-feet)	Cumulative Exp. (acre-feet)	TOTAL DELIVERED ⁽¹⁶⁾ (acre-feet)	TOTAL TO BE DELIVERED ⁽¹⁷⁾ (acre-feet)	2015 State Line Delivery Volume ⁽¹⁸⁾ (acre-feet)
09/26/15	3248.36	22,656	2,002	0.22	36.0	22,656	3248.36	2002	36.0	—	—	—	—	—	—	—	—	20,055	4,226	930
09/29/15	3247.98	21,872	1,973	0.28	8.6	22,872	3247.98	1973	8.6	—	—	—	—	—	—	—	—	20,985	3,275	1047
09/30/15	3247.55	21,052	1,893	0.07	36.8	22,952	3247.55	1893	36.8	—	—	—	—	—	—	—	—	22,053	2,247	962
10/01/15	3247.13	20,146	1,857	0.12	34.5	20,366	3247.13	1,857	34.5	—	—	—	—	—	—	—	—	22,095	1,835	934
10/02/15	3246.71	19,240	1,821	0.13	41.0	19,458	3246.71	1,821	41.0	—	—	—	—	—	—	—	—	23,130	1,545	957
10/03/15	3246.30	18,334	1,785	0.16	49.2	18,589	3246.30	1,785	49.2	—	—	—	—	—	—	—	—	24,158	1,276	967
10/04/15	3245.88	17,428	1,750	0.16	4.6	17,648	3245.88	1,750	4.6	—	—	—	—	—	—	—	—	25,232	993	978
10/05/15	3245.47	16,522	1,715	0.16	4.6	16,742	3245.47	1,715	4.6	—	—	—	—	—	—	—	—	26,322	893	984
10/06/15	3245.05	15,616	1,680	0.16	4.6	15,826	3245.05	1,680	4.6	—	—	—	—	—	—	—	—	27,422	793	990
10/07/15	3244.64	14,710	1,645	0.16	4.6	14,916	3244.64	1,645	4.6	—	—	—	—	—	—	—	—	28,532	693	996
10/08/15	3244.23	13,804	1,610	0.16	4.6	14,020	3244.23	1,610	4.6	—	—	—	—	—	—	—	—	29,652	593	1,002
10/09/15	3243.82	12,898	1,575	0.16	4.6	13,128	3243.82	1,575	4.6	—	—	—	—	—	—	—	—	30,782	493	1,008
10/10/15	3243.41	11,992	1,540	0.16	4.6	12,232	3243.41	1,540	4.6	—	—	—	—	—	—	—	—	31,912	393	1,014

Notes: 1. Brantley Reservoir elevations are the July 2 00 AM readings by the Brantley Dam Treader.

2. The volume of water stored is determined from the 2013 Brantley Reservoir Area Capacity Tables (BRCR, 2013).

3. The reservoir surface area is determined from the 2013 Brantley Reservoir Area Capacity Tables (BRCR, 2013) and is used to calculate the total volumetric, evaporative loss.

4. Pan evaporation values are daily readings by the Brantley Dam Treader. Due to freezing temperatures, daily evaporation estimates are used November through February.

5. Daily volumetric evaporation is calculated by multiplying the reservoir's surface area in acres by 0.77 times the dam treader's measured pan evaporation values in inches (see note 4) and dividing by 22 to convert to feet of water. The 0.77 coefficient converts pan evaporation to free-surface reservoir evaporation (Pean River Master's Manual, p. 16, 2003).

6. Carlsbad Project water in the Pecos River is measured at the Pecos River below Austin Dam. The Pecos River below Austin Dam is the only point of measurement for the Carlsbad Project water.

7. The Pecos River below Austin Dam is the only point of measurement for the Carlsbad Project water.

8. The 2013 Brantley Reservoir Area Capacity Tables (BRCR, 2013) are used to determine the surface area of the Carlsbad Project pool.

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Table 9-1a
Summary of Accounting Differences (TAF)

All Adjustments Proposed by Texas⁽¹⁾

Accounting Year	NM Proposed Departure ⁽²⁾	TX Proposed Departure	Annual Difference	Cumulative Difference
2014 Water Year	0.7	-16.9	-17.6	-17.6
2015 Water Year	31.7	33.8	2.1	-15.5
2016 Water Year	27.2	20.5	-6.7	-22.2
2017 Water Year ⁽³⁾	24.8	17.0	-7.8	-30.0

Note: 1. Includes Texas' Attachment 1 Items 1, 2, 3 & 4

2. Final River Master accounting with Dark Canyon adjustment and 21.1 TAF evaporation credit for New Mexico applied in 2015

3. Final River Master accounting for Water Year 2012 used as a surrogate for water year 2017

Table 9-2a
Summary of Accounting Differences (TAF)

Brantley Adjustments Proposed by Texas⁽¹⁾

Accounting Year	Final Report Departure ⁽²⁾	TX Proposed Departure	Annual Difference	Cumulative Difference
2014 Water Year	0.7	-8.8	-9.5	-9.5
2015 Water Year	31.7	41.1	9.4	-0.1
2016 Water Year	27.2	28.2	1.0	0.9
2017 Water Year ⁽³⁾	24.8	17.0	-7.8	-6.9

Note: 1. Includes Texas' Attachment 1 Items 1, 2 & 3 only

2. Final River Master accounting with Dark Canyon adjustment and 21.1 TAF evaporation credit for New Mexico applied in 2015

3. Final River Master accounting for Water Year 2012 used as a surrogate for water year 2017

Table 9-3a
Summary of Accounting Differences (TAF)

2014 Red Bluff Releases & Spills Adjustments Proposed by Texas⁽¹⁾

Accounting Year	Final Report Departure ⁽²⁾	TX Proposed Departure	Annual Difference	Cumulative Difference
2014 Water Year	0.7	-7.0	-7.7	-7.7
2015 Water Year	10.6	3.7	-6.9	-14.6
2016 Water Year	27.2	19.8	-7.4	-21.9
2017 Water Year ⁽³⁾	24.8	24.8	0.0	-21.9

Note: 1. Includes Texas' Attachment 1 Item 4 only

2. Final River Master accounting with Dark Canyon adjustment and 21.1 TAF evaporation credit for New Mexico applied in 2015

3. Final River Master accounting for Water Year 2012 used as a surrogate for water year 2017

EXHIBIT O

IN THE
SUPREME COURT OF THE UNITED STATES

STATE OF TEXAS, Plaintiff,

v.

STATE OF NEW MEXICO, Defendant.

Before the Honorable Dr. Neil S. Grigg
River Master

TEXAS' RESPONSE TO
*NEW MEXICO'S MOTION TO RECONCILE AND ACCOUNT FOR TEXAS WATER
STORED IN NEW MEXICO DURING WATER YEARS 2014 AND 2015*

I. Introduction

In September and October 2014, the remnants of Tropical Storm Odile resulted in widespread heavy rainfall and flooding in the Pecos River Basin in New Mexico and Texas. Much of that rainfall could not be used in Texas. New Mexico complains that it should be awarded a credit for evaporative losses on water that it delivered when Texas could not use it. Their motion should be rejected because it is not timely and because it violates both the letter and the spirit of the Pecos River Compact.

II. Background

In an effort to control the heavy rainfall and resulting flood from Odile, the Bureau of Reclamation (Reclamation) began to curtail releases from Brantley dam on September 8, 2014, and continued to hold water in Brantley Reservoir throughout the rest of 2014.¹ By September 19, 2014, Brantley Reservoir had exceeded the 42,057 acre-feet (AF) maximum authorized Carlsbad Irrigation District (CID) Project conservation storage limit (the Conservation Pool).² And by October 3, 2014, Brantley Reservoir was storing over 78,000 AF of water.³ The reservoir ultimately impounded 36,419 AF above 42,057 AF from September 19 through October 3, 2014, during the actual storm event, and 43,034 AF in both Water Year (WY) 2014 and WY 2015.⁴ By the end of 2014, Brantley Reservoir reached 81,095 AF⁵ and eventually reached a maximum storage of over 85,000 AF on March 25, 2015.⁶

Before the 2014 Flood Event, Red Bluff Reservoir was about 50 percent full.⁷ Because of the 2014 Flood Event, Red Bluff Reservoir began spilling on September 21, 2014.⁸ Ultimately, Red Bluff Reservoir rose to a depth of over four feet above its uncontrolled service spillway and spilled about 64,000 AF through the outlet works and principal spillway to the Pecos River, wasted and unused, from September 19 through November 21, 2014.⁹

On November 20, 2014, the Texas Commissioner to the Pecos River Commission, Mr. Rick Tate, sent an email requesting that New Mexico continue to store Texas' portion of flood waters stored in Brantley Reservoir "until such time as they can be utilized in Red Bluff Reservoir."¹⁰ Two months later, on January 26, 2015, New Mexico's Commissioner to the Pecos River Commission, Mr. Ray Willis, formally responded affirmatively to Texas' request.¹¹ He added that New Mexico also planned to deliver its portion of the flood waters

¹ See Exhibit (Ex.) M to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015 (New Mexico's Motion).

² Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at D21.

³ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at D35.

⁴ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at F86.

⁵ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at D124.

⁶ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at B86.

⁷ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at J3.

⁸ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at P23.

⁹ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2014 Table at Q128.

¹⁰ Ex. A to New Mexico's Motion.

¹¹ Ex. B to New Mexico's Motion.

to Texas and that he expected Texas to bear all evaporative losses on the waters.¹² He also acknowledged that the River Master would ultimately decide the accounting.¹³ As set forth in greater detail below, New Mexico was unable to fulfill Texas' request to store its portion of the water until it could be used. Reclamation ultimately began releasing both Texas' and New Mexico's portions of the flood water in August 2015.¹⁴

Red Bluff Reservoir remained above an elevation of 2,826 feet (NAVD 88) through March 2015.¹⁵ The service spillway elevation for Red Bluff Reservoir is 2,828.9 (NAVD 88).¹⁶ With less than three feet of freeboard below the service spillway elevation, there was still not a sufficient factor of safety for the reservoir to receive the deliveries of water from the 2014 and 2015 storage without releasing water downstream unused.¹⁷ New Mexico was also suffering from the flood waters. The storm event destroyed all but one bridge over the Pecos in southeast New Mexico.¹⁸ Out of concern for the stability of the remaining bridge, officials from Southwest Salt, a New Mexico company, and Eddy County, New Mexico both expressed concerns about releases from the Reservoir.¹⁹ Reclamation decided to hold flood water to prevent damage to Red Bluff Reservoir's service spillway, to reduce flooding downstream of Red Bluff Reservoir, and to address New Mexico's concerns related to Pecos River crossings in Eddy County.²⁰

Representatives from Reclamation, New Mexico, and Texas met several times by conference call between February and March of 2015, during which Reclamation indicated that, once public safety concerns had ended, it could no longer hold water in Brantley Reservoir without a contract under the Warren Act and would, therefore, release water from Brantley even if Red Bluff Reservoir was full and would have to pass flows downstream.²¹ In response, on March 8, 2015, Red Bluff began to release water to make room for the additional inflows of the planned deliveries. Red Bluff released 29,710 AF²² between March 8 and June 15, 2015, when irrigation releases (11,361 AF)²³ also began. In October 2015, Red Bluff again made releases, ultimately releasing a total of 42,239 AF unused to allow room for the deliveries from Brantley Reservoir.²⁴

In February 2016, technical advisors from both Texas and New Mexico met with the River Master to discuss how the unappropriated flood waters could be accounted for in the

¹² Ex. B to New Mexico's Motion.

¹³ Ex. B to New Mexico's Motion.

¹⁴ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at E218-E277.

¹⁵ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, Red Bluff Capacity at G460.

¹⁶ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, Red Bluff Capacity at I5.

¹⁷ See Ex. 1, 12/7/15 Email from Prewit to Valentine.

¹⁸ Ex. 2, 2/3/15 Email from Sheppard to Clint, Lewis, Valentine, and others.

¹⁹ Ex. 2, 2/3/15 Email from Sheppard to Clint, Lewis, Valentine, and others; Ex. 3, 1/28/15 Email from Donnelly to Lewis, Romero, Ballard, and others.

²⁰ Ex. D to New Mexico's Motion.

²¹ Ex. 4, Declaration (Decl.) of Suzy Valentine, at ¶ 2; Ex. D to New Mexico's Motion.

²² Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at O369.

²³ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at N368.

²⁴ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at O368.

WY 2014 and WY 2015 accountings.²⁵ While the technical advisors agreed that the flood waters met the definition of unappropriated flood waters, they struggled with a mechanism to account for them.²⁶ New Mexico's technical advisor proposed that no declaration of unappropriated flood waters be made and that New Mexico be granted a one-time credit for all evaporative losses for water stored above the Conservation Pool limit in Brantley.²⁷ Texas' technical advisor expressed concerns about other aspects of the accounting that were not included in New Mexico's proposal, but agreed to review the proposal.²⁸ New Mexico circulated its notes regarding the meeting to Texas' technical advisor.²⁹ Texas did not ratify the notes.³⁰

New Mexico's technical advisor sent Texas' technical advisor a proposal on May 6, 2016.³¹ Three days later, Texas' technical advisor responded that she needed additional information concerning how storage and release of the flood waters would be accounted for under New Mexico's proposal.³² After this exchange, Texas' technical advisor had multiple communications with New Mexico's technical advisor in which she continued to gather information regarding New Mexico's position and express concerns about New Mexico's proposed accounting.³³

On May 9, 2016, the River Master circulated his preliminary accounting for WY 2015.³⁴ On June 14, 2016, both Texas and New Mexico sent their objections to that accounting to the River Master.³⁵ New Mexico did not include an objection related to evaporative losses from the stored flood water in its objections.³⁶ On June 23, 2016, the River Master transmitted his final report for WY 2015.³⁷ New Mexico did not appeal the final report.

On August 22, 2016, New Mexico's legal advisor sent a draft proposed motion to adjust the WY 2015 accounting.³⁸ In several emails between August 23, 2016, and September 30, 2016, Texas' legal advisor told New Mexico that it continued to evaluate the

²⁵ Ex. 4, Decl. of Suzy Valentine, at ¶ 3.

²⁶ Ex. 4, Decl. of Suzy Valentine, at ¶ 3.

²⁷ Ex. 4, Decl. of Suzy Valentine, at ¶ 3.

²⁸ Ex. 4, Decl. of Suzy Valentine, at ¶ 3.

²⁹ Ex. 4, Decl. of Suzy Valentine, at ¶ 3.

³⁰ Ex. 4, Decl. of Suzy Valentine, at ¶ 3.

³¹ Ex. G to New Mexico's Motion.

³² Ex. G to New Mexico's Motion.

³³ Ex. 4, Decl. of Suzy Valentine, at ¶ 3.

³⁴ Report of the River Master, Water Year 2015, Accounting Year 2016, Preliminary Report, May 9, 2016. Texas requests that the River Master take judicial notice of filings related to Compact accounting.

³⁵ State of New Mexico's Response to the May 9, 2016 Preliminary Report, Pecos River Compact, Report of the River Master, Water Year 2015, Accounting Year 2016, filed June 14, 2016 ("New Mexico's Objections to WY 2015 Preliminary Report"); Texas' Response to the Pecos River Master's Preliminary Report for Water Year 2015/Accounting Year 2016 ("Texas' Objections to WY 2015 Preliminary Report").

³⁶ See New Mexico's Objections to WY 2015 Preliminary Report.

³⁷ Pecos River Compact Report of the River Master Water Year 2015 Accounting Year 2016 Final Report, June 23, 2016.

³⁸ Ex. 5, 10/2/16 Email chain between Haas and Atwood.

proposal.³⁹ On September 30, 2016, the Texas legal advisor notified New Mexico's legal advisor that Texas believed that New Mexico's proposal did not properly account for unappropriated flood waters and would require recalculation.⁴⁰ New Mexico's legal advisor acknowledged receipt of the email and suggested that the States meet to resolve the dispute.⁴¹ On January 11, 2017, Texas sent its counter-proposal to New Mexico.⁴² And on January 26, 2017, representatives from Texas traveled to New Mexico to answer questions about its proposal and to discuss resolution of the dispute.

The River Master sent his preliminary accounting for WY 2016 to the states on May 8, 2017.⁴³ New Mexico and Texas sent their objections to that accounting to the River Master on June 13 and June 14, 2017, respectively.⁴⁴ Again, New Mexico did not object to the absence of its claimed credit for evaporative losses from stored flood waters.⁴⁵ The River Master transmitted his final report for WY 2016 on June 28, 2017.⁴⁶ Again, New Mexico did not appeal the final report.

III. The River Master lacks the authority to adjust the WY 2014 or WY 2015 accountings.

New Mexico asks the River Master to adjust the WY 2017 accounting to give it credit for evaporative losses that occurred in WY 2014 and WY 2015. Absent written agreement of the parties, the order appointing the River Master requires that a request to review the final report setting forth the results of the accounting for a water year must be made within 30 days of the delivery of the final report for that year.⁴⁷ This results in finality and consistency for all parties for the following years' accounting and associated three-year averaging. Because the final reports for WY 2014 and WY 2015 were delivered on June 26, 2015, and June 23, 2016, respectively, the review deadlines for those water years have passed.⁴⁸ Neither the River Master Manual's modification procedure, which only allows opposed modifications to be applied prospectively; nor the Compact's three-year averaging,

³⁹ Ex. 5, 10/2/16 Email chain between Haas and Atwood.

⁴⁰ Ex. 5, 10/2/16 Email chain between Haas and Atwood.

⁴¹ Ex. 5, 10/2/16 Email chain between Haas and Atwood.

⁴² Ex. I to New Mexico's Motion.

⁴³ Pecos River Compact Report of the River Master Water Year 2016 Accounting Year 2017 Preliminary Report, May 6, 2017. While the report is dated May 6, 2017, the River Master transmitted the report to the states on May 8, 2017.

⁴⁴ New Mexico's Objections to the Preliminary Report of the River Master of the Pecos River for the Water Year 2016, June 13, 2017 ("New Mexico's Objections to WY 2016 Preliminary Report"); Texas' Response to the Pecos River Master's Preliminary Report for Water Year 2016/Accounting Year 2017, June 14, 2017 ("Texas' Objections to WY 2016 Preliminary Report").

⁴⁵ See New Mexico's Objections to WY 2016 Preliminary Report.

⁴⁶ Pecos River Compact Report of the River Master Water Year 2016 Accounting Year 2017 Final Report, June 28, 2017.

⁴⁷ *Texas v. New Mexico*, 108 S.Ct. 1201, 1203 (1988).

⁴⁸ Pecos River Compact Report of the River Master Water Year 2014 Accounting Year 2015 Final Report, June 26, 2015; Pecos River Compact Report of the River Master Water Year 2015 Accounting Year 2016 Final Report, June 23, 2016.

which NM does not propose correcting in its adjustment; nor the doctrine of equitable tolling provide authority for an opposed adjustment.

A. The deadline to object to the WY 2014 and WY 2015 accounting or to seek an adjustment of the final reports from the Supreme Court has passed.

The Amended Decree requires the River Master to calculate New Mexico's delivery obligation and any overages and shortfalls under the Compact on an annual basis.⁴⁹ In a process that is now familiar to both Texas and New Mexico, the River Master delivers his preliminary report before May 15 of the accounting year;⁵⁰ the States provide objections before June 15 of the accounting year;⁵¹ and the River Master, after considering the objections, delivers a final report by July 1 of the accounting year.⁵² After the River Master issues his final report, a party seeking review of the report must file a motion with the Clerk of the Supreme Court within 30 days of the adoption.⁵³

For WY 2015, the River Master delivered his preliminary report on May 9, 2016. New Mexico and Texas both filed objections to the report on June 14, 2016. Although New Mexico believed there to be an error in the accounting, it did not include this objection in its objections to the River Master's WY 2015 preliminary report.⁵⁴ On June 23, 2016, the River Master transmitted his final report for WY 2015. Therefore, a motion to adjust the accounting for WY 2015 was due on July 25, 2016. New Mexico missed the deadline.

B. Modifications to the River Master's Manual may only be applied retroactively by agreement of the parties.

Absent written agreement of both States, a modification to the River Master Manual may only be applied prospectively. The Amended Decree requires the River Master to modify the Manual in accordance with any written agreement of the states.⁵⁵ The parties may agree to apply the amendment retroactively if the agreement specifies the procedures for the retroactive adjustments.⁵⁶ This provides the authority for Texas and New Mexico to agree to adjust final accountings after the deadline for adjustment has passed. However, when the parties do not agree, there is no process for retroactive adjustments, as New Mexico proposes in its motion. While a single party may move to modify the Manual for good cause shown, "[a] modification of the Manual by motion shall be first applicable to the water year in which the modification becomes effective."⁵⁷

⁴⁹ *Amended Decree* at III(B)(1), *Texas v. New Mexico*, 108 S.Ct. 1201, 1202 (1988).

⁵⁰ *Amended Decree* at III(B)(2), *Texas v. New Mexico*, 108 S.Ct. at 1202.

⁵¹ *Amended Decree* at III(B)(3), *Texas v. New Mexico*, 108 S.Ct. at 1202.

⁵² *Amended Decree* at III(B)(4), *Texas v. New Mexico*, 108 S.Ct. at 1202.

⁵³ *Amended Decree* at III(D), *Texas v. New Mexico*, 108 S.Ct. at 1203.

⁵⁴ See New Mexico's Objections to WY 2015 Preliminary Report. By contrast, Texas did include an objection stating that Texas believed that the WY 2015 accounting would be affected by objections Texas made to the WY 2014 accounting regarding flooding from the 2014 flood event. See Texas' Objections to WY 2015 Preliminary Report at Ex. 1 to Report, p. 1.

⁵⁵ *Amended Decree* at III(C)(1), *Texas v. New Mexico*, 108 S.Ct. at 1203.

⁵⁶ *Amended Decree* at III(C)(1), *Texas v. New Mexico*, 108 S.Ct. at 1203.

⁵⁷ *Amended Decree* at III(C)(3), *Texas v. New Mexico*, 108 S.Ct. at 1203.

A court's decree must be read to give effect to all its provisions and to render them consistent with each other.⁵⁸ Interpreting the modification provision to allow one state to unilaterally adjust the accounting based on a past error several years after the final report was issued would allow a party to circumvent—and make a nullity of—the deadlines for accounting adjustments in the Amended Decree. Texas does not agree to New Mexico's proposed modification, and therefore, it may not be retroactively applied through a modification of the River Master Manual.

C. Three-year averaging does not create a loophole for the deadline to object to the WY 2014 or WY 2015 accounting.

The Amended Decree's deadline for challenging an accounting adjustment provides finality for the states and certainty regarding their obligations under the Compact. This finality is important precisely because certain elements of the accounting affect the accounting of future years. Moreover, the deadline for challenges to the accounting prevents a state from delaying its challenge until witnesses' memories have faded and evidence has been lost.

New Mexico's suggestion that the deadline may be ignored because the Compact calls for certain aspects of the accounting to be averaged over a three-year period would potentially allow a party to reach back to the beginning of the River Master's accounting. An error affecting the WY 2017 accounting could reopen the WY 2015 accounting, which if an error were found in averaged numbers in WY 2015, could lead to the reopening of the WY 2013 accounting, and so on. The Supreme Court was aware of the three-year averaging feature of the Compact. If the Supreme Court meant for the states to be able to seek an adjustment for three years, it would have created a three-year deadline for adjustments in the Amended Decree.

But even if one could reach back, New Mexico's proposed adjustment does not affect any of the figures used in the three-year averaging. Instead, they have proposed a one-time below-the-line credit that would not impact any of the figures used in the three-year averaging in the WY 2017 accounting.⁵⁹

D. Equitable tolling does not apply.

Equitable tolling is a doctrine that generally applies to non-jurisdictional statutes of limitation. Courts have not applied it universally to all deadlines – for example, the Supreme Court has held that it does not apply to treaties or statutes of repose.⁶⁰ New Mexico cites no authority suggesting that the doctrine of equitable tolling applies to deadlines in a court's decree.

⁵⁸ See *Mastrobuono v. Shearson Lehman Hutton, Inc.*, 115 S. Ct. 1212, 1219 (1995) (contracts must be interpreted to give effect to all provisions; *Corley v. U.S.*, 129 S.Ct. 1558, 1566 (2009) (statutes must be interpreted to give effect to all provisions).

⁵⁹ New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico during Water Years 2014 and 2015 (New Mexico's Motion) at 1.

⁶⁰ See *Lozano v. Montoya Alvarez*, 134 S. Ct. 1224, 1232 (2014) (treaties); *California Pub. Employees' Ret. Sys. v. ANZ Sec., Inc.*, 137 S.Ct. 2042, 2049 (2017) (statutes of repose).

When courts do apply the doctrine, they do so sparingly.⁶¹ The doctrine of equitable tolling generally applies when the plaintiff fails to meet a non-jurisdictional statute of limitation because it is unaware of the facts underlying its claims.⁶² So, for example, it has been applied when the federal government failed to notify patients that doctors at a healthcare facility were federal employees so that the patients didn't realize that the statute of limitations under the Federal Tort Claims Act applied.⁶³

The doctrine is not applicable here. New Mexico had notice of the preliminary report for WY 2015, knew that it did not agree with the accounting in it, and lodged no objection regarding the evaporative losses in its objections.⁶⁴ Furthermore, despite its knowledge that it did not agree with the accounting, New Mexico did not appeal the final report for WY 2015, nor did it take any action to extend the deadline to appeal the report. New Mexico was aware of the facts underlying its claim and aware of the Amended Decree's deadlines. It simply neglected to preserve its right to object.

Equitable tolling does not apply to garden-variety neglect or strategic mistakes.⁶⁵ Otherwise, equitable tolling would effectively undo all deadlines. For example, equitable tolling did not apply to a creditor who missed the deadline for filing a complaint that his debt should not be discharged, even though he had been diligently negotiating a consent decree with the debtor, and the debtor and trustee had agreed that the debt was not dischargeable.⁶⁶ The court noted that the creditor could have asked to extend the deadline and simply failed to do so.⁶⁷

Texas did nothing to mislead New Mexico.⁶⁸ However, assuming for the sake of argument that Texas reneged on an agreement, nothing prevented New Mexico from noting its objection to the River Master's accounting in its objections to the WY 2015 accounting or pursuing an extension to allow for additional time for the WY 2015 final report or seeking an extension of the deadline to object to the WY 2015 final report while the agreement was being papered. New Mexico simply neglected to do so, and this type of neglect does not provide a basis for equitable tolling.

Moreover, while Texas disputes that it accepted New Mexico's proposal—even New Mexico's evidence shows that Texas' technical advisor had notified New Mexico that she had concerns with its proposal well before the deadline to challenge the WY 2015

⁶¹ See, for example, *Phillips v. Leggett & Platt, Inc.*, 658 F.3d 452, 457 (5th Cir. 2011). "Equitable tolling . . . is a narrow exception . . . that should be 'applied sparingly.'" *Id.* (quoting *Ramirez v. City of San Antonio*, 312 F.3d 178, 183 (5th Cir. 2002)).

⁶² *Ramirez-Carlo v. United States*, 496 F.3d 41, 48 (1st Cir. 2007). See also *Holmberg v. Armbrecht*, 66 S.Ct. 582, 585 (1946).

⁶³ *Valdez ex rel. Donely v. United States*, 518 F.3d 173, 183 (2nd Cir. 2008).

⁶⁴ See Ex. G to New Mexico's Motion, transmitting New Mexico's proposed accounting adjustment, and New Mexico's Objections to WY 2015 Preliminary Report, which contains no objection to the River Master's WY 2015 preliminary accounting.

⁶⁵ *Menominee Indian Tribe of Wisconsin v. United States*, 136 S.Ct. 750, 757 (2016).

⁶⁶ *In re Davis*, 330 B.R. 606, 610 (Bankr. E.D. Tenn. 2005).

⁶⁷ *Id.* at 612.

⁶⁸ See Section II, Background, *supra*.

accounting⁶⁹—New Mexico’s cases do not support its argument that Texas’ conduct prevented it from timely filing an objection. In *Roberts v. Barerras*, an inmate argued that he was unaware of the statute of limitations for filing a personal injury lawsuit against the prison because the prison did not allow him to access the law library.⁷⁰ The Tenth Circuit Court of Appeals held that the prisoner had not been prevented from filing throughout the entire period, and therefore equitable tolling did not apply.⁷¹ And, in *Menominee Indian Tribe of Wisconsin v. United States*, the Supreme Court refused to apply equitable tolling to a tribe that missed a deadline to present its claim because it mistakenly believed that its claim would be covered by a class action lawsuit brought by another tribe.⁷²

Finally, even if the doctrine were applicable, equitable tolling expires when a party discovers or should have discovered the concealed facts that led to the tolling.⁷³ While Texas disputes that any facts supporting equitable tolling exist, even under New Mexico’s theory, it knew Texas did not agree with its accounting by January 11, 2017.⁷⁴ Yet New Mexico still filed no objections with the River Master concerning WY 2014 or WY 2015 when it had an opportunity to do so during the WY 2016 accounting. It did not object to the River Master’s preliminary accounting for WY 2016, served on May 8, 2017, nor did it challenge his final report for WY 2016, filed on June 23, 2017.

IV. New Mexico’s proposed credit violates the Compact.

The Compact allows evaporative losses to be charged against a state in only two instances. Under Article XII, evaporative losses may be charged when the United States impounds water for use in a state. And under Article VI(d)(iii), if unappropriated flood waters are stored in New Mexico, reservoir losses are to be charged to each state in proportion to the quantity of water belonging to the state in storage. Neither provision supports New Mexico’s claim that it should be credited for all evaporative losses on water stored above Brantley’s Conservation Pool limit in 2014 and 2015.

A. The water held in Brantley Reservoir in 2014 and 2015 was not a consumptive use by the Bureau of Reclamation for use in Texas.

Article XII of the Compact provides that consumptive uses by the United States, including uses incident to impoundment, are charged to the state in which the use is made.⁷⁵ This provision does not apply to the 2014 and 2015 storage of unappropriated flood waters

⁶⁹ Ex. G to New Mexico’s Motion.

⁷⁰ *Roberts v. Barreras*, 484 F.3d 1236, 1242 (10th Cir. 2007).

⁷¹ *Id.*

⁷² 136 S.Ct. at 756-57.

⁷³ *Credit Suisse Securities (USA), LLC, et al. v. Simmonds*, 566 U.S. 221, 227 (2012) (“Allowing tolling to continue beyond the point at which a . . . plaintiff is aware, or should have been aware, of the facts underlying the claim would quite certainly be *inequitable* and inconsistent with the general purpose of statutes of limitation.”).

⁷⁴ New Mexico’s Motion at 13-14.

⁷⁵ “The consumptive use of water by the United States or any of its agencies, instrumentalities or wards shall be charged as a use by the state in which the use is made; provided, that such consumptive use incident to the diversion, impounding, or conveyance of water in one state for use in the other state shall be charged to such latter state.” Pecos River Compact, Art. XII.

in Brantley Reservoir for one simple reason: the water was not used in Texas. Ultimately, Red Bluff released 29,710 AF of water to make room for the flood water releases from Brantley Reservoir.⁷⁶ The water passed Girvin, Texas, unused.

Reclamation wasn't storing the flood waters for use in Texas. Reclamation's stated purpose and legal authority for holding the water was for flood control in both states. In an email to the states on July 10, 2015, Ms. Carolyn Donnelly of Reclamation stated that Reclamation was holding the water to prevent damage to Red Bluff Reservoir's service spillway, to reduce flooding downstream of Red Bluff Reservoir, and to address New Mexico's concerns related to Pecos River crossings in Eddy County, NM.⁷⁷ In July 2015, Reclamation began reviewing its authority to continue to hold the water and concluded that its flood control authority was beginning to expire.⁷⁸ Because the State of Texas did not have a contract to store water in Brantley Reservoir, Reclamation told Texas that it would begin releases the first week of August 2015.⁷⁹ To accommodate Reclamation's release of flood water, Red Bluff Reservoir had to release water to avoid an uncontrolled spill and potential dam failure.⁸⁰

The United States was not holding water in New Mexico for use in Texas. The water was not used in Texas. Therefore, Article XII does not provide a basis for crediting evaporative losses to New Mexico.

B. The water held in Brantley Reservoir in 2014 and 2015 was unappropriated flood water. But if Texas is to be charged for evaporative losses on this water, all unappropriated flood water from the event must be accounted for under the terms of the Compact.

Article VI(d) states: "[i]f unappropriated flood waters apportioned to Texas are stored in facilities constructed in New Mexico, the following principles shall apply: . . . (iii) Reservoir losses shall be charged to each state in proportion to the quantity of water belonging to that state in storage at the time the losses occur."

New Mexico argues that the waters stored in Brantley were not unappropriated flood waters under the Compact.⁸¹ If this was the case, then New Mexico would have no basis to charge Texas for evaporative losses in Brantley Reservoir. However, if the waters are unappropriated flood waters, then evaporative losses should be split in half; evaporative losses should be calculated by volume; and downstream unappropriated flood waters should also be properly accounted for. New Mexico's proposal fails to do this and should therefore be rejected.

⁷⁶ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at O369.

⁷⁷ Ex. D to New Mexico's Motion.

⁷⁸ Ex. D to New Mexico's Motion.

⁷⁹ Ex. D to New Mexico's Motion.

⁸⁰ See Ex. 1, 12/7/15 Email from Prewit to Valentine.

⁸¹ New Mexico's Motion at 15-22.

1. The flood waters stored in addition to Brantley's Conservation Pool are "unappropriated flood waters" under the Compact.

The Compact defines "unappropriated flood waters" as "water originating in the Pecos River Basin above Red Bluff Dam in Texas, the impoundment of which will not deplete the water usable by the storage and diversion facilities existing in either state under the 1947 condition and which if not impounded will flow past Girvin, Texas."⁸² The purpose of the provision, as discussed by R.J. Tipton, the engineer advisor to the Federal Compact Representative in 1948, was to ensure that no state received a windfall from a flood event:

There is a quantity of floodwater that is unappropriated in the basin. It wastes to the Gulf of Mexico unused. That quantity of water is that water which spills from Red Bluff Reservoir and is not used in the Texas area above Girvin. That water belongs to neither State. It can be made usable by the construction of additional storage facilities. The two States at this moment have agreed to apportion that on a 50-50 basis. I think that is eminently fair. I can see no other basis for doing that.⁸³

Beginning in September 2014, Reclamation impounded flood water from Tropical Storm Odile to prevent downstream flooding.⁸⁴ After Reclamation indicated that its flood control objective was ending and that it would not be able to continue to hold water in Brantley Reservoir without a contract under the Warren Act, Red Bluff Reservoir released 29,710 AF of water to make room for flood water releases from Brantley.⁸⁵ This water flowed past Girvin, Texas, unused and wasted. Moreover, approximately 63,862 AF passed through Red Bluff Reservoir and flowed past Girvin, Texas, wasted and unused due to the 2014 flood event. Therefore, these waters are unappropriated flood water under the Compact.

2. New Mexico wrongly asserts that the flood waters do not meet the Compact's "unappropriated flood waters" definition.

New Mexico's position is inconsistent with its conduct, inconsistent with the Pecos River Commission's March 6, 1984, resolution concerning the construction of Brantley Reservoir (the "Brantley Resolution"), and inconsistent with the Partial Final Decree in *State of New Mexico, ex rel. Office of the State Engineer v. Lewis* ("CID Decree"). Moreover, it is not supported by evidence.

New Mexico argues that the parties' course of conduct supports its theory.⁸⁶ However, throughout the storm event and after, New Mexico officials referred to the water

⁸² Pecos River Compact, Art. II(i).

⁸³ Ex. 6, Transcript, Pecos River Commission Meeting, Nov. 8-13, 1948, at 98.

⁸⁴ Brantley and Red Bluff Reservoir operations 2014-2015.xlsx, 2014 Table at D21.

⁸⁵ Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at O368. Red Bluff ultimately released 42,239 AF of water to accommodate releases from Brantley Reservoir. Brantley and Red Bluff Reservoir operations 2014-2015 Final.xlsx, 2015 Table at O368. None of this water was used.

⁸⁶ New Mexico's Motion at 20, 22-23.

as unappropriated flood water.⁸⁷ Moreover, under the Pecos River Commission's Brantley Resolution, New Mexico agreed that Brantley Reservoir would not store any waters except those that have been determined to be unappropriated flood waters as defined by the Compact.⁸⁸ And, the CID Decree only allows water to be stored above Brantley's Conservation Pool limit if that water is unappropriated flood water under the Compact.⁸⁹ Therefore, the parties' course of conduct shows that both states considered the flood waters to be unappropriated flood waters under the Compact.

New Mexico further argues, with no evidence to support its assertion, that the water from the storm was not unappropriated flood water under the Compact because the water would not have flowed past Girvin in 1947, when Red Bluff Reservoir had a 270,000 AF capacity.⁹⁰ This is inaccurate. Even if Red Bluff had a 270,000 AF capacity, Red Bluff would have started to spill on October 10, 2015, and would have spilled approximately 32,583 AF.⁹¹ New Mexico also argues—with no support—that Red Bluff “took minimal steps to make additional storage capacity available” in the reservoir.⁹² There is no evidence that this is the case, and therefore this argument should be disregarded.

3. If evaporative losses are credited to Texas under the Compact's unappropriated flood waters provisions, then all unappropriated flood waters should be properly accounted for. New Mexico's proposal fails to do this, so it should be rejected.

Article III(f) of the Compact states that “[b]eneficial consumptive use of unappropriated waters is hereby apportioned fifty per cent (50%) to Texas and fifty per cent (50%) to New Mexico.” Because 50% of the unappropriated flood waters stored in Brantley belonged to Texas, under Compact Article VI(d)(iii), which apportions reservoir losses associated with the storage of unappropriated flood waters “in proportion to the quantity of water belonging to the state in storage at the time the losses occur,” 50% of the evaporative losses attributable to amounts stored over Brantley's Conservation Pool limit belonged to Texas. New Mexico's proposal credits New Mexico for all losses. Moreover, by using a stacked methodology, rather than the quantity of water belonging to each state in the reservoir, New Mexico incorrectly charges Texas for all evaporation at the top layer of the reservoir, with its larger area.

Finally, New Mexico's proposal fails to account for unappropriated flood waters that were not impounded in Brantley. New Mexico has argued that unimpounded flood waters

⁸⁷ For example, in his letter to Commissioner Tate, Commissioner Willis stated: “It is my understanding that the Pecos River Commission engineer advisers from Texas and New Mexico, Ms. Suzy Valentine and Mr. Greg Lewis, respectively, are in agreement that the water held in Brantley Reservoir above its Carlsbad Project storage limitation as a result of the September 2014 storm events is likely Unappropriated Flood Waters, as defined in Article II(i) of the 1948 Pecos River Compact.” *See* Ex. B to New Mexico's Motion. *See also*, Ex. 7, 12/15/15 Email from Lewis to Grigg.

⁸⁸ Ex. 8, Pecos River Commission March 6, 1984 Resolution.

⁸⁹ Ex. 9, CID Decree, at ¶ 2.E.

⁹⁰ New Mexico's Motion at 18-20.

⁹¹ Red Bluff Reservoir operations 2014-2016 at 270 TAF CAP.xlsx, 2014-2016 Table at L406, L580.

⁹² New Mexico's Motion at 17.

should not be apportioned any differently in the Compact. However, Compact Article IV(e), which states “unappropriated flood waters apportioned to Texas by this Compact that are not impounded in reservoirs in New Mexico shall be measured and delivered at the New Mexico-Texas state line,” indicates that *all* unappropriated flood waters are to be calculated under the Compact’s provisions.

If evaporative losses are to be charged to Texas at all, then it should be done in accordance with the Compact. New Mexico’s proposal fails to properly account for reservoir losses from unappropriated flood waters and fails to account for those unappropriated flood waters that were not impounded in Brantley. Therefore, New Mexico’s accounting should be rejected.

C. Neither Texas’ Commissioner nor its technical advisor entered into an agreement that would violate the Compact; nor would they have the authority to do so.

The Compact does not allow a Commissioner to agree to an apportionment that is contrary to the express terms of the Compact or authorize the technical advisor to bind its state. Article IV(e) allows the Commissioners to determine the conditions under which Texas stores water in New Mexico – but only in works operated by New Mexico.⁹³ Brantley Reservoir is operated by Reclamation. And while Article V(d)(10) gives the Commission the authority to make findings as to the quantities of reservoir losses, those findings must be consistent with the Compact.⁹⁴ The Commission made no such finding, but a finding that Texas must bear all evaporative losses associated with unappropriated flood water that was never used in Texas is inconsistent with the Compact and therefore could not be entered under Article V. Nothing in the Compact suggests that a state’s technical advisor can bind the state in any way.

And, contrary to New Mexico’s assertions, neither a Compact Commissioner nor a technical advisor can amend the terms of the Compact through agreement. The Compact Clause of the United States Constitution provides that “[n]o State shall, without the Consent of Congress, ... enter into any Agreement or Compact with another State.”⁹⁵ Congress’s approval prevents agreements between states from injuring national interests or the interests of other states.⁹⁶ Once Congress consents to a compact between states, that compact becomes federal law.⁹⁷ Because compacts require Congressional approval, adjustments to the terms of a compact are likewise null and void without the approval of Congress.⁹⁸

⁹³ Pecos River Compact, Art. IV(e). “The Commission may determine the conditions under which Texas may store water in works constructed in and operated by New Mexico.”

⁹⁴ Pecos River Compact Art. V(d). “The Commission, *so far as consistent with this Compact*, shall have the power to: . . . (10) Make findings as to the quantities of reservoir losses from reservoirs constructed in New Mexico which may be used for the benefit of both states; . . .” (emphasis added).

⁹⁵ U.S. Const. Art. I, § 10, cl. 3.

⁹⁶ *Texas v. New Mexico*, 138 S.Ct. 954, 958 (2018).

⁹⁷ *Id.*

⁹⁸ *See Florida v. Georgia*, 58 U.S. 478, 494 (1854) (negotiation and agreement to adjust boundary between states was void without Congressional approval).

This all assumes that Texas agreed to bear the evaporative losses on all water above Brantley's Conservation Pool limit. It did not. On November 20, 2014, Texas' Commissioner requested that New Mexico store Texas' portion of the flood flows until they could be used by Red Bluff Reservoir and stated that he understood that evaporative losses would be accounted for in accordance with the Pecos River Master's Manual.⁹⁹ Two months later, New Mexico's Commissioner agreed not to object to Reclamation holding the water in Brantley until Texas could use it, but stated that New Mexico would seek to charge Texas for all evaporative losses.¹⁰⁰ Texas' Commissioner did not agree to these terms, and New Mexico was unable to deliver the water to Texas when it could use it.¹⁰¹

Since the release of water from Brantley, Texas has diligently attempted to resolve the dispute over the proper accounting of unappropriated flood waters with New Mexico. New Mexico characterizes this negotiation alternately as agreement or silence that should be construed as agreement. Neither characterization is correct.

In February 2016, technical advisors from both Texas and New Mexico met with the River Master to discuss how unappropriated flood waters should be accounted for in the WY 2014 and WY 2015 accounting.¹⁰² New Mexico's technical advisor proposed that New Mexico be granted a one-time credit for all evaporative losses for water stored above the Conservation Pool limit in Brantley.¹⁰³ Texas' technical advisor expressed concerns about other aspects of the accounting that were not included in New Mexico's proposal, but agreed to review the proposal.¹⁰⁴ New Mexico circulated its notes regarding the meeting; Texas never ratified those notes.¹⁰⁵

New Mexico's technical advisor sent Texas' technical advisor a proposal on May 6, 2016.¹⁰⁶ Three days later, Texas' technical advisor responded that she needed additional information concerning how storage and release would be accounted for—a continuing point of disagreement between the States.¹⁰⁷ After this exchange, Texas' technical advisor had multiple communications with New Mexico's technical advisor in which she continued to gather information regarding New Mexico's position and express concerns about New Mexico's proposed accounting.¹⁰⁸ Texas' technical advisor never agreed to New Mexico's proposal.

V. Conclusion and Prayer

Neither state benefited from the use of the flood waters from the 2014 flood event. When the states negotiated the Compact, they decided that neither state should be charged for water that it couldn't use. New Mexico's proposed accounting treats wasted and unused

⁹⁹ Ex. A to New Mexico's Motion.

¹⁰⁰ Ex. B to New Mexico's Motion.

¹⁰¹ See Section II, Background, *supra*.

¹⁰² Ex. 4, Decl. of Suzy Valentine, at ¶ 4.

¹⁰³ Ex. 4, Decl. of Suzy Valentine, at ¶ 4.

¹⁰⁴ Ex. 4, Decl. of Suzy Valentine, at ¶ 4.

¹⁰⁵ Ex. 4, Decl. of Suzy Valentine, at ¶ 4.

¹⁰⁶ Ex. G to New Mexico's Motion.

¹⁰⁷ Ex. G to New Mexico's Motion.

¹⁰⁸ Ex. 4, Decl. of Suzy Valentine, at ¶ 4.

water as if Texas had been able to use it, turning an historic weather event into a windfall for New Mexico. Providing credit for all evaporative losses for non-beneficial flood waters, plus giving full delivery credit for flood waters that wasted downstream is not an equitable distribution of the 2014 flood events. Instead, it benefits New Mexico to the detriment of Texas. More importantly, New Mexico's proposed distribution and additional credit do not comply with the express terms of the Compact.

Because New Mexico failed to challenge the accounting for WY 2014 and WY 2015 within the time proscribed by the Supreme Court, and because its proposed adjustment would violate the Compact, Texas respectfully requests that the River Master deny New Mexico's Motion.

Respectfully submitted on this 27th day of July, 2018.

/s/

MARY E. SMITH

Texas State Bar No. 24041947

Assistant Attorney General

Environmental Protection Division

Office of the Attorney General of Texas

P. O. Box 12548

Austin, Texas 78711

Phone: (512) 475-4041

Fax: (512) 320-0911

E-Mail: Mary.Smith@oag.texas.gov

ATTORNEY FOR THE STATE OF TEXAS

/s/

SUZY VALENTINE, P.E.

Texas Commission on Environmental
Quality

P. O. Box 13087

Mail Code 160

Austin, Texas 78711

TECHNICAL REPRESENTATIVE
FOR THE STATE OF TEXAS

CERTIFICATE OF SERVICE

On this 27th day of July, 2018, a true and correct copy of Texas' foregoing Response was sent to the following:

Dominique Work
New Mexico Interstate Stream Commission
Room 101, Bataan Memorial Building
P. O. Box 25102
Santa Fe, New Mexico 87504-5102
Via E-mail and Federal Express

Jeffrey Wechsler
Montgomery & Andrews, P.A.
325 Paseo de Peralta (87501)
P. O. Box 2307
Santa Fe, NM 87504-2307
jwechsler@montand.com
(505) 986-2637
(505) 982-4289 (fax)
Via E-mail and Federal Express

Hannah Riseley-White, P.E
Engineer Advisor, Pecos River Compact
New Mexico Interstate Stream Commission
P. O. Box 25102
Santa Fe, New Mexico 87504
Hannah.Riseley-White@state.nm.us
Via E-mail and Federal Express

/s/
MARY E. SMITH

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EXHIBIT 1

From: Robin Prewit
To: Suzy Valentine
Subject: RE: Pecos reservoir storage
Date: Monday, December 07, 2015 6:41:41 PM

Hi Suzy:

I didn't get back in the office until late so I didn't have a chance to call you. If they send us that water, I will have to just dump part of it. The elevation today is 2826.73 and in September 2014, we spilled at 2828.21. If I have to take it, I will start releasing tomorrow to make room and that is just wasted water. I will be in the office all day tomorrow, so give me a call if you get a chance.

Thank you,

Robin Prewit

From: Suzy Valentine [mailto:Suzy.Valentine@tceq.texas.gov]
Sent: Monday, December 07, 2015 3:08 PM
To: Robin Prewit (redbluff@windstream.net)
Subject: FW: Pecos reservoir storage

Robin,

If you get a chance, I would like to discuss this information about NM releasing water in the next few weeks. I see the reservoir is still around 90% full and about 2' below the spillway. It looks like 10,000 to 15,000 AF might reduce your freeboard significantly. What do you think? Please give me a call when you get a chance.

Thanks!

Suzy

Suzy Valentine, P.E., CFM
Texas Commission on Environmental Quality
Interstate River Compacts
P. O. Box 13087, MC-160
Austin, Texas 78711
512-239-4730 office
512-239-2214 fax
512-461-1093 mobile
Suzy.valentine@tceq.texas.gov

From: Lewis, Greg J., OSE [mailto:greg.lewis@state.nm.us]
Sent: Monday, December 07, 2015 11:17 AM
To: Suzy Valentine; Robin Prewit (redbluff@windstream.net)
Cc: Riseley-White, Hannah, OSE; Davis, Daniel, OSE
Subject: FW: Pecos reservoir storage

Colleagues:

It looks as if we'll be sending more water your way in the next few weeks – see the message below from Carolyn Donnelly at Reclamation. You were looking for more water, right?

I hope you are both well,

Greg

Greg Lewis
Pecos Basin Manager
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504-5102
(505) 827-7867 v
(505) 476-0399 f

From: Donnelly, Carolyn [mailto:cdonnelly@usbr.gov]
Sent: Monday, December 07, 2015 9:49 AM
To: Dale Ballard
Cc: Lewis, Greg J., OSE; Davis, Daniel, OSE; Riseley-White, Hannah, OSE; Michelle Estrada-Lopez; Rick Young
Subject: reservoir storage

Dale,

I've been tracking storage in your reservoirs, and thought it was time to initiate a discussion, because I suspect that Brantley is going to exceed maximum conservation storage in about 2 weeks. In addition, you have about 7,500 ac-ft of storage in all reservoirs left before you are at full conservation storage (176,500 ac-ft without sediment, or 188,505 ac-ft with the sediment calculation in the 2015 storage entitlement).

Below is a table summarizing it, based on this morning's storage numbers.

	Permitted			
	Cons. Storage	Current storage	% of conservation storage	
Santa Rosa	105,926	96,817	91	
Sumner	35,917	41,197	74	55,917 Sumner winter
Brantley	42,196	40,956	97	
Avalon	4,466	2,028	45	
	188,505	180,998	77	average 7,507 ac-ft remaining

I don't think you need to make a decision today, but you should start thinking about what CID wants to do. Since Sumner generally gains 12,000 to 15,000 ac-ft over the winter, and Brantley will also gain storage, my suggestion is that you release at least 10,000 and more likely about 15,000 ac-ft from Brantley beginning in the next few weeks. That should mean that you will only have to make one release over the winter.

Carolyn

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EXHIBIT 2

From: Chuck Sheppard
To: Marshall Clint OSE; Greg Lewis; Suzy Valentine
Cc: Charles Dixon; Robin Prewit
Subject: Water release from Brantley Reservoir
Date: Tuesday, February 03, 2015 11:01:21 AM

Clint, Greg, Suzy,

We are concerned about the possible release of water from Brantley and it's effect on Southwest Salt's ability to operate for the next 3-6 months. As you know both Pecos River bridges that serve our plant were washed out in the 2014 flood. The low water bridge on Dog Town road has been temporarily repaired so we have access to the plant and a way to ship product. The road is very rough and in bad shape but usable. You experienced that road in your plant visit.

The Haruun Road bridge is out and there have been delays in getting it replaced. We have been advised that it might be June or July before the bridge and road are back in use. That was to be our main plant entrance as this is an asphalt road.

The county people tell us that the temporary bridge at Dog Town may not stand a large release from Brantley and we have heard that there is a lot of pressure to begin releasing water this spring. We would like add our concerns to any discussions about water releases and the amount of the releases. If the temporary bridge is washed out at Dog Town before the new bridge is completed on Haruun Road we will be out of business at a critical time.

The temporary bridge will allow a substantial flow increase from the background flow, however there is a practical limit without endangering the bridge. The background flow is 80 cfs at this time.

We would like to discuss these issues at your convenience.

Regards,
Chuck Sheppard
Southwest Salt
913-522-5812

EXHIBIT 3

From: Donnelly, Carolyn
To: Lewis, Greg J., OSE; rromero@co.eddy.nm.us; Dale Ballard
Cc: Michelle Estrada-Lopez; Suzy Valentine; Robin Prewit
<redbluff@windstream.net> (redbluff@windstream.net)
Subject: Brantley
Date: Wednesday, January 28, 2015 4:18:35 PM

All,

I spoke with Ray Romero of Eddy County this morning. He let me know that difficulties with permitting for the County's Pecos River crossings means that they will not be able to complete - or even begin - work by March 1 as discussed in our January 13th conference call.

I told Ray that we would still most likely begin releasing from Brantley on or about March 1. Also, depending on the flow rate at which the water is moved, the release could last into mid April, so they should not expect to be able to begin work until after that. As we discussed on our call, the release rate could be as high as 1,200 cfs and probably would be no lower than 800 cfs.

We will still have our conference call with Eddy County on February 19th. Suzy and Robin, if you have any updates that could help us, please let us know.

Ray, I'll follow up with another email with some documents about the channel capacity below Brantley.

Carolyn

EXHIBIT 4

IN THE
SUPREME COURT OF THE UNITED STATES

STATE OF TEXAS, Plaintiff,

v.

STATE OF NEW MEXICO, Defendant.

Before the Honorable Dr. Neil S. Grigg
River Master

DECLARATION OF SUZY VALENTINE
IN SUPPORT OF TEXAS' RESPONSE TO NEW MEXICO'S MOTION

Comes now Suzy Valentine, pursuant to 28 U.S.C. § 1746 and states as follows:

1. I am over 18 years of age and have personal knowledge of the facts stated in this declaration. I have been employed at the Texas Commission on Environmental Quality since November 2010. Since September 2012, I have been the Technical Advisor to the State of Texas for the Texas Pecos River Compact Commission. In that capacity, my responsibilities include the technical analysis of accounting under the Pecos River Compact, the Amended Decree, and the River Master Manual. Further, in that capacity, I have interacted and communicated with technical staff for New Mexico regarding accounting for the Pecos River Compact.
2. In February and March of 2015, I met by conference call with representatives from the Bureau of Reclamation, New Mexico, and various constituents from Texas and New Mexico to discuss public safety concerns stemming from flooding in Southeastern New Mexico and the Trans-Pecos. During those meetings, representatives of various New Mexico entities expressed their concerns about releases and the rate of releases of flood water from Brantley Reservoir. Reclamation indicated that, once public safety concerns had ended, it would no longer be able to hold water in Brantley Reservoir without a contract under the Warren Act and would, therefore, release water from Brantley even if Red Bluff Reservoir was full and would have to pass flows downstream.
3. In February 2016, technical advisors from both Texas and New Mexico met with the River Master to discuss how the unappropriated flood waters could be accounted for in the WY 2014 and WY 2015 accountings. The Commissioners and the legal advisors for the Compact Commission did not attend the meeting. While the technical advisors agreed that the flood waters met the definition of unappropriated flood waters, they

struggled with a mechanism to account for them. New Mexico's technical advisor, Mr. Greg Lewis, proposed that no declaration of unappropriated flood waters be made and that New Mexico be granted a one-time credit for all evaporative losses for water stored above the conservation pool in Brantley. I expressed concerns about other aspects of the accounting that were not included in New Mexico's proposal, such as how downstream unappropriated flood waters would be accounted for, but agreed to review New Mexico's proposal. New Mexico circulated its notes regarding the meeting to me via email. I never responded to the email that Texas agreed with New Mexico's version of the meeting.

4. Mr. Greg Lewis, New Mexico's technical advisor, sent me New Mexico's proposal on May 6, 2016. Three days later, I responded that I needed additional information concerning how storage and release of the flood waters would be accounted for under New Mexico's proposal. During this period, I had multiple communications with Mr. Lewis in which I continued to gather information regarding New Mexico's position and continued to express concerns about New Mexico's proposed accounting. I also informed him that I was consulting with Texas's legal adviser about our concerns.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on July 27, 2018.

/s/
Suzy Valentine, P.E.

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EXHIBIT 5

From: Haas, Amy, OSE
To: Atwood, Jane
Cc: Riseley-White, Hannah, OSE; Suzy.Valentine@tceq.texas.gov
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico
Date: Sunday, October 02, 2016 4:34:45 PM

Thank you for your response, Jane. I suggest we meet in person to discuss the Texas proposal once we've received it.

Regards,

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504
Phone: (505) 476-0558

From: Atwood, Jane [Jane.Atwood@oag.texas.gov]
Sent: Friday, September 30, 2016 3:34 PM
To: Haas, Amy, OSE
Cc: Riseley-White, Hannah, OSE; Suzy.Valentine@tceq.texas.gov
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Amy,

We are close to completing our review. It has taken some time given the unprecedented flood in 2014. It is our view that any credit for reservoir losses will require a recalculation of water years 2014 and 2015 with reallocation of some portion of the water as unappropriated flood water. We are very close to a preliminary proposal and hope to have it to you in the next few weeks.

Jane

Jane E. Atwood
Assistant Attorney General
Environmental Protection Division
Office of the Attorney General of Texas
(512) 475-4006

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-----Original Message-----

From: Haas, Amy, OSE [<mailto:amy.haas@state.nm.us>]
Sent: Wednesday, September 28, 2016 1:54 PM

To: Atwood, Jane <jane.atwood@texasattorneygeneral.gov>
Cc: Riseley-White, Hannah, OSE <Hannah.Riseley-White@state.nm.us>
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Hi, Jane-

I wanted to follow-up on the status of your review. As I mentioned in my original email, below, this is time sensitive for New Mexico.

I look forward to hearing from you.

Regards,

Amy

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission

-----Original Message-----

From: Atwood, Jane [<mailto:jane.atwood@texasattorneygeneral.gov>]
Sent: Wednesday, September 07, 2016 7:12 PM
To: Haas, Amy, OSE
Cc: Riseley-White, Hannah, OSE
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Amy,

Apologies for the delay, we are still reviewing the 2014 accounting and your proposal. We hope to be back to you in the next few weeks.

Jane

From: Haas, Amy, OSE [amy.haas@state.nm.us]
Sent: Wednesday, September 07, 2016 12:09 PM
To: Atwood, Jane
Cc: Riseley-White, Hannah, OSE
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Hi, Jane-

Just a follow-up to see whether you have had a chance to review our draft? Once again, we'd appreciate your comments as soon as possible.

Thanks,

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504
Phone: (505) 476-0558

From: Atwood, Jane [jane.atwood@texasattorneygeneral.gov]

Sent: Tuesday, August 23, 2016 12:55 PM

To: Haas, Amy, OSE

Cc: Riseley-White, Hannah, OSE

Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Thank you for the draft Amy. We will review and get back with you as soon as possible.
Jane

Jane E. Atwood

Assistant Attorney General

Environmental Protection Division

Office of the Attorney General of Texas

(512) 475-4006

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-----Original Message-----

From: Haas, Amy, OSE [<mailto:amy.haas@state.nm.us>]

Sent: Monday, August 22, 2016 5:37 PM

To: Atwood, Jane <jane.atwood@texasattorneygeneral.gov>

Cc: Riseley-White, Hannah, OSE <Hannah.Riseley-White@state.nm.us>

Subject: Draft Joint Motion re Storage of Texas Water in New Mexico

Hello, Jane-

I have attached a draft joint motion to reconcile and account for Texas water stored in New Mexico during 2014 and 2015. The motion is intended to capture the discussions of the Texas and New Mexico Pecos River Compact Engineer Advisers (Suzy Valentine and Greg Lewis, respectively) in early 2016, as well as their meeting and calls with the River Master, Dr. Neil Grigg.

I would appreciate comments and edits at your earliest convenience as this issue is time-sensitive for New Mexico. Specifically, under the 2003 Pecos Settlement Agreement between New Mexico, the US (BOR), Carlsbad Irrigation District (CID) and Pecos Valley Artesian Conservancy District, the CID's deliveries to Texas are dependent upon how large New Mexico's cumulative Compact credit is on November 1st. The River Master's disposition of evaporation losses on Texas water stored in NM will directly bear on the amount of NM's Compact credit.

I look forward to hearing from you.

Regards,

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504
Phone: (505) 476-0558

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EXHIBIT 6

PECOS RIVER COMPACT

Mr. MILLER. We have reviewed the proposal of New Mexico and drafted an answer that we feel fits it except that there is part of that proposal that might be acceptable and parts of it that are not. For instance:

The proposal of the Commissioner for New Mexico, submitted at the meeting at Santa Fe, N. Mex., on March 10 and 11, 1948, as a basis for a compact is entirely too vague and indefinite for Texas to consider as a compact basis.

Texas cannot agree to protect the junior rights in New Mexico. Texas is not asking for the same protection in Texas.

New Mexico must be responsible for and assume the burden for the taking of underground water that affects the base flow of the stream in question.

A compact can be reached on the basis of specified amounts of water to be delivered at the State line.

Any changed conditions that may increase or decrease the water supply must be defined, and losses or gains allocated in agreed proportions to each State.

Mr. Chairman, I would like to have that made a part of the record.

Chairman JOHNSON. It is so ordered.

Mr. BLISS. Mr. Chairman, as you know, our delegation from the Carlsbad project asked for and received additional time to go back and consult with the Carlsbad people regarding the import of the engineering advisory committee's report and the general features of a proposed compact. They left hurriedly, have had but a short time to talk with the group in Carlsbad and after a short discussion came back here with some additional representatives from the district. New Mexico has not had time to go into all the ramifications of the engineering report and we now have before us a reply from the Texas commissioner to our proposal made in Santa Fe in March of this year. I feel that before making a reply to this we should be given some additional time to consider the matter. I don't know just how long that might take but feel that if we could recess at this time we could meet this afternoon. What time do you suggest?

Mr. MOISE. Three o'clock.

Mr. BLISS. Three o'clock; about three o'clock or at the call of the Chair.

Chairman JOHNSON. That suit you, Mr. Miller?

Mr. MILLER. That's entirely satisfactory.

Chairman JOHNSON. If there is nothing else to be brought up at this time, the meeting will recess to 3 o'clock this afternoon unless called sooner by the Chair.

(Meeting recessed.)

MORNING SESSION, NOVEMBER 13, 1948, AUSTIN, TEX.

Chairman JOHNSON. The meeting will please come to order. This time, I think the first move is to ask Mr. Bliss if he has an answer to the statement made by Mr. Miller at the last meeting.

Mr. BLISS. Mr. Chairman, at our last meeting which was November 11, the commissioner for Texas made a reply to the New Mexico offer or counterproposal which was presented at the March meeting of the commission at Santa Fe.

PECOS RIVER COMPACT

New Mexico has considered the comments of Texas upon that proposal. She has also considered the later studies of the engineering advisory committee following the March meeting in which a certain additional facts and data were developed. We have drafted a reply to Mr. Miller's comments which enlarge on and, to some extent, modify the New Mexico proposal made in March in the light of additional facts which the engineering studies have developed.

I do not believe it will be necessary at this time to go back and answer specifically the comments as made by Texas commissioner because I believe they are all answered and embodied in the current New Mexico proposal. There may be some questions as to how the current proposal might work in actual practice. It seems to me that those are matters which can be worked out as administrative features of the compact. If the principles set forth are agreeable to both States, those details can be worked out.

At this time I would like to present the New Mexico reply and to read it into the record. This is not titled in any way. I have here a group of items or principles, some nine in number, as follows:

AUSTIN, TEXAS, *November 13, 1948.*

1. New Mexico shall agree not to deplete by man's activities, the flow of the Pecos River at the New Mexico-Texas State line below an amount which would give to Texas the quantity of water equivalent of the 1947 condition as reported by the engineering advisory committee in its report of January 1948 and supplements thereto, adopted November 11, 1948, except as modified by paragraph 3 hereof.

2. Water salvaged by reducing the present-day consumption of water by nature shall be apportioned 38 percent to Texas and 62 percent to New Mexico, the Texas share to be delivered and measured at the New Mexico-Texas State line.

3. Unappropriated flood waters (water which otherwise would spill from Red Bluff Reservoir and pass Girvin, Tex., unused with present storage facilities) shall be apportioned 50 percent to Texas and 50 percent to New Mexico.

4. Both States shall agree to promote the authorization and construction of a federally financed project to bypass the salt cedars or otherwise eliminate the nonbeneficial consumptions at the head of Lake McMillan, the cost of the project to be nonreimbursable.

5. Both States shall agree to cooperate with governmental agencies and urge upon them to devise and effectuate means of alleviating the salinity problems of the Pecos River.

6. Each State shall have the right to construct additional reservoir capacity to replace capacity lost by sedimentation or otherwise, or to permit that State to make use of salvage and floodwaters apportioned to it or both, or to permit it to make more efficient use of its water supply and neither shall oppose any of the construction contemplated by this compact, and will cooperate in the promotion and construction of facilities that will be of joint benefit.

7. Each State shall have the right to construct and operate works for the purpose of preventing flood damage.

8. All additional facilities shall be operated in such manner as to carry out the terms of the compact.

PECOS RIVER COMPACT

The signatories to the compact shall agree that in making up deficiencies in flow necessary to meet the terms of the compact, the principle of prior appropriation shall be applicable.

Chairman JOHNSON. Mr. Miller, do you have any comments?

Mr. MILLER. In the absence of a preamble to your statement, I presume that the different clauses in this letter or presentation mean that these principles will be incorporated into a compact between the two States?

Mr. BLISS. That is my suggestion.

Mr. MILLER. Well, Texas agrees with the principles involved in this letter except the apportionment of water allocated to the two States in paragraph 2. We do not believe that the 38 and 62 percent of the salvaged water is entirely fair to Texas. We believe that a more equitable division of that supply of water which we would be instrumental in helping salvage should be 45 percent for Texas and 55 percent for New Mexico. Outside of that condition we are willing to accept the proposal as it is presented.

Mr. BLISS. Mr. Chairman, I might explain how we arrived at the percentages in item 2. Comparison of items 5 and 6 of a table which was adopted as the second supplement to the engineering report shows that the total salvage in that area above Lake McMilan might be expected to be the difference between 198,700 and 165,000 acre-feet, plus the amount of shortages to Carlsbad project of 5,300 acre-feet, or a total of 39,000 acre-feet net salvage.

We considered that if Texas, particularly the Red Bluff project, were put back into a condition as of 1905 when their net dependable supply was 170,900 the increase which they could expect above present-day conditions would be 38 percent of the expected salvage. That was the basis of our computation.

I might say, too, there is another feature that enters into that. It may not be important. New Mexico is making that delivery at the Texas State line and, of course, is responsible for the normal losses which might be expected in delivering that water to the State line. We think that should receive some consideration.

Chairman JOHNSON. Mr. Tipton, do you have any comments on this presentation?

Mr. TIPTON. Mr. Chairman, in general I believe that the proposal made by the State of New Mexico comprehends the major factors that are involved in the interstate problem between the two States. At the moment I cannot think of any other factors that should be considered as matters of fundamental principle.

I believe that a compact could be written around the principles as presented. It is fairly obvious to me that one of the fundamental principles involved here, that of a guaranty by New Mexico not to deplete the flow of the river below essentially present conditions or, conversely, that there should be delivered at the State line that which Texas is receiving with some modification is a fair provision. I believe it is fair to both States. I don't believe New Mexico in good conscience could say we're going to deliver less than that. I don't believe Texas should require more because a compact could not be ratified by New Mexico, I don't believe, under those conditions.

There comes then the allocation of two quantities of water which at the moment are not beneficially usable in the basin. I will go to floodwaters first. There is a quantity of

PECOS RIVER COMPACT

floodwater that is unappropriated in the basin. It wastes to the Gulf of Mexico unused. That quantity of water is that water which spills from Red Bluff Reservoir and is not used in the Texas area above Girvin. That water belongs to neither State. It can be made usable by the construction of additional storage facilities. The two States at this moment have agreed to apportion that on a 50-50 basis. I think that is eminently fair. I can see no other basis for doing that. Each State is a sovereign State and probably each should have 50 percent of that supply. I'll come back in a moment to the other type of water that is now being beneficially used. It is the water being consumed by nature. It appears to me the balance of the principles have mainly to do with the effectuating of a better use of water by the States by the construction and operation of works, including those works required to salvage water, those works required to make such salvage water available for use, and those works required to make available for use the floodwaters and the further principle that all those works shall be operated in a manner to carry out the terms of the compact. I think the principle is good, that facilities can be constructed and operated to prevent flood damage. That is mutually beneficial to both States. Those have to be operated within the terms of the compact.

Now, let's go back to the one item which seems to be troubling the States at the present time. That is the apportionment of the water which might be salvaged. The draft that I have before me, which is the New Mexico draft, suggests apportionment of that water 38 percent to Texas, 62 percent to New Mexico. Is that right?

Mr. BLISS. Yes.

Mr. TIPTON. As I understand, Mr. Miller takes exception to that suggestion. What was it you suggested?

Mr. MILLER. Forty-five and fifty-five.

Mr. TIPTON; Forty-five and fifty-five. Mr. Bliss rationalized the New Mexico proposal on the basis of what the engineering advisory committee found 1905 conditions to be. In his rationalization he also suggested that it must be borne in mind that New Mexico would be agreeing to deliver Texas' portion of salvaged water to the State line. I think we can get rid of that by this statement—that under any condition that should be considered, even the 1905 condition, that portion of the water that would be salvaged now but was then in the stream, and that went to Texas was being received at the State line. In other words, the engineering studies were/studies of the flow at the State line, so that the delivery, of course, under any condition that should be considered, should be at the State line.

I think that considering the viewpoint of the two States, another rationalization might be made by the State of Texas. Now, I use the word "rationalization" with some hesitation because as soon as you begin to rationalize something, someone brings in other factors that upset your rationalization. So I hope I'm not quizzed too much on some of these rationalizations. I could talk a lot about Mr. Bliss' rationalization. Putting this on a broad basis—and I think that is the basis on which it should be put—some rationalization should be considered.

To the Texas group there may be more significance placed upon the period 1915-34 than on the period 1905. That period, 1915 to 1934 was the 20 years preceding the authorization of the Alamogordo Reservoir. I won't go into the history of any of that. It is not necessary.

PECOS RIVER COMPACT

The engineering advisory committee's report indicates that a certain amount of water would be available for use of Texas by the Red Bluff Reservoir under that condition. The difference between that and that which would be made available to Texas for actual use by Texas under the 1905 condition is only a matter of something over 3,000 acre-feet. When you get to this stage in a program there is no reason at all why the parties involved should not give and take a little bit. There is only a small amount of water involved. The 1905 condition may have some significance to the State of New Mexico. The 20 years preceding the authorization of Alamogordo Reservoir may have some significance to the State of Texas.

My suggestion, Mr. Chairman, is that the States split the difference between those two conditions which may have some significance to the two States and make the allocation of salvaged water on that basis. I think that will come out just about 43 percent to the State of Texas and 57 percent to the State of New Mexico. I'm merely making that as a suggestion. It doesn't depart very much from the percentages which were used and there isn't too much water involved. It splits the difference between the principle that might be applied on the one side of the line and the principle that might be applied on the other side of the line.

Chairman JOHNSON. Either commissioner have any comment?

Mr. BLISS. Mr. Chairman, it might be desirable for each State to take just a very short period to consider Mr. Tipton's suggestion and see if they can agree on this compromise that has been suggested.

Chairman JOHNSON. How about 15 minutes?

Mr. BLISS. Make it 5.

Chairman JOHNSON. Five-minute recess.

(Meeting recessed 5 minutes.)

Chairman JOHNSON. The meeting will come to order, please. Mr. Miller?

Mr. MILLER. Mr. Chairman, if it would be acceptable to New Mexico, Texas is willing to accept Mr. Tipton's suggestion of the 43 and 57 percent basis.

Mr. BLISS. Mr. Chairman, the amount involved is not large and I think it would be very unfortunate if we stuck on such a small quantity of water. New Mexico, of course, prefers the other rationalization but we are willing to go along with the compromise figures suggested by Mr. Tipton.

Chairman JOHNSON. Then it looks as though this meeting is getting close to an adjournment. You want to set a meeting date for the next meeting at which time the compact will be written?

Mr. BLISS. Mr. Chairman, we have adopted here a set of principles which will form the basis of an agreement. However, I would say the compact is a long way from its final draft. There are a good many details, principles of operation, which are going to have to be developed and inserted in the compact to make it operative. As I see it, it involves to a large extent engineering studies. It seems to me we could proceed best and fastest in getting this thing through to a final draft if a subcommittee or perhaps two subcommittees were appointed.

I have talked with Mr. Tipton and others regarding possible meeting times. It will be practically impossible for our group and for Mr. Tipton, I know, to meet before

PECOS RIVER COMPACT

Thanksgiving. The 25th would be Friday. My suggestion is that a drafting committee be appointed and meet immediately after Thanksgiving and try to get a draft in shape so that it could be acted upon the following week. If that is not done, it will be some time in January before we could have another meeting. There are a group of the potential members of such committee who will have to be in Denver for a Colorado River meeting on the 29th; and, if it were possible, I think it would be well to plan on that committee meeting in Denver starting the Friday following Thanksgiving and continuing right on through that week end and the first part of the next week. The draft and details could be worked out as nearly as possible before a final meeting, which presumably will take place the following week.

Mr. MILLER. Mr. Bliss, I was of the opinion that if we met back in Santa Fe, after your Denver meeting, perhaps we could expedite it and do better.

Mr. BLISS. I think that Santa Fe is the proper place for the commission to meet. However, there is a great deal of work which has to be done before that. I know these things take time, and they should take time. No one wants to rush into and adopt some compact which is not fully thought out. It is going to take a great deal of time to do that, perhaps more than we foresee at the present time.

Mr. MILLER. What was the idea in regard to the Denver meeting, that being more available to Mr. Tipton?

Mr. BLISS. More available to Mr. Tipton; and, if I may speak for him, Mr. Tipton has the idea that possibly an attorney from the Bureau of Reclamation who did a very excellent job in assisting in the drafting of the Upper Colorado River Compact, which was adopted in Santa Fe last month, may be available to assist in that work. I think it would be desirable if he can assist. He will be in Denver for the Colorado River meeting and presumably could take time from those duties to assist in the drafting of this compact.

Mr. TIPTON. Off the record.

(Off-record discussion.)

Mr. TIPTON. Mr. Jeff Will, who is assistant counsel, Bureau of Reclamation, in Washington—I don't know whether that is his exact title—has had considerable experience in drafting legislation. In drafting this compact, he can bring to bear upon it that experience insofar as it might conceivably tie in with existing legislation.

During the negotiations of the Upper Colorado River Compact, Mr. Will did a very excellent job for all of the interests in his capacity as chairman of the drafting committee, and I believe it would be very highly desirable to get him if it is at all possible.

Mr. MILLER. You have no assurance you can get him; have you?

Mr. TIPTON. Off the record.

(Off-record discussion.)

Mr. BLISS. Mr. Chairman, I believe it would be highly desirable for the chairman to be represented by legal counsel in the drafting of the compact, and I feel that because of Mr. Will's experience and ability it would be highly desirable for the commission to request the Bureau of Reclamation to make his services available for that purpose, and I so move.

Mr. MILLER. Second the motion.

Chairman JOHNSON. You ready for the question? Those in favor say "Aye." Opposed? Carried.

PECOS RIVER COMPACT

Are you ready to name your members on this drafting committee? What is your reaction to the drafting committee?

Mr. MILLER. No doubt we have to have a drafting committee, but I couldn't name mine now. Do we have to name them? Looks to me like some of our folks might be available and some wouldn't. I might have to substitute between now and the first part of December.

Chairman JOHNSON. Are you in favor of the drafting committee?

Mr. MILLER. Yes; I think we need one.

Chairman JOHNSON. You want to take action?

Mr. MILLER. I move that a drafting committee of the two States be appointed.

Mr. BLISS. I second the motion. I suggest that they should meet at the earliest opportunity to carry on this work, which I think is desirable.

Mr. MILLER. Now, you mean to meet before the Denver meeting?

Mr. BLISS. I think the date suggested, immediately following Thanksgiving, is probably the soonest date that could be arranged.

Mr. MILLER. That's satisfactory.

Chairman JOHNSON. You ready for the question? Those in favor of the motion say "Aye." Opposed? Carried.

Mr. MILLER. No need to say how many members you want on the drafting committee; is there?

Mr. BLISS. I think not.

Mr. MILLER. It might develop we have to have one or two more than contemplated because of different interests.

Mr. BLISS. My only suggestion in that regard is that there not be too many on the committee, but I shouldn't think there should be any special number.

Mr. MILLER. How many did you use on the last compact?

Mr. BLISS. Each State was represented by one member on that committee. However, there were five States represented, plus the Federal representative.

Mr. MILLER. Do you think two for each State would be enough?

Mr. BLISS. I believe so.

Mr. TIPTON. Off the record.

(Off-record discussion.)

Mr. MILLER. Mr. Chairman, I want to make a suggestion that the drafting committee meet Sunday, the 28th, or Monday, the 29th of November.

Mr. BLISS. Off the record.

(Off-record discussion.)

Mr. BLISS. The committee will meet and start their deliberations on November 28th.

Mr. TIPTON. Off the record.

(Off-record discussion.)

Mr. BLISS. Mr. Chairman, I move that the next meeting of the commission be set for Santa Fe, N. Mex., starting the morning of December 1, 1948.

Mr. MILLER. Will that give us plenty of time?

Mr. TIPTON. I think so.

Mr. MILLER. All right; I second the motion.

PECOS RIVER COMPACT

Chairman JOHNSON. You have heard the motion. Those in favor of the motion say "Aye." Opposed? Carried.

Mr. TIPTON. Off the record.

(Off-record discussion.)

Mr. MILLER. I move that this agreement entered into by Texas and New Mexico be formally adopted as a part of the record.

Mr. STURROCK. May I add, as amended by agreement?

Mr. MILLER. That's right.

Chairman JOHNSON. Incorporate it.

Mr. BLISS. As the basis for a compact, I will second the motion.

Chairman JOHNSON. You have heard the motion. Those in favor say "Aye." Opposed? Carried.

Mr. JACKSON. While that initialing is going on, may I make a statement here?

Chairman JOHNSON. Judge Jackson.

Mr. JACKSON. On behalf of the Texas Water Conservation Association, which association adopted as one of its first projects the bringing about of an understanding of the distribution of the waters on the Pecos River, I want to extend our sincere appreciation for the amicable and fair way in which these negotiations have been carried on.

I further want to express our appreciation for the attendance of so many of our good neighbors from the State of New Mexico, and we sincerely hope that your stay here has been enjoyable and that you will return in the near future. That's all.

Chairman JOHNSON. Thank you, Judge.

Are there any other comments before this meeting is adjourned? Hearing no further comments, the Chair will entertain a motion to adjourn.

Mr. BLISS. Mr. Chairman, I just want to express to the Texas group our appreciation of their hospitality here in Austin.

Chairman JOHNSON. I will entertain a motion to adjourn.

Mr. MILLER. I move we adjourn.

Mr. BLISS. Second the motion.

Chairman JOHNSON. Meeting adjourned.

(Whereupon it being 12:30 p. m., the meeting was adjourned.)

JOHN H. BLISS, *Commissioner for the State of New Mexico.*

CHARLES H. MILLER, *Commissioner for the State of Texas.*

Approved.

BERKELEY JOHNSON,
Representative of the United States of America.

EXHIBIT 7

From: Haas, Amy, OSE
To: Atwood, Jane
Cc: Riseley-White, Hannah, OSE; Suzy.Valentine@tceq.texas.gov
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico
Date: Sunday, October 02, 2016 4:34:45 PM

Thank you for your response, Jane. I suggest we meet in person to discuss the Texas proposal once we've received it.

Regards,

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504
Phone: (505) 476-0558

From: Atwood, Jane [Jane.Atwood@oag.texas.gov]
Sent: Friday, September 30, 2016 3:34 PM
To: Haas, Amy, OSE
Cc: Riseley-White, Hannah, OSE; Suzy.Valentine@tceq.texas.gov
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Amy,

We are close to completing our review. It has taken some time given the unprecedented flood in 2014. It is our view that any credit for reservoir losses will require a recalculation of water years 2014 and 2015 with reallocation of some portion of the water as unappropriated flood water. We are very close to a preliminary proposal and hope to have it to you in the next few weeks.

Jane

Jane E. Atwood
Assistant Attorney General
Environmental Protection Division
Office of the Attorney General of Texas
(512) 475-4006

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-----Original Message-----

From: Haas, Amy, OSE [<mailto:amy.haas@state.nm.us>]

Sent: Wednesday, September 28, 2016 1:54 PM
To: Atwood, Jane <jane.atwood@texasattorneygeneral.gov>
Cc: Riseley-White, Hannah, OSE <Hannah.Riseley-White@state.nm.us>
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Hi, Jane-

I wanted to follow-up on the status of your review. As I mentioned in my original email, below, this is time sensitive for New Mexico.

I look forward to hearing from you.

Regards,

Amy

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission

-----Original Message-----

From: Atwood, Jane [<mailto:jane.atwood@texasattorneygeneral.gov>]
Sent: Wednesday, September 07, 2016 7:12 PM
To: Haas, Amy, OSE
Cc: Riseley-White, Hannah, OSE
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Amy,

Apologies for the delay, we are still reviewing the 2014 accounting and your proposal. We hope to be back to you in the next few weeks.

Jane

From: Haas, Amy, OSE [amy.haas@state.nm.us]
Sent: Wednesday, September 07, 2016 12:09 PM
To: Atwood, Jane
Cc: Riseley-White, Hannah, OSE
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Hi, Jane-

Just a follow-up to see whether you have had a chance to review our draft? Once again, we'd appreciate your comments as soon as possible.

Thanks,

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504

Phone: (505) 476-0558

From: Atwood, Jane [jane.atwood@texasattorneygeneral.gov]
Sent: Tuesday, August 23, 2016 12:55 PM
To: Haas, Amy, OSE
Cc: Riseley-White, Hannah, OSE
Subject: RE: Draft Joint Motion re Storage of Texas Water in New Mexico

Thank you for the draft Amy. We will review and get back with you as soon as possible.
Jane

Jane E. Atwood
Assistant Attorney General
Environmental Protection Division
Office of the Attorney General of Texas
(512) 475-4006

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-----Original Message-----

From: Haas, Amy, OSE [mailto:amy.haas@state.nm.us]
Sent: Monday, August 22, 2016 5:37 PM
To: Atwood, Jane <jane.atwood@texasattorneygeneral.gov>
Cc: Riseley-White, Hannah, OSE <Hannah.Riseley-White@state.nm.us>
Subject: Draft Joint Motion re Storage of Texas Water in New Mexico

Hello, Jane-

I have attached a draft joint motion to reconcile and account for Texas water stored in New Mexico during 2014 and 2015. The motion is intended to capture the discussions of the Texas and New Mexico Pecos River Compact Engineer Advisers (Suzy Valentine and Greg Lewis, respectively) in early 2016, as well as their meeting and calls with the River Master, Dr. Neil Grigg.

I would appreciate comments and edits at your earliest convenience as this issue is time-sensitive for New Mexico. Specifically, under the 2003 Pecos Settlement Agreement between New Mexico, the US (BOR), Carlsbad Irrigation District (CID) and Pecos Valley Artesian Conservancy District, the CID's deliveries to Texas are dependent upon how large New Mexico's cumulative Compact credit is on November 1st. The River Master's disposition of evaporation losses on Texas water stored in NM will directly bear on the amount of NM's Compact credit.

I look forward to hearing from you.

Regards,

Amy I. Haas
General Counsel
New Mexico Interstate Stream Commission
P.O. Box 25102
Santa Fe, New Mexico 87504
Phone: (505) 476-0558

160a

EXHIBIT 8

R E S O L U T I O N

PECOS RIVER COMMISSION

WHEREAS, the Bureau of Reclamation has completed its final design of the dam and spillway for Brantley Reservoir authorized by PL 92-514;

WHEREAS, the Bureau of Reclamation's final design deviates from the "Brantley Project, Pecos River Basin, New Mexico," report revised February 1968 and the May 1979 Special Report for Reauthorization upon which Texas based its approval and support for the project, in the following respects:

- 1) Brantley Reservoir will initially have 56,000 acre-feet of storage capacity below the spillway crest elevation which will result in 14,000 acre-feet of storage capacity above the 42,000 acre-feet capacity necessary for New Mexico's conservation, inactive, and fish and wildlife storage.
- 2) Brantley Reservoir's conduit outlet capacity is 1,230 cubic feet per second (cfs) rather than 4,000 cfs as indicated in the report revised in February 1968 and in the May 1979 report for reauthorization; and

WHEREAS, the Bureau of Reclamation has developed a procedure for release and accounting to assure that New Mexico does not unduly benefit from the release of water stored in Brantley Reservoir in excess of 42,000 acre-feet; and

WHEREAS, the Governor of New Mexico, the Honorable Toney Anaya, has assured the Governor of Texas, the Honorable Mark White, that New Mexico has no intention of seeking, now or in the future, the use of any storage capacity in excess of 42,000 acre-feet that may exist in Brantley Reservoir for any purpose other than flood control, except for the storage of waters which have been determined by the Pecos River Commission to be "unappropriated floodwaters" as defined by the Pecos River Compact; and

WHEREAS, the Pecos River Commission is in agreement with the Bureau of Reclamation's release and accounting procedures and the understanding of the Governors of Texas and New Mexico,

NOW, THEREFORE, BE IT RESOLVED that the Pecos River Commission agrees with the release and accounting procedures developed by the Bureau of Reclamation, a copy of which is attached; and

BE IT FURTHER RESOLVED, that the Pecos River Commission understands that New Mexico has no intention of seeking, now or in the future, the use of any storage capacity in excess of 42,000 acre-feet that may exist in Brantley Reservoir for any purpose other than flood control, except for the storage of waters which have been determined by the Pecos River Commission to be "unappropriated floodwaters" as defined by the Pecos River Compact.

/s/
Horace Babcock, Chairman
Commissioner for the United States

/s/
Walter Gerrells
Commissioner for New Mexico

162a

/s/
Billy L. Moody
Commissioner for Texas

DATED: 3/6/84

EXHIBIT 9

FIFTH JUDICIAL DISTRICT
 CHAVEZ COUNTY NM
 FILED

COPY

2004 DEC 10 AM 10:40

CLERK

FIFTH JUDICIAL DISTRICT OF
 COUNTY OF CHAVES
 STATE OF NEW MEXICO

STATE OF NEW MEXICO, ex rel.)	
OFFICE OF THE STATE ENGINEER,)	Nos. 20294 and 22600
and PECOS VALLEY ARTESIAN)	Consolidated
CONSERVANCY DISTRICT,)	
Plaintiffs.)	
)	
v.)	
)	Carlsbad Irrigation District Sub-Section
L. T. LEWIS, et al., and)	Carlsbad Basin Section
UNITED STATES OF AMERICA,)	
Defendants.)	PROJECT(OFFER)PHASE

PARTIAL FINAL DECREE

This matter came before the Court on the Joint Motion filed by the United States of America ("United States"), the Carlsbad Irrigation District ("CID"), the State of New Mexico *ex rel.*, State Engineer ("State"), and the Pecos Valley Artesian Conservancy District ("PVACD"), in connection with the claims of the United States and the CID in connection with the Carlsbad Project.

The Parties are represented by their counsel of record.

The Court, having considered the Joint Motion filed herein, the arguments of counsel and being otherwise sufficiently advised in the premises enters its decision consisting of its findings of fact and conclusions of law, judgment and decree determining and adjudicating the United States' and CID's maximum allowable annual diversion and storage rights, and the CID's right to deliver water to the members of the CID.

FINDINGS OF FACT

1. This proceeding is part of the proceedings to determine and adjudicate rights of the United States and others to use surface and ground waters of the Pecos River Stream System, brought in accordance with the provisions of NMSA 1978, Sections 72-4-15 (1907), 72-4-16 (1919), 72-4-17 (1965), 72-4-18 (1907), and 72-4-19 (1907).¹

¹ All further cites to specific statutes are to NMSA 1978.

2. The CID is an irrigation district organized under the laws of the State of New Mexico, NMSA 1978, Chapter 73, Article 10.

3. On March 25, 2003, the State, the United States, the CID and PVACD filed with this Court a Joint Motion seeking the Court's adoption and entry of a proposed Partial Final Decree that incorporates a Settlement Agreement between the said parties, which Partial Final Decree and Settlement Agreement settle the surface water claims of the CID and the United States. The Settlement Agreement, and the agreement between the Interstate Stream Commission ("ISC") and the Fort Sumner Irrigation District ("FSID") (the "FSID/ISC Agreement") submitted in support of said Joint Motion, include agreements by and among the United States and the governing bodies of the ISC, the CID, the PVACD and the FSID that specify the actions the parties agree will be taken or avoided to ensure that the expenditures by the ISC authorized under § 72-1-2.4 (2002) will be effective toward permanent compliance with New Mexico's obligations under the Pecos River Compact, § 72-15-19 et. seq. (1949) (the "Pecos River Compact")², and the Decree of the United States Supreme Court in *Texas v. New Mexico*, 485 U.S. 388 (1988) (the "Pecos River Decree"). The terms and provisions of said Joint Motion are adopted and incorporated herein.

4. Each person executing the Settlement Agreement on behalf of each Party is the duly authorized and appointed representative of that Party and the governing body of each Party, to the extent necessary to bind that Party, have formally authorized the actions of its representatives and attorneys to approve this Partial Final Decree and the Settlement Agreement.

5. The Settlement Agreement and the FSID/ISC Agreement are comprehensive and reasonable for the purposes for which they are intended and should be approved by this Court.

6. The Settlement Agreement and the FSID/ISC Agreement satisfy § 72-1-2.4, which requires that the ISC enter into agreements with PVACD, CID and FSID.

CONCLUSIONS OF LAW

Based on the foregoing findings of fact, the Court concludes as matters of law:

1. All of the foregoing findings of fact that may be deemed or construed to be conclusions of law are incorporated herein by this reference.

2. The United States was properly joined in this general adjudication suit under the McCarran Amendment, 43 U.S.C. 666 (a).

3. The Court has jurisdiction over the parties and the subject matter of these proceedings for purposes of determining and adjudicating, between and among the United States, the State, the CID, the PVACD, and all other defendants in this proceeding, the United States' and CID's maximum allowable annual diversion and storage rights; and the

² The United States Congress approved the Pecos River Compact in the Act of June 9, 1949, Ch. 184, 63 Stat. 159.

CID's right to deliver water for the members of the CID, and the administration of such rights as determined by the Court.

4. This Decree and the Settlement Agreement attached hereto and incorporated herein settle the surface water claims of the CID and the United States as contemplated by and for the purposes of § 72-1-2.4(D)(1)(c)(2002). As contemplated by and for the purposes of § 72-1-2.4 (C), the Settlement Agreement attached hereto and incorporated herein and the FSID/ISC Agreement, include agreements with the governing bodies of the ISC, the CID, the PVACD and the FSID that specify the actions the parties agree will be taken or avoided to ensure that the expenditures by the ISC authorized under § 72-1-2.4 will be effective toward permanent compliance with New Mexico's obligations under the Pecos River Compact and the Pecos River Decree.

5. The Settlement Agreement is an integral part of this Decree and is incorporated herein for all purposes. The Settlement Agreement is part of this Decree and this Decree is part of the Settlement Agreement and neither is to be considered independent of the other.

DECREE

Based on the foregoing findings of fact and conclusions of law, which are incorporated herein by reference,

IT IS ORDERED, ADJUDGED AND DECREED THAT:

This Partial Final Decree (Decree) judicially establishes the maximum allowable annual diversion and storage rights of the United States and the CID, and the CID's right to deliver water for the members of the CID. Each individual CID member's surface water rights, to be further determined in the Membership Phase of the Carlsbad Irrigation District Sub-Section of these proceedings (the "Membership Phase") shall be limited by the diversion, storage, and delivery rights held by the United States and the CID and shall be subject to applicable state and federal law. The United States and the CID shall have the right to:

1. Divert public surface waters from the Pecos River stream system as follows:
 - A. Pecos River mainstream
 - i. State Engineer File Number: 6
 - ii. Purposes: For irrigation and for domestic and livestock watering uses incidental to irrigation use.
 - iii. Source: Surface waters of the Pecos River.
 - iv. Point of diversion: Avalon Dam gate into the CID Main Canal in the SE¹/₄NW¹/₄SW¹/₄, Section 12, T. 21 S., R. 26 E., N.M.P.M.
 - v. Place of use: An irrigable area not exceeding 25,055.00 acres, all within the boundaries of the CID (also known as the Carlsbad Project). The location of said CID is in T. 21 S., R. 26 E., Sections 14, 23, 25, 26, 35, 36; T. 21 S., R. 27 E., Sections 19, 29, 30, 31, 32, 33; T. 22 S., R. 26 E.,

Sections 1, 12, 13; T. 22 S., R. 27 E., Sections 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36; T. 22 S., R. 28 E., Sections 19, 29, 30, 31, 32, 33; T. 23 S., R. 27 E., Sections 1, 2, 3, 9, 10, 11, 12, 13, 14, 15, 24, 25; T. 23 S., R. 28 E., Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36; T. 23 S., R. 29 E., Sections 30, 31; T. 24 S., R. 27 E., Sections 12, 13; T. 24 S., R. 28 E., Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24; T. 24 S., R. 29 E., Sections 18, 19; N.M.P.M.; as shown on attached Exhibit A entitled "Plat of the Carlsbad Irrigation District, Eddy County, New Mexico," filed for record April 16, 1993, in the records of Eddy County, New Mexico, and as described in the State Engineer Hydrographic Survey Report of the Pecos River Stream System, CID Section (1987). The boundaries of the CID may be changed pursuant to and as authorized by state law.

- vi. Allowable annual diversion: As specified in Paragraph 1 (C) of this Decree.
- vii. Priorities:
 - a. July 31, 1888, for an amount of water diverted from the Pecos River under Paragraph 1 (C) of this Decree not to exceed an annual amount of 101,283 acre-feet;
 - b. April 10, 1915, for an amount of water diverted from the Pecos River under Paragraph 1 (C) of this Decree not to exceed an annual amount of 22,625 acre-feet;
 - c. June 24, 1919, for an amount of water diverted from the Pecos River under Paragraph 1 (C) of this Decree not to exceed an annual amount of 1,292 acre-feet;
 - d. Each of the above priorities shall be subject to such superior rights of the FSID and the Storrie Project Water Users Association described in and established by the Final Decree in *United States of America v. Hope Community Ditch*, U.S. District Court Cause No. 712 Equity (1933), in addition to being subject to all other water rights having senior priority dates.

B. Black River

- i. State Engineer File Number: 1927
- ii. Purposes: For irrigation and for domestic and livestock watering uses incidental to irrigation use.
- iii. Source: Surface waters of the Black River.

- iv. Point of diversion: The junction at which the CID Black River Canal intersects the Black River in the NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 12, T. 24 S., R. 27 E., N.M.P.M.
- v. Place of Use: An irrigable area located in the north one-half of T. 24 S., R. 28 E., N.M.P.M., within the boundaries of the CID, and all a part of the irrigable area not exceeding 25,055.00 acres described in Paragraph 1 (A) (v) of this Decree.
- vi. Allowable annual diversion: As specified in Paragraph 1 (C) of this Decree.
- vii. Priority: December 31, 1889, for the amount of water diverted from the Black River under Paragraph 1 (C) of this Decree.

C. Allowable annual diversion.

- i. Subject to the conditions which follow in this Paragraph 1 (C), for the irrigable area within the CID described in Paragraph 1 (A) (v) of this Decree, the combined annual diversion of water at the diversion points described in Paragraphs 1 (A) (iv) and 1 (B) (iv) of this Decree shall not exceed (a) 125,200 acre-feet or (b) the quantity of water necessary to supply an annual depletion of 55,572 acre-feet, whichever of (a) or (b) is less.
- ii. The right, allotment or entitlement of use within the CID described in Paragraph 1(A) of this Decree shall, for each acre irrigated from the Pecos River, incorporate and be based on an amount of water at the point of diversion described in Paragraph 1 (A) (iv) of this Decree that shall not exceed a diversion of 4.997 acre-feet per year, a farm delivery of 3.697 acre-feet per year, and a consumptive irrigation requirement of 2.218 acre-feet per year.
- iii. The right, allotment or entitlement of use within the CID described in Paragraph 1 (B) of this Decree shall, for that acreage within the area described in Paragraph 1 (B) (v) of this Decree that is irrigated from the Black River, incorporate and be based on an amount of water at the point of diversion described in Paragraph 1 (B) (iv) of this Decree that shall not exceed a total maximum diversion of 2,800 acre-feet per year, a farm delivery of 3.697 acre-feet per year, and a consumptive irrigation requirement of 2.218 acre-feet per year; such diversion to be governed by the State Engineer Findings and Order dated June 10, 1964, as the same exists or may be amended in the future.
- iv. The allowable annual diversion of water described in Paragraph 1 (C) (i) of this Decree incorporates an off-farm conveyance efficiency of 74 percent and an on-farm irrigation efficiency of 60 percent. The off-farm diversion or the farm delivery amounts may be adjusted downward by the Court to compensate for improved efficiencies.

2. Divert, impound, and store public surface waters of the Pecos River stream system, as follows:
 - A. Lake Avalon
 - i. State Engineer File Number: 6
 - ii. Purposes: For irrigation and for domestic and livestock watering uses incidental to irrigation use in the irrigable area described in Paragraph I (A) (v) of this Decree.
 - iii. Source: Surface waters of the Pecos River.
 - iv. Place: Lake Avalon on the Pecos River in Eddy County, the headwall at the Avalon Dam outlet gate being at lat. 32° 29' 27", long. 104° 15' 05" in the NW¹/₄SW¹/₄, Section 12, T. 21 S., R. 26 E., N.M.P.M.
 - v. Amount of water: In the amount of total reservoir capacity available, but not more than 7,000 acre-feet, with the right to fill and refill as often as waters are available.
 - vi. Priority: October 31, 1889.
 - B. Brantley Lake
 - i. State Engineer File Number: 6
 - ii. Purposes: For irrigation and for domestic and livestock watering uses incidental to irrigation use in the irrigable area described in Paragraph I (A) (v) of this Decree.
 - iii. Source: Surface waters of the Pecos River.
 - iv. Place: Brantley Lake on the Pecos River in Eddy County, the control tower at Brantley Dam outlet gate being at lat. 32° 32' 48" long. 104° 22' 43" in the NE¹/₄SE¹/₄NE¹/₄, Section 28, T. 20 S., R. 26 E., N.M.P.M.
 - v. Amount of water: In an amount not to exceed 40,000 acre-feet, with the right to fill and refill as waters are available, said 40,000 acre-feet to include the quantity of water in bank storage which returns to and is available for release from Brantley Lake, said returned and available bank storage to be determined by the State Engineer based on a joint investigation by the State Engineer, the United States through the Department of Interior, Bureau of Reclamation, the CID, and the PVACD. The joint investigation shall evaluate the volume of bank storage returned and available for release from Brantley Lake at given water surface elevations based on the records of the CID's Brantley operations. The surface area-capacity curve of Brantley Lake shall be combined with the bank storage elevation-volume relationship for purposes of administration and the combined conservation storage shall be limited to 40,000 acre-feet. The quantity

of bank storage shall be jointly investigated periodically by the State Engineer, the United States through the Department of Interior, Bureau of Reclamation, the CID, and the PVACD, and shall be adjusted by the State Engineer based upon said joint investigation.

vi. Priority: October 31, 1893.

C. Lake Sumner (f/k/a Alamogordo Reservoir)

i. State Engineer File Number: 6

ii. Purposes: For irrigation and for domestic and livestock watering uses incidental to irrigation use in the irrigable area described in Paragraph 1 (A) (v) of this Decree.

iii. Source: Surface waters of the Pecos River.

iv. Place: Lake Sumner on the Pecos River in DeBaca and Guadalupe Counties, the center of Sumner Dam being near lat. 34° 36' 30", long. 104° 23' 04" in the SE¹/₄SW¹/₄, Section 34, T. 5 N., R. 24 E., N.M.P.M.

v. Amount of water: In the total reservoir capacity in acre-feet available at elevation 4,261 above sea level, provided that the elevation of 4,261 feet above sea level may be exceeded during the period from October 1 of each year to April 30 of the following year so long as the water level is reduced to an elevation not exceeding 4,261 feet above sea level by April 30 of each year and, provided further, that such impoundment and storage rights shall never be less than 20,000 acre-feet so long as the storage capacity at any elevation is 20,000 acre-feet or more.

vi. Priority: February 2, 1906.

D. Santa Rosa Lake (f/k/a Los Esteros Reservoir)

i. State Engineer File Number; 6

ii. Purposes: For irrigation and for domestic and livestock watering uses incidental to irrigation use in the irrigable area described in Paragraph I (A) (v) of this Decree.

iii. Source: Surface waters of the Pecos River.

iv. Place: Santa Rosa Lake on the Pecos River in Guadalupe County, the outlet gates at Santa Rosa Dam being near lat. 35° 01' 47", long. 104° 41' 30" in the Jose Perea Grant.

v. Amount of water: In an amount not to exceed 176,500 acre-feet less the total reservoir capacity in acre-feet available for the storage of water for release for use by the CID in Lake Avalon, Brantley Lake, and Lake Sumner (or any replacement or additional lake or reservoir that may be constructed to impound and store water for use by the CID) as determined from current sediment surveys of those lakes, or

by determining reservoir capacity by estimating sediment deposition by the use of generally accepted techniques for those years when the actual sediment surveys are not available, and the contract between the United States Department of the Interior, Bureau of Reclamation. and the CID dated September 8, 1971.

vi. Priority: February 2, 1906.

- E. With the permission of the State Engineer in each instance, water may be stored in Brantley Lake and Santa Rosa Lake in addition to the amount defined above, provided that such additional water is “unappropriated flood water” as the term is defined in Article II (i) of the Pecos River Compact, § 72-15-19, and provided further that the total combined storage of water for release for use by the CID in all project reservoirs shall not exceed 300,000 acre-feet.
 - F. The diversion, impoundment, and storage right described herein incorporates and is subject to the State Engineer Findings and Order dated September 22, 1972, permit dated January 8, 1982, and order dated August 13, 1986, as the same may have been amended or supplemented or as they may be amended or supplemented consistent with the terms of this Decree.
3. Other diversion, impoundment and storage rights: None.
 4. This Decree shall be interpreted, and the rights established hereunder shall be administered and enforced, in accordance with the Settlement Agreement attached hereto and incorporated herein by this reference, as the same may be amended, subject to approval of such amendment by this Court.
 5. The Offers of Judgment to CID members, decrees, adjudications or orders entered in the Membership Phase of this proceeding shall be subject to and consistent with the terms of this Decree.
 6. This Decree shall not be effective until and unless the CID, the United States, the PVACD, the ISC and the State file with this Court a joint declaration that the conditions precedent set forth in the Settlement Agreement attached hereto and incorporated herein by this reference have been satisfied, or that satisfaction of such conditions precedent has been waived by such parties. By joint motion filed with this Court on or before December 31, 2004, the CID, the United States, the PVACD and the State may extend the date by which a joint declaration shall be filed with this Court by such parties. In the event that a joint declaration is not filed with this Court on or before December 31, 2004, or such extended date as may be ordered by this Court, then this Decree shall be void *ab initio*, shall have no further force or effect, and all parties hereto shall be relieved from all claims and defenses with respect thereto.
 7. If any provision of this Decree or the Settlement Agreement attached hereto and incorporated herein by this reference, or the application of either thereof is adjudicated to be void, invalid or unenforceable, such action shall not render this

entire Decree or said Settlement Agreement void, but rather only that provision shall be deemed void, and all remaining provisions shall remain in full force and effect; provided, however, that this Decree and said Settlement Agreement shall remain valid and enforceable absent the void provision only to the extent that the United States, the CID, the PVACD, the ISC and the State agree that the purpose hereof and of said Settlement Agreement will not be materially frustrated by the elimination or lack of enforceability of the void provision.

8. The Settlement Agreement attached hereto and incorporated herein by this reference may be modified by agreement of the parties thereto in accordance with its terms. Any such modification shall be filed with this Court, and upon such filing and approval of this Court shall modify the Settlement Agreement attached hereto, and, accordingly, shall be deemed to modify this Decree.

Dated: 12/10/04

/s/
DAVID W. BONEM
District Judge *Pro Tempore*
Fifth Judicial District Court
County of Chaves

Approved as to form only:

State of New Mexico *ex. rel.* State Engineer:

/s/
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SETTLEMENT AGREEMENT

THIS SETTLEMENT AGREEMENT (“Settlement Agreement”) is entered into this 25th day of March 2003 by and between the state of New Mexico *ex rel.* the State Engineer; the New Mexico Interstate Stream Commission; the United States of America, Department of the Interior, Bureau of Reclamation; the Carlsbad Irrigation District; and the Pecos Valley Artesian Conservancy District These Parties are sometimes individually referred to as “Party” or collectively as “Parties.”

RECITALS

A The New Mexico State Engineer (“**State Engineer**”) is an official of the state of New Mexico, exercising authority pursuant to, *inter alia*, NMSA 1978 Chapter 72, including the general supervision of the waters of the state and of the measurement, appropriation, and distribution thereof and such other duties as required. The state of New Mexico on the relation of the State Engineer, is a party to the adjudication pending in the District Court in and for the Fifth Judicial District (the “**Adjudication Court**”) in *State of New Mexico ex. rel. State Engineer v. L.T. Lewis, et. al.*, Nos. 20294 and 22600 Consolidated (the “**Adjudication**”).

B. Pursuant to NMSA 1978 Article 72, Chapter 14¹ the New Mexico Interstate Stream Commission (“ISC”) is authorized, to, *inter alia*, negotiate compacts with other states, investigate water supply, to develop, to conserve, to protect and to do any and all other things necessary to protect, conserve and develop the waters and stream systems of the state of New Mexico. With regard to the Pecos River specifically, the ISC has undertaken a program pursuant to § 72-1-2.2 (1991) to purchase and retire and place in a state water conservation program administered by it adequate water rights over a period of years to increase the flow of water in the Pecos River and diminish the impact of man-made depletions of the stream flow in order to meet the state’s future obligations under the Pecos River Compact, § 72-15-19 *et. seq.* (1949) (the “**Pecos River Compact**”), and the Decree of the United States Supreme Court in *Texas v. New Mexico*, 48S U.S. 388 (1988) (the “**Pecos River Decree**”). Pursuant to § 72-1 -2.4 (2002), the ISC is required to determine the need for projects to be funded with appropriations for compliance with the Pecos River Compact and may expend funds for the purchase of land with appurtenant water rights or rights to the delivery of water and take other appropriate actions that would effectively aid New Mexico in compliance with the Pecos River Decree.

C. The United States has interests in and obligations with respect to the Carlsbad Project, a federal reclamation project located on the Pecos River in New Mexico (“**Carlsbad Project**” or “**Project**”). The United States is a party to the Adjudication.

D. The Carlsbad Irrigation District (“CID”) is an irrigation district organized under the laws of the state of New Mexico, NMSA 1978 Article 73, Chapter 10, and has interests in and obligations with respect to the Carlsbad Project CID is a party to the Adjudication.

¹ All further specific statutory references are to NMSA 1978.

E. The Pecos Valley Artesian Conservancy District (“PVACD”) is an artesian conservancy district organized under the laws of the state of New Mexico, NMSA 1978 Article 73, Chapter 1. PVACD is a party to the Adjudication.

F. At a condition precedent to the expenditure of funds by the ISC appropriated pursuant to § 72-1-2.4, the ISC is required to enter into contracts with the governing bodies of the CID, PVACD and the Fort Sumner Irrigation District (“**FSID**”) that specify the actions the parties agree will be taken or avoided to ensure that the expenditures by the ISC authorized under § 72-1-2.4 will be effective toward permanent compliance with New Mexico’s obligations under the Pecos River Compact and the Pecos River Decree. § 72-1-2.4 (C). This Settlement Agreement and an agreement by and between the ISC and the FSID are intended by the Parties to satisfy said condition precedent.

G. At a further condition precedent to the expenditure of funds by the ISC appropriated pursuant to § 72-1-2.4, the surface water claims in the Adjudication by or within the CID are required to be settled or adjudicated. § 72-1-2.4 (D) (1) (c). Concurrently with the execution of this Settlement Agreement, the Parties have executed a Joint Motion to be filed with the Adjudication Court seeking approval of the proposed Partial Final Decree, which Partial Final Decree incorporates the terms and provisions of this Settlement Agreement (the “**Joint Motion**”). Said Partial Final Decree and this Settlement Agreement are intended by the Parties to satisfy said condition precedent.

H. The ISC has undertaken computer modeling of the anticipated effects of the operations contemplated in this Agreement, which modeling has been reviewed and approved by the Parties. The results of this modeling, and the assumptions upon which such modeling is based, are summarized in the report entitled “New Mexico Interstate Stream Commission, Pecos River Adjudication Settlement Negotiations: Model Evaluation of Proposed Settlement Terms, Final Report, prepared by John Carron, Ph.D., Hydrosphere Resource Consultants, Inc., March 10, 2003.”

TERMS OF AGREEMENT

THE PARTIES AGREE AS FOLLOWS:

1. **Implementation of Settlement.** Immediately upon the final execution of this Settlement Agreement by all Parties, the Parties shall file with the Adjudication Court the Joint Motion and shall thereafter promptly initiate and diligently prosecute efforts to comply with their obligations set forth in Paragraph 2 below.

2. **Conditions Precedent.** Except for the provisions of Paragraph 13 below, the obligations of CID, the United States, PVACD, the ISC and the state of New Mexico under this Settlement Agreement, and the force and effect of the Partial Final Decree entered in the Project (Offer) Phase of the Carlsbad Irrigation District Sub-Section in *State of New Mexico ex. rel. State Engineer v. L.T. Lewis, et. al., Nos. 20294 and 22600* (“the **PFD**”), shall be contingent upon either the satisfaction or waiver by express agreement of the following conditions precedent (the “**Conditions Precedent**”), on or before December 31, 2004:

(A) **Entry of a PFD.** The Adjudication Court shall have entered a PFD containing the same terms as contained in the form of PFD to which this Settlement Agreement is attached. As an independent obligation Under this Agreement, in order to effectuate the satisfaction of this Condition Precedent, the Parties shall in good faith seek to have as many of the objectors in the Project (Offer) Phase of the Adjudication as possible execute pleadings entitled Withdrawal of Objection to Stipulated Offer and Consent to Entry of Partial Final Decree (the “**Withdrawal**”) that withdraw their objections heretofore filed in the Adjudication if the Adjudication Court enters a PFD containing the same terms as contained in the form of PFD to which this Settlement Agreement is attached. Said Withdrawals shall further provide that upon entry of a PFD containing the same terms as contained in the form of PFD attached to said Withdrawals, the parties to said Withdrawals shall not present any claim or objection in the Membership Phase of the Carlsbad Irrigation District Sub-Section (the “**Membership Phase**”) or any *inter se* phase of the Adjudication that is inconsistent with the PFD and this Settlement Agreement. The purpose of the foregoing procedure will be to create as limited a group of remaining objection in the Project (Offer) Phase of the Adjudication as is feasible. The Parties will then request that the Adjudication Court enter an order directed to those who have not withdrawn their objections to show cause why the PFD, as submitted, should not be made final and binding upon all parties.

(B) **Implementation of Consensus Plan.** The ISC shall have implemented the terms of the authorizations contained in §72-1-2.4 (D)-(G) inclusive, as the same may be amended to the extent of acquiring at least 4,500 acres of land on the assessment rolls of CID that are entitled to the delivery of Project water. and 7,500 acres of irrigation water rights in the Roswell Artesian Basin (“**RAB**”). The ISC shall have constructed, leased or purchased wells sufficient to undertake the augmentation pumping plan outlined in Paragraph 9 below, to a minimum capacity of 15,750 acre-feet of water per year.

(C) **Federal Contract and Environmental Compliance.**

(1) The United States, acting through the Department of Interior, Bureau of Reclamation (the “**Bureau of Reclamation**”), and CID shall have extended the Carlsbad Project New Mexico Contract for the Conversion of Carlsbad Project Water from Irrigation to Miscellaneous Purposes and Uses Other than Irrigation, Contract No. 9-WC-40-R6140, dated February 9, 1999, or enter into a new contract to achieve the same purpose, for an additional 5-year period with one automatic 5-year extension (the “**Umbrella Agreement**”). Said extension or new contract shall in addition allow the ISC to lease some or all of the water allotted to lands owned by it to itself or to a separate entity approved by it. without the need to include Forbearance Payments (as defined in the Umbrella Agreement). The Bureau of Reclamation shall have completed all necessary environmental compliance related to the Umbrella Agreement, including compliance under the National Environmental Policy Act and the Endangered Species Act.

(2) The Bureau of Reclamation, CID and the ISC shall have entered into a separate long-term miscellaneous purposes contract pursuant to the authorities granted under the Act of June 17, 1902 (32 Stat. 388), as amended in particular by the Act of February 25, 1920 (41 Stat. 451), that will contain substantially and materially the same terms as the Umbrella Agreement, and which shall be sufficient to allow the ISC to utilize water allotted to lands owned by it or leased by the ISC from other members of CID, or other Project water as described in this Agreement, for release from facilities serving the Carlsbad Project to the New Mexico-Texas state line for the purpose of compliance with the Pecos River Compact and any United States Supreme Court Decree, or any court order, River Master compliance plan, or state administrative regulation or order relating thereto, in the manner set forth in this Agreement (the “**Miscellaneous Purposes Contract**”). The Bureau of Reclamation shall have completed all necessary environmental compliance related to the Miscellaneous Purposes Contract, including compliance under the National Environmental Policy Act and the Endangered Species Act.

(3) The Bureau of Reclamation shall have completed all compliance under the National Environmental Policy Act and the Endangered Species Act with regard to Carlsbad Project operations. The ISC shall use its best efforts, consistent with its authorities as joint lead agency and its available funding, to facilitate completion of such environmental compliance.

On or before September 30, 2004, the Parties shall confer in good faith to determine whether: (i) the Conditions Precedent have been satisfied, in which event the Parties shall file with the Adjudication Court on or before December 31, 2004, a joint declaration that the Conditions Precedent have been satisfied; or (ii) the Conditions Precedent have not been and will not be satisfied, but satisfaction will be waived by the Parties, in which event the Parties shall file with the Adjudication Court on or before December 31, 2004, a joint declaration that the unsatisfied Conditions Precedent have been expressly waived by the Parties; or (iii) the Conditions Precedent have not been satisfied, but may in the future be so satisfied, in which event the Parties shall file with the Adjudication Court a joint motion seeking an extension to a date certain of the date by which a joint declaration shall be filed with the Adjudication Court by the Parties. In the event that the Parties do not file on or before December 31, 2004, a joint declaration or joint motion with the Adjudication Court as provided herein, then this Settlement Agreement and the PFD shall be void *ab initio*, shall have no further force or effect, and all Parties hereto shall be relieved from all obligations, claims and defenses with respect hereto.

3. **Additional Studies and Modeling.** In furtherance of greater accuracy and additional benefit to the Parties and to the economy of the Pecos River region in New Mexico, the ISC anticipates undertaking, in consultation with the Parties, such studies, including but not limited to computer modeling, as will result in enhanced river operations, the avoidance of priority calls, and increased beneficial use of water in the state of New

Mexico consistent with legal obligations. To the extent necessary to achieve such goals, the Parties may, but are not obligated to, in good faith modify the terms of this Agreement.

4. **Supplemental Well Pumping.**

(A) Groundwater diversions from each supplemental well within CID shall not exceed a quantity of water equal to a combined maximum Farm Delivery Requirement (“**FDR**”) of 3.697 acre-feet per acre per year as determined by the State Engineer, minus surface water allotments by CID to the same land as is served by such supplemental well (regardless of whether water under such allotments is actually delivered to said land). The State Engineer shall compute and limit each individual supplemental well owner’s maximum allowable supplemental well diversion based on the surface water allotment computed for the supplemental well owner’s proportional amount of Carlsbad Project acres, without consideration of surface water allotment leasing and/or temporary moves of surface water allotments.

(B) In the Membership Phase, the State shall include in offers of judgment made to those CID members owning supplemental wells (the “**Supplemental Well Owner(s)**”) serving acreage within the CID that are entitled to receive water delivered by the CID, a provision whereby each such Supplemental Well Owner will execute an assignment (the “**CID Allotment Assignment**”) in favor of the ISC for the purpose of expediting the administration of water rights. The purpose of the CID Allotment Assignment shall be to prevent excess depletions to the annual surface water supply of the Pecos River. The CID Allotment Assignment shall be exercised in accordance with regulations to be adopted by the State Engineer addressing diversions from supplemental wells in excess of the amounts allowed by the terms of this Settlement Agreement, which shall be included by the State Engineer in the permits governing the diversion and use of water from such wells. The ISC shall exercise the CID Allotment Assignment in those instances in which a CID member’s combined surface and supplemental groundwater diversions exceed an FDR of 3.697 acre-feet per acre per year. The CID Allotment Assignment shall provide that the ISC is entitled to request the CID to transfer from the Supplemental Well Owner’s current or future CID allotment(s) to the ISC, a quantity of water equal to the quantity by which the sum of supplemental well diversions by said Supplemental Well Owner plus surface water allotments by CID for the lands served by the supplemental well(s) owned by said Supplemental Well Owner exceed 3.697 acre-feet per acre per year of land owned and irrigated by said Supplemental Well Owner. The point of measurement for such diversions shall be at the farm headgate for surface water allotments by the CID and at the wellhead for groundwater diversions. The CID shall effectuate such transfers upon receipt of an application(s) from the ISC. All such surface water allotments transferred to the ISC hereunder shall be added to the ISC’s surface water allotment and shall be utilized as set forth in this Agreement. Notwithstanding the failure or refusal of Supplemental Well Owner to execute a CID Allotment Assignment, the ISC and the State Engineer

shall have all powers accorded by law to regulate diversions from Supplemental Wells and to enforce remedies for over diversions.

5. **ISC Water Right Acquisition, Sale Back and Lease Back.** The ISC will use its best efforts to request from, and to utilize moneys appropriated by, the New Mexico Legislature pursuant to §72-1-2.4 to purchase land in accordance with the proportions set forth in said authorizing legislation as the same may be amended, as follows:

(A) Up to 6000 acres of land on the assessment rolls of CID that are entitled to delivery of Project water;

(B) Up to 1,000 acres of irrigation water rights between the Acme gage to and including the FSID;

(C) Up to 11,000 acres of irrigation water rights in the RAB, of which approximately 3,000 acres shall be water rights in the shallow aquifers and approximately 8,000 acres shall be water rights in the artesian aquifers.

(D) The ISC, CID and PVACD will work in good faith to seek legislative amendment to §72-1-2.4 that will allow the ISC to purchase water rights outside of the CID, including within PVACD and/or between Avalon and the New Mexico-Texas state line, pursuant to this Paragraph 5, without the necessity of purchasing the land to which the water rights are appurtenant (the **“Dried Up Acreage”**), under the following conditions:

(1) The right to be purchased is a valid existing water right and provisions are included in such purchase to prevent any further use of water on the Dried Up Acreage except in accordance with law by subsequent transfer to the Dried Up Acreage of a duly-adjudicated water right; provided, however, that the ISC shall withhold from the transfer or shall obtain from another source, a quantity of water sufficient for irrigation, not to exceed one irrigation season, in the minimum amount necessary to establish cover vegetation on the Dried Up Acreage, and shall be responsible to establish such cover vegetation, to prevent erosion until irrigation water rights are once again available to said Dried Up Acreage; and,

(2) §72-12-1 groundwater well permits for use on the Dried Up Acreage are specifically prohibited through a covenant running with the land.

(E) If the ISC determines that it may make any water rights acquired by the ISC available for beneficial use, by sale or leases longer than one year, without compromising Pecos River Compact compliance goals established in this Agreement, then the ISC shall first make the rights available to the original owner for the original use at the original place of use from the original point of diversion, giving preference to acreage with a

history of continuous irrigation use, and thereafter to other purchasers or lessees in the same general area as the original use.

(F) Whenever the sum accumulated over time of the annual Overages as defined in Article I (A) (3) of the Pecos River Decree, as determined pursuant to Article III (B) (1) of the Pecos River Decree by the River Master appointed by the U.S. Supreme Court pursuant to the Pecos River Decree (the “**River Master**”) (which sum accumulated over time shall be referred to herein as the “**Accumulated Overage**”) is greater than 115,000 acre-feet, and if there is a sufficient quantity of water in storage in facilities serving the Carlsbad Project to allow the ISC to reasonably predict that augmentation pumping likely will not be required in the next succeeding year, the ISC will reasonably consider and in good faith implement a program for leasing, on an annual basis, CID water rights to users located within CID; Roswell Artesian Basin water rights to users located within the RAB; FSID water rights to users located within FSID; and/or CID, RAB or FSID water rights (with the consent of whichever of CID, PVACD or FSID has jurisdiction over the area from which the water rights will be leased, which consent shall not unreasonably be withheld) to the Bureau of Reclamation or other federal agency for the purpose of compliance with the Endangered Species Act. The ISC shall offer water rights for leasing under such program in the proportion that the acreage purchased in CID, RAB and FSID bears to the total acreage purchased, for such periods of time as said water rights are temporarily not required for satisfaction of conditions of this Settlement Agreement, so as to stimulate economic activity from use of said water rights in CID, RAB and FSID and as a means by which ISC may recoup, to some extent, the cost of augmentation pumping from the RAB. The ISC shall establish a policy to give a preference for re-irrigating historically irrigated lands. Water rights leased by the ISC shall be transferred and used in accordance with state law.

6. **Status of ISC Owned CID Surface Water Delivery Rights.** By virtue of the purchase and ownership of land on the assessment rolls of CID, the ISC shall become a member of CID, and shall be entitled to all the rights and benefits, and shall be subject to all the obligations, assessments, rules and regulations, of membership in CID, on the same basis as all other members of CID. The CID, consistent with applicable federal and state law, shall allot water on a *pro rata* basis to 25,055 acres of land on the assessment rolls of CID. CID shall deliver through the Carlsbad Project to Avalon Reservoir all water allotted by CID to lands owned by the ISC (the “**ISC Allotment**”), and shall make such water available to the ISC pursuant to the terms of this Agreement. CID shall account for and shall deliver water under the ISC Allotment dependant upon the water supply available to CID and the amount of Accumulated Overage. in the following manner:

(A) On or before January 31 of each year, the ISC shall estimate the Accumulated Overage as of December 31 of the previous calendar year. Such estimate shall be based upon the Accumulated Overage determined by the River

Master as of July 1 of the previous calendar year, extrapolated to December 31 based upon the Manual as defined in Article I (A) (2) of the Pecos River Decree. For the sole purpose of determining the disposition of the ISC Allotment and governing Carlsbad Project operations pursuant to this Paragraph 6, the ISC's estimate shall be binding upon the Parties, and shall be referred to herein as the **"Calculated Overage"**. The ISC shall consult to the extent reasonably requested with the Bureau of Reclamation CID and PVACD in its determination of the Calculated Overage.

(B) The State Engineer shall determine, in good faith consultation with CID, the Bureau of Reclamation and PVACD, the total water supply available to the Carlsbad Project at any one time (the **"Project Water Supply"**). The Project Water Supply shall be an estimate of the amount of water available to CID for delivery at the Avalon Dam gate into the CID main canal, and shall equal the quantity of water allotted and delivered to CID members (including the ISC) within the current year, plus the quantity of water then in active storage in all facilities serving the Carlsbad Project and available for release, less storage evaporation losses and conveyance losses associated with the release of water from storage and delivery to Avalon Reservoir. Groundwater pumped by the Augmentation Wells between November 1 and December 31 pursuant to Paragraph 9 below, which is not passed through facilities serving the Carlsbad Project pursuant to Paragraph 11 (A) or 13 (E) below, shall be accounted as part of the Project Water Supply in the next succeeding calendar year.

(C) In any year in which the Calculated Overage is less than 50,000 acre-feet, the ISC shall not take delivery of water under any allotments made to it by CID from the first 50,000 acre-foot increment of the Project Water Supply. CID shall re-allot any ISC Allotment from the first 50,000 acre-foot increment of Project Water Supply in that year to other CID members; provided, however, that the total allotments and re-allotments of water for each CID member hereunder shall not exceed a quantity of water that will yield an FDR of 3.697 acre-feet per acre per year, and the total Project acreage irrigated within CID in that year shall not exceed 25,055 acres minus the quantity of acres then owned by the ISC. If the Project Water Supply is equal to or greater than 50,000 acre-feet at any time in that same year, CID shall deliver from facilities serving the Carlsbad Project and release at Avalon Dam to the Pecos River for delivery to the New Mexico-Texas state line under the Miscellaneous Purposes Contract a quantity of water equal to the Project Water Supply in excess of 50,000 acre-feet, up to the quantity of water determined by the following formula:

$$\frac{50,000 \text{ acre feet}}{(25,055 \text{ acres} - \text{Total acres in CID owned by ISC}) \times 1.35 \text{ carriage loss}} \times$$

$$\text{Total acres in CID owned by ISC} \times 1.176 \text{ carriage loss} = \text{Delivery}$$

When the total release from the Carlsbad Project at Avalon Dam to the Pecos River for delivery to the New Mexico-Texas state line in that year reaches the quantity of water determined by the above formula, CID may resume storing water in facilities

serving the Carlsbad Project and may make such additional allotments as it may determine. CID shall deliver from facilities serving the Carlsbad Project and release at Avalon Dam to the Pecos River for delivery to the New Mexico-Texas state line under the Miscellaneous Purposes Contract all such additional allotments made to ISC-owned lands in that year, plus a quantity of water equal to 17.6% of such ISC Allotment CID shall deliver from facilities serving the Carlsbad Project and release to the Pecos River at Avalon Dam the full quantity of water specified herein at the earliest possible time consistent with efficient water management practices so as to complete the release of the full quantity of water specified herein to the Pecos River at Avalon Dam by December 25. CID shall begin deliveries from facilities serving the Carlsbad Project and releases to the Pecos River at Avalon Dam no later than November 1. and shall complete all deliveries and releases by December 25. Delivery of water directly into the Pecos River below Avalon Dam by CID necessitated by Avalon Reservoir contents exceeding the top of the permitted conservation elevation at the time of the spill, or by the conservation storage in all of the reservoirs in the Pecos River Basin serving the Carlsbad Project exceeding 176,500 acre-feet shall not be credited to CID against the CID delivery requirement to the ISC under this Agreement Such delivery of water directly into the Pecos River below Avalon Dam by CID shall be considered an involuntary spill.

(D) In any year in which the Calculated Overage is equal to or greater than 50,000 acre-feet but less than or equal to 115,000 acre-feet, the ISC shall not take delivery of water under any allotments made to it by CID from the first 90,000 acre-foot increment of Project Water Supply. CID shall re-allot any ISC Allotment from the first 90,000 acre-foot increment of Project Water Supply in that year to other CID members; provided, however, that the total allotments and re-allotments of water for each CID member hereunder shall not exceed a quantity of water that will yield an FDR of 3.697 acre-feet per acre per year, and total Project acreage irrigated within CID in that year shall not exceed 25,055 acres minus the quantity of acres then owned by the ISC. If the Project Water Supply is equal to or greater than 90,000 acre-feet at any time in that same year, CID shall deliver from facilities serving the Carlsbad Project, and release at Avalon Dam to the Pecos River for delivery to the New Mexico-Texas state line under the Miscellaneous Purposes Contract a quantity of water equal to the Project Water Supply in excess of 90,000 acre-feet, up to the quantity of water determined by the following formula:

$$\frac{90,000 \text{ acre feet}}{(25,055 \text{ acres} - \text{Total acres in CID owned by ISC}) \times 1.35 \text{ carriage loss}} \times$$

$$\text{Total acres in CID owned by ISC} \times 1.176 \text{ carriage loss} = \text{Delivery}$$

When the total release from the Carlsbad Project at Avalon Dam to the Pecos River for delivery to the New Mexico-Texas state line in that year reaches the quantity of water determined by the above formula, CID may resume storing water in facilities serving the Carlsbad Project and may make such additional allotments as it may determine. CID shall deliver from facilities serving the Carlsbad Project and release

at Avalon Dam to the Pecos River for delivery to the New Mexico-Texas state line under the Miscellaneous Purposes Contract, all such additional allotments made to ISC-owned lands in that year, plus a quantity of water equal to 17.6% of such ISC Allotment. CID shall deliver from facilities serving the Carlsbad Project and release to the Pecos River at Avalon Dam the full quantity of water specified herein at the earliest possible time consistent with efficient water management practices so as to complete the release of the full quantity of water specified herein to the Pecos River at Avalon Dam by December 25. CID shall begin deliveries from facilities serving the Carlsbad Project and releases to the Pecos River at Avalon Dam no later than November 1, and shall complete all deliveries and releases by December 25. Delivery of water directly into the Pecos River below Avalon Dam by CID necessitated by Avalon Reservoir contents exceeding the top of the permitted conservation elevation at the time of the spill, or by the conservation storage in all of the reservoirs in the Pecos River Basin serving the Carlsbad Project exceeding 176,500 acre-feet, shall not be credited to CID against the CID delivery requirement to the JSC under this Agreement. Such delivery of water directly into the Pecos River below Avalon Dam by CID shall be considered an involuntary spill.

(E) In any year in which the Calculated Overage is greater than 115,000 acre-feet, CID shall re-allot the ISC Allotments to other CID members, until such time as the total allotments and re-allotments of water for each CID member hereunder shall equal a quantity of water that will yield an FDR of 3.697 acre-feet per acre per year, and total Project acreage irrigated within CID in that year shall not exceed 25,055 acres minus the quantity of acres then owned by the ISC. If CID has allotted and re-allotted a total quantity of water that will yield a FDR of 3.697 acre-feet per year to 25,055 acres minus the quantity of acres then owned by the ISC, ISC shall determine whether it will take available under Paragraph 5 (F) above. any additional ISC Allotments in that year to lands within CID. In such event, the allotments and re-allotments to each member shall not exceed a quantity of water that will yield an FDR of 3.697 acre-feet per acre per year, and total Project acreage irrigated within CID shall not exceed 25,055 acres in that year.

7. **Transfers of Allotments Within CID.** Notwithstanding the FDR limitation of 3.697 acre-feet per acre per year of land within CID as set forth in this Settlement Agreement, nothing in this Agreement shall be deemed to limit the authority of CID pursuant to NMSA 1978 §73-10-16 to approve transfers of allotments from the acreage to which the allotment was originally made to other acreage within CID, and which may result in total water deliveries to the land to which the transfer is made in excess of an FDR of 3.697 acre-feet per acre per year; provided, however, that for purposes of determining the diversion limitation for any supplemental well on the land from which the allotment has been moved for stacking purposes, the allotment shall be charged to the acreage to which the allotment was originally made.

8. **Membership Phase.** With regard to the Membership Phase or any *inter se* phase of the Adjudication, the Parties agree as follows:

(A) The state of New Mexico shall utilize its best efforts to expedite the Membership Phase of the CID section of the Adjudication by initiating an informal negotiation process in the membership surface water rights phase. The State shall provide a copy of each offer of judgment to CID at the time of service upon a CID member. CID may provide technical assistance to any member served with an offer of judgment and, in the event it deems necessary, facilitate settlement of any dispute concerning the surface water rights elements of named owner, delivery ditch, and amount of irrigated land as set forth in the offer of judgment. The State Engineer and CID shall cooperate in the development of a common database for the reconciliation of the irrigated acreages in the offers of judgment with the CID Assessment Rolls. CID, at the end of each irrigation season, shall report to the State Engineer all permanent suspensions and transfers. CID shall also provide to the State Engineer a copy of its current assessment roll listing current members in order to maintain the common database.

(B) Upon entry of a PFD containing the same terms as contained in the PFD attached to the Joint Motion, no Party shall present any claim or objection in the Membership Phase or any *inter se* phase of the Adjudication that is inconsistent with the PFD and this Settlement Agreement; provided, however, that nothing herein shall prevent any Party from protesting any change in purpose and/or place of use based on grounds provided by applicable law in proceedings before the State Engineer or an appeal therefrom.

9. **Augmentation Pumping.** The ISC will utilize moneys appropriated by the Legislature to develop a well field or wells, or lease or purchase existing wells (the “**Augmentation Wells**”) located in the RAB and drilled into the Roswell Basin aquifers. The purpose of the Augmentation Wells shall be to pump water to the Pecos River in order to augment the flow of the Pecos River. The ISC will utilize moneys appropriated by the Legislature to acquire water rights in the RAB and FSID as set forth in Paragraph 5 (B) and (C) above, for transfer to the Augmentation Wells pursuant to the statutes governing the acquisition and transfer of water rights and the rules and regulations and the administrative basin guidelines of the State Engineer. The ISC will consult with the PVACD in the purchase, lease or development of the Augmentation Wells, and shall make a reasonable effort to locate the Augmentation Wells so the operation thereof shall not cause impairment to any valid existing water rights. PVACD shall make available to the ISC such data and expertise as it has, in order to reduce the potential for impairment by, and maximize the effectiveness and reduce the capital and operational costs of, the Augmentation Wells. PVACD, CID and the United States shall not oppose any transfer of water rights to the Augmentation Wells deemed necessary by the ISC, unless based on the grounds of impairment of valid existing water rights or degradation of groundwater quality from salt water intrusion or encroachment, as provided by the applicable policies, guidelines, rules, and/or regulations of the State Engineer. Before any formal opposition to any such transfer, PVACD CID and/or the United States shall consult with the ISC and the Parties shall attempt to resolve any issues that might exist without the necessity of formal opposition. Total diversions of water through the Augmentation Wells shall not

exceed 2.1 acre-feet for each acre of irrigation water rights acquired by the ISC pursuant to Paragraph 5 (B) and (C), above, or held by the ISC pursuant to its Water Conservation Program, or loaned by PVACD to the ISC pursuant to Paragraph 11 (A) or 13 (D) below. The ISC shall undertake operation of the Augmentation Wells and delivery of water to the Pecos River based on the following criteria:

(A) The State Engineer shall determine, in good faith consultation with CID, the United States and PVACD, the Project Water Supply on March 1, May 1, June 1, July 15, September 1 and November 1 of each year. The quantity of water delivered from the Augmentation Wells to the Pecos River pursuant to this Paragraph 9 shall be based upon the Project Water Supply on each of the **“Target Dates”**, measured against a **“Target Supply”** for each of the Target Dates. The Target Supplies on each of the Target Dates shall be as follows:

Target Date	Target Supply
March 1	50,000 acre-feet
May 1	60,000 acre-feet
June 1	65,000 acre-feet
July 15	75,000 acre-feet
September 1	90,000 acre-feet

(B) Water shall be delivered from the Augmentation Wells to the Pecos River commencing November 1 of each year as necessary to meet a Target Supply for CID of 50,000 acre-feet on March 1 of the next succeeding calendar year and shall continue until the Project Water Supply reaches 50,000 acre-feet. Groundwater pumped by the Augmentation Wells between November 1 and December 31 pursuant to this Paragraph 9, which is not passed through facilities serving the Carlsbad Project pursuant to Paragraph 11 (A) or 13 (D) below, shall be accounted as part of the Project Water Supply in the next succeeding calendar year.

(C) If the Project Water Supply on March 1 is less than 60,000 acre-feet water shall be delivered from the Augmentation Wells to the Pecos River as necessary to meet a Target Supply for CID of 60,000 acre-feet on May 1 of the same calendar year and shall continue until the Project Water Supply reaches 60,000 acre-feet.

(D) If the Project Water Supply on May 1 is less than 65,000 acre feet, water shall be delivered from the Augmentation Wells to the Pecos River as necessary to meet a Target Supply for CID of 65,000 acre-feet on June 1 of the same calendar year and shall continue until the Project Water Supply reaches 65,000 acre-feet.

(E) If the Project Water Supply on June 1 is less than 75,000 acre-feet, water shall be delivered from the Augmentation Wells to the Pecos River as necessary to meet a Target Supply for CID of 75,000 acre-feet on July 15 of the same calendar year and shall continue until the Project Water Supply reaches 75,000 acre-feet.

(F) If the Project Water Supply on July 15 is less than 90,000 acre-feet, water shall be delivered from the Augmentation Wells to the Pecos River as necessary to meet a Target Supply for CID of 90,000 acre-feet on September 1 of the same calendar year and shall continue until the Project Water Supply reaches 90,000 acre-feet, or until October 31, whichever occurs first.

(G) The ISC shall not divert from the Augmentation Wells more than 100,000 acre-feet during each five-year accounting period used for RAB administration (for an average annual diversion of 20,000 acre-feet per year), and in no event more than 35,000 acre-feet in any one year of such accounting period. The State Engineer shall administer groundwater diverted from the Augmentation Wells to the Pecos River for delivery to Brantley and/or Avalon Reservoir as appropriate.

(H) In addition to the operations described above, the ISC may utilize the Augmentation Wells to deliver water to the Pecos River in a Pecos River Decree Shortfall Condition as set forth in Paragraphs 11 and 13 below.

(I) The ISC shall not operate the Augmentation Wells to augment Pecos River flows for the purpose of conserving species listed as threatened or endangered under the Endangered Species Act, except as may be wholly incidental to the primary purposes established in this Agreement.

10. Limitation on CID and United States Call Pursuant to the PFD. Notwithstanding the provisions of the PFD and the rights and priorities therein established, neither CID nor the United States shall place a call for administration of priorities or otherwise seek to curtail water uses in the RAB, and neither CID nor the United States shall store or divert water resulting from a call or curtailment exercised by others (including specifically but without limitation for the delivery of water to the New Mexico-Texas state line for purposes of compliance with the Pecos River Compact or any United States Supreme Court Decree or court order relating thereto), except to the extent necessary to supply not more than 50,000 acre-feet in any one year at the Avalon Dam gate for delivery into the CID main canal. The following factors shall be utilized to calculate the amount of water necessary to supply not more than 50,000 acre-feet at the Avalon Dam gate into the CID main canal:

(A) the quantity of water allotted and delivered to CID members within the current year,

(B) the amount of water then in active storage in all facilities serving the Carlsbad Project and available for release;

(C) any amount of water necessary to refill any minimum storage pools;

(D) evaporation and conveyance losses; and

(E) projected deliveries of water from the Augmentation Wells to the Pecos River pursuant to this Agreement.

Neither the CID nor the United States shall place a call for water into storage for carry-over into a subsequent irrigation season. Upon the exercise of a call by CID or the United States hereunder, the CID or the United States may request the State Engineer to initiate priority administration pursuant to law to curtail the use of water under water rights junior to the adjudicated rights of CID and/or the United States to the extent necessary to supply the amount of the call.

11. **Pecos River Decree Shortfall Condition.** In the event that the River Master determines in his Final Report setting forth the calculations required by Article III (B) (1) of the Pecos River Decree that a net shortfall exists (“Shortfall”), the Parties agree that the interests of the Pecos River Basin and the state of New Mexico will best be served by the implementation of voluntary measures to increase flows at the New Mexico-Texas state line. Therefore, in the event of a Shortfall, the ISC will use its best efforts to prepare a proposed plan pursuant to Article II (A) (2) of the Pecos River Decree that shall be based upon the following actions that will increase the amount of water at the New Mexico-Texas state line by March 31 of the calendar year following the accounting year in the amount of the Shortfall, in the following order of priority:

(A) The ISC may operate the Augmentation Wells to deliver water to the Pecos River in an amount necessary to meet the Shortfall, subject to the limitations in any state permit under which the Augmentation Wells operate. The State Engineer shall administer the river to insure that the water delivered to the Pecos River from the Augmentation Wells is passed through Project facilities, subject to normal stream conveyance losses, for delivery to the New Mexico-Texas state line. CID and the United States agree to comply with and to not oppose such administration. Any water delivered to the Pecos River from the Augmentation Wells to meet a Shortfall shall be subject to the 100,000 acre-feet over five years and 35,000 acre-feet in any one-year limitations specified in Paragraph 9 (G) above. To the extent necessary for the ISC to meet the Shortfall, PVACD shall make available by loan without charge to the ISC for a reasonable period of time necessary to meet the Shortfall, water rights held by PVACD in its retirement program for temporary transfer to the Augmentation Wells in an amount necessary for such purpose.

(B) The State Engineer and/or the ISC may develop a proposed plan pursuant to Article II (A) (2) of the Pecos River Decree.

12. **Water Master.** The state of New Mexico shall petition the District Court in and for the Fifth Judicial District to expand the duties of the Pecos River Water Master to include authority to:

(A) Order meters and records with respect to the diversion of water from the Augmentation Wells, and administer the delivery of water diverted from the Augmentation Wells to the Pecos River by preventing the subsequent diversion of such water from the Pecos River by any person, including taking all legal actions to enjoin such diversions as may be necessary.

(B) Administer deliveries of water from the Augmentation Wells to Avalon Reservoir, and deliveries of water from Avalon Reservoir to the New Mexico-Texas state line in compliance with this Settlement Agreement by preventing by injunction any diversion of such water from the Pecos River by any person; provided, however, that the Water Master shall have no authority over Carlsbad Project internal operations and deliveries of water to CID members;

(C) Order records from CID with respect to the deliveries of water from Project facilities to Avalon Reservoir and from Avalon Reservoir to and within the CID, in order to assure compliance with the terms of this Settlement Agreement; and

(D) Order meters and records for the diversion of water from supplemental wells within CID, and enforce by injunction the limitations on supplemental well pumping within CID as set forth in Paragraph 4 above.

13. Interim Measures.

(A) For purposes of this Paragraph 13, the "Interim Period" shall be defined as the period of time between the date of the entry of a PFD in accordance herewith, and the date of the satisfaction of the Conditions Precedent as evidenced by the filing of a joint declaration by the Parties, or December 31, 2004 (or such later date as the Parties may agree), whichever date is earlier.

(B) The agreement and cooperation of the Parties is required to assist the ISC in avoiding or satisfying a Shortfall during the Interim Period, in order to avoid the necessity of curtailing water use and priority administration by the state of New Mexico in order to meet the State's obligations under the Pecos River Decree.

(C) During the Interim Period, in the implementation of the measures outlined in Paragraphs 5 and 9 above, the first priority of the ISC shall be to begin development, purchase or lease of Augmentation Wells and to acquire and apply for transfer of water rights to such Augmentation Wells so as to be better able to meet any anticipated or actual Shortfall. Such applications for the transfer of irrigation groundwater rights to new points of diversion, as necessary, to augment the surface flows of the Pecos River for the purposes set forth in Paragraph 9 above, shall be made in amounts of water equal to the consumptive irrigation requirement transferred from each irrigated acre. The ISC shall seek from the State Engineer, and the Parties shall support subject to reasonable assurance of non-impairment, approval of emergency authorization to begin diversions immediately upon the development, purchase, or lease of the Augmentation Wells if necessary to meet or avert a Shortfall. In the purchase, lease or development of Augmentation Wells, the Parties shall cooperate to jointly identify well locations and thereafter assist the ISC to facilitate the resolution of any protest to applications involving such identified well locations and transfer of irrigation groundwater rights.

(D) During the Interim Period, in the event of an anticipated or actual Shortfall as determined by the ISC, the ISC may operate the Augmentation Wells

to deliver no more than 35,000 acre-feet of water in any one year to the Pecos River in an amount necessary to meet the anticipated or actual Shortfall, subject to the limitations in any state permit or emergency authorization under which the Augmentation Wells operate. PVACD shall make available by loan without charge to the ISC for a reasonable period of time necessary to meet or avert the Shortfall, water rights held by PVACD in its retirement program for temporary transfer to the Augmentation Wells in an amount necessary for such purpose.

(E) In the event of an anticipated Shortfall, and after September 1 of each year during the Interim Period, the State Engineer shall administer the water diverted from the Augmentation Wells and delivered to the Pecos River so as to insure that such water is passed through Project facilities, subject to normal stream conveyance losses, for delivery to the New Mexico-Texas state line. CID and the United States agree to comply with and to not oppose such administration.

(F) In the event of an actual Shortfall, the State Engineer shall administer the water diverted from the Augmentation Wells and delivered to the Pecos River so as to ensure that such water is passed through Project facilities, subject to normal stream conveyance losses, for delivery to the New Mexico-Texas state line. CID and the United States agree to comply with and to not oppose such administration.

(G) During the Interim Period the second priority of the ISC to meet an anticipated or actual Shortfall shall be to implement a program to lease water within CID, similar to leasing programs previously undertaken by the ISC, CID and the Bureau of Reclamation. CID and the Bureau of Reclamation shall cooperate in the implementation of any such leasing program.

(H) During the Interim Period, neither CID nor the United States shall place a call for water on the Pecos River stream system, so long as the other provisions of this Paragraph 13 are effective and no Party is in breach hereof.

(I) During the Interim Period in order to promote the successful implementation of the ISC Pecos River compliance plan through cooperation among the water users within the Pecos River stream system, neither the ISC nor the state of New Mexico shall include priority administration in any plan submitted to the River Master pursuant to Article II (A) (2) of the Pecos River Decree, nor shall the State Engineer otherwise seek to curtail the exercise of any water right in the Pecos River Basin, except pursuant to court order.

(J) Notwithstanding the Conditions Precedent set forth above, the provisions of this Paragraph 13 will be valid and binding obligations of the Parties during the Interim Period. Upon expiration of the Interim Period, this Paragraph 13 shall cease to have any further force or effect, and the Parties shall be relieved of any further rights or obligation hereunder.

14. **Modification.** The Settlement Agreement may be modified only by written agreement of the Parties hereto. Any such modification shall be filed with the Adjudication Court.

15. **Settlement and Compromise.** The Parties acknowledge and agree that this Settlement Agreement is a compromise of disputed claims, and shall not be construed as an admission of any fact or theory of law in any other litigation. The Parties enter into this Settlement Agreement solely for the purpose of avoiding the expense and uncertainty of further litigation. The terms of the PFD and this Settlement shall not be construed as precedent in any other litigation.

16. **Termination.** In the event that this Settlement Agreement is terminated for any reason, including without limitation for failure of the Conditions Precedent, the PFD is not made final, and the litigation of the Project (Offer) Phase of the adjudication is resumed, then the terms of this Settlement Agreement, and all conduct or statements made in negotiations, documents, offers, submittals, and communications related thereto or in furtherance thereof, shall not be admissible as evidence in such litigation, pursuant to N.M.R.E. 408 and F.R.E. 408.

17. **Compliance.** The Parties agree that the PFD and this Settlement Agreement shall constitute compliance with the conditions specified in NMSA 1978 § 72-1-2.4 (2002 Cum. Supp.).

18. **Further Documents.** All Parties hereto agree to enter into and execute such other and further documents and instruments as may be reasonably necessary to carry out the terms and objectives of this Agreement.

19. **Entire Agreement.** This Agreement constitutes the entire agreement and understanding among the Parties with respect to the subject matter hereof and all prior or contemporaneous agreements and understandings are merged into this Agreement.

20. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their members, officers, directors, managers, agents, employees, attorneys, successors, assigns and transferees.

21. **Notice.** If notice is required or permitted under this Agreement, then notice of ten (10) days shall be given. Such notice shall be deemed received ten days after mailing if sent by first-class mail, postage prepaid addressed to the following Parties:

State of New Mexico:

John R. D'Antonio, P.E.

State Engineer

P.O. Box 25102

Santa Fe, NM 87504-5102

With copies mailed separately to the General Counsel, Office of the State Engineer and the Director, Interstate Stream Commission, at the address set forth above.

United States:

Area Manager

Bureau of Reclamation

555 Broadway NE

Suite 100
Albuquerque NM 87102

Carlsbad Irrigation District:

Tom Davis, Manager
Carlsbad Irrigation District
201 S. Canal St.
Carlsbad, NM 88220

With a copy to: Steven L. Hernandez, Hubert & Hernandez, P.A., P.O.
Drawer 2857, Las Cruces, NM 88004-2857

Pecos Valley Artesian Conservancy District:

Dennis Karnes, Superintendent
Pecos Valley Artesian Conservancy District
P.O. Box 1346
Roswell, NM 88202-1346

With a copy to: A. J. Olsen, Legal Counsel to the to the Pecos Valley
Artesian Conservancy District, P.O. Box 1415, Roswell, New Mexico
88202-1415.

Modifications to Parties or addresses as provided in this Paragraph 21 shall be made in writing and Parties shall be notified of such modifications pursuant to this Paragraph 21.

22. **Governing Law.** This Agreement shall be governed by and shall be construed in accordance with the substantive laws of the State of New Mexico and any applicable federal law. Nothing in this Agreement shall be construed to constitute a waiver of sovereign immunity by the United States except as expressly set forth in 43 U.S.C. § 666 (1952).

23. **No Limitation on Enforcement of Law.** Nothing in this Agreement shall be construed to deprive CID, PVACD, or a federal or state official of authority to revise, amend, or promulgate regulations, or to enforce federal or state law.

24. **No Commitment of Unappropriated Funds.** Nothing in this Agreement shall be construed to commit a federal or state official or agency to expend funds not appropriated by Congress or the New Mexico Legislature and legally available for the purpose of the expenditure.

25. **No Effect on Federal Rights.** Nothing in this Agreement shall be construed to affect in any manner other federal rights other than as expressly set forth in this Agreement.

26. **Duplicate Originals.** The Parties each agree to execute multiple originals of this Agreement. Separate copies or counterparts of this Agreement may be executed by each Party, separately, and when each party has executed said copies thereof and delivered them to the other Party, such copies taken together shall be deemed to be a full and complete Agreement between the parties.

27. **Effective Date.** This Agreement shall become effective on the date upon which the final signature shall be obtained.

28. **Time of Essence.** Time is of the essence to all covenants and provisions set forth herein.

29. **Captions and Headings.** The captions and headings of the Paragraphs of this Agreement are for convenience only and are not to be used to interpret, define, limit, or enlarge the provisions hereof.

30. **Interpretation.** The Parties were represented by counsel and fully participated in negotiating and drafting this Agreement; this Agreement shall not be interpreted for or against any Party based on authorship.

UNITED STATES:
THOMAS L. SANSONETTI
Assistant Attorney General

Date: 3/25/03

/s/
David Gehlert
Trial Attorney
General Litigation Section

**U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION:**

Date: 3-25-03

/s/
Rick Gold
Regional Director
Upper Colorado Region

STATE OF NEW MEXICO:

Date: 3/25/03

/s/
Patricia A. Madrid
New Mexico Attorney General

Date: 3/25/03

/s/
John R. D'Antonio, Jr. P.E.
New Mexico State Engineer

Date: 3.25.03

/s/
DL Sanders, General Counsel
Special Assistant Attorney General
Office of the State Engineer

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**NEW MEXICO INTERSTATE STREAM
COMMISSION:**

Date: 3-25-03

/s/

Jim Dunlap

Chair

CARLSBAD IRRIGATION DISTRICT:

Date: 3-25-03

/s/

William C. Ahrens

Board President

Attest:

/s/

Tom W. Davis

Treasurer/Manager

/s/

Steven L. Hernandez

Legal Counsel for Carlsbad Irrigation District

**PECOS VALLY ARTESIAN
CONSERVANCY DISTRICT:**

Date: March 25, 2003

/s/

Wesley Menefee

President

Date: 3-25-03

/s/

Ben Kerr

Secretary

/s/

Stuart D. Shanor, Esq.

/s/

Fred H. Hennighausen, Esq.

Richard A. Simms, Esq.

Legal Counsel for Pecos Valley Artesian
Conservancy District

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No. 65, Original



In The
Supreme Court Of The United States



STATE OF TEXAS,

Plaintiff,

v.

STATE OF NEW MEXICO

Defendant.



Before the Honorable Dr. Neil S. Grigg
River Master



**REPLY IN SUPPORT OF NEW MEXICO'S MOTION TO RECONCILE AND
ACCOUNT FOR TEXAS WATER STORED IN NEW MEXICO DURING WATER
YEARS 2014 AND 2015**

The State of New Mexico replies in support of its Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015 ("Motion") as follows:

ARGUMENT

I. Introduction

Prior to addressing the legal arguments advanced in Texas' Response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015 ("Response"), New Mexico first identifies and corrects the following factual inaccuracies and mischaracterizations upon which Texas' arguments are based.

First, and most egregiously, Texas mischaracterizes the February 11, 2016 meeting notes memorializing discussions and collective agreements as unratified notes taken and circulated by New Mexico. *See* Response at 5. As the River Master is personally aware (1) New Mexico and Texas met with the River Master to discuss accounting procedures for the storage of water from the 2014 storm event in Brantley Reservoir; (2) the River Master recommended that New Mexico and Texas jointly draft meeting notes memorializing the agreements reached during the meeting, including the agreement that the water from the 2014 storm event would not be treated as unappropriated flood waters and that the 2014-15 storage in Brantley Reservoir would be accounted as water stored for Texas; and (3) the

representatives from New Mexico and Texas drafted the requested agreement while still together at the meeting and circulated the meeting notes with the understanding that they represented the collective position of New Mexico and Texas on the issues discussed. *See* Declaration of Hannah Riseley-White ¶ 7 (attached as **Exhibit 1**).

Texas next argues that New Mexico's conduct was somehow sufficient to indicate its agreement that water from the 2014 storm event was unappropriated flood waters, *see* Response at 16-17, based on a sentence taken out of context from Commissioner Willis' January 26, 2015 letter outlining the conditions under which New Mexico will agree to Texas' request for storage at Brantley Reservoir. While New Mexico may have contemplated that the water from the 2014 storm event could be classified as unappropriated flood waters, it never agreed that the water from the 2014 storm event was to be treated as unappropriated flood waters and expressly made a contrary agreement at the February 11, 2016 meeting between New Mexico and Texas with the River Master. Moreover, as stated in the subsequent sentence on Commissioner Willis' letter, New Mexico could not make such a classification because the "official designation of the water under discussion as Unappropriated Flood Waters may only be granted by the River Master." *See* Exhibit B to Motion at 2.

Third, Texas references an excel spreadsheet presenting water storage analysis for Red Bluff Reservoir between 2014 and 2016 to argue that Red Bluff Reservoir could not have contained all the water from the 2014 storm event even at the 1947 capacity of 270,000 acre-feet. *See* Response at 17. This is irreconcilable with Texas' own statements and calculations showing Red Bluff Reservoir filled to its current capacity of approximately 150,000 acre-feet and then "spilled" approximately 100,000 acre-feet of water as a result of the 2014 storm event. If Texas started with approximately 75,000 acre-feet of water before the 2014 storm event, and then added an additional 75,000 acre-feet to get to capacity, the addition of approximately 100,000 more acre-feet could not exceed the 270,000 acre-foot capacity, much less result in a spill. The River Master is able to take judicial or other notice of the results of these basic calculations.

Fourth, Texas portrays its misleading conduct between February 11, 2016, and January 11, 2017, as a legitimate investigation of alternative accounting procedures for the water from the 2014 storm event by referencing an email exchange between state employees in which Suzy Valentine states that there are a "couple of things to clear up" with respect to evaporation accounting. *See* Response at 12; Exhibit G to Motion. As with Commissioner Willis' January 26, 2015 letter, Texas' reference to this email exchange disingenuously glosses over important additional content; notably, Mr. Lewis statement "Since we seem to be in agreement regarding evaporation accounting . . . I suggest letting the River Master decide the method he feels to be most appropriate." *See id.* Taken in context, it is clear that Ms. Valentine was not disagreeing with the principles agreed to regarding evaporation accounting during the February 11, 2016 meeting. She instead was stating her preference to "include [the evaporation accounting] in the year it occurred and not to go with the averaging." *See id.* Furthermore, on May 5, 2016, Ms. Valentine prepared a spreadsheet proposing a 21,071 acre-foot evaporation credit to New Mexico for "Texas water stored in NM reservoirs". *See* Valentine Spreadsheet (attached as **Exhibit 2**). This

is the evaporation loss associated with the water stored for Texas from the 2014 storm event.

It was interactions such as these, both in person and by email, throughout 2015 and 2016 that convinced New Mexico that a resolution was pending and that it did not need to appeal the River Master's final reports for previous water years. *See* Declaration of Hannah Riseley-White ¶¶ 8-9 (attached as **Exhibit 1**). New Mexico was unaware that Texas intended to fundamentally change its position with respect to accepting responsibility for evaporative losses. Had New Mexico been aware of such maneuvering to penalize New Mexico for accommodating Texas' request to store water on Texas' behalf following the 2014 storm event, New Mexico would have aggressively pursued corrections to the River Master's Final Reports for Water Years 2014 and 2015. *See* Declaration of Hannah Riseley-White ¶ 10 (attached as **Exhibit 1**).

Finally, Texas misrepresents that Reclamation was holding the water from the 2014 storm event in Brantley Reservoir for flood control purposes only. *See* Response at 4. It is correct that flood control and public safety were initial concerns immediately following the 2014 storm event, but that concern had subsided long before the water was ultimately released. The record evidence makes clear that there was no public safety reason to continue to store water from the 2014 storm event after mid-November 2014, and New Mexico would not have stored the water but for the request by Texas. Any release to Texas in late 2014 would have had to have been conducted at a lower than normal release rate due to temporary bridges in Eddy County, New Mexico. However, by the time of the actual release in August 2015, those same temporary bridges were still in place and the lower than normal release rate was used. The evidence further demonstrates that New Mexico would not have consented to long-term storage under the accounting method now proposed by Texas. *See* Exhibit B to Motion at 2; Exhibit C to Motion 5; Declaration of Hannah Riseley-White ¶ 6 (attached as **Exhibit 1**).

The record evidence also makes clear that following the initial flood concern, Reclamation did not perceive that the water was being stored for the benefit of both states. Instead, Reclamation clearly understood that the water was being stored for Texas. *See* Exhibit D to Motion July 10, 2015 email from Carolyn Donnelly with the subject "Storage of Texas' water in Brantley."

Having addressed and corrected the factual misrepresentations upon which Texas' legal arguments are premised, New Mexico now turns to the arguments stated in Texas' Response.

II. The Amended Decree Does Not Limit the River Master's Authority to Adjust the Water Year 2014 or 2015 Accounting

Texas' initial argument that New Mexico is barred from requesting necessary and equitable adjustments to the accountings for Water Years 2014 and 2015 to credit New Mexico for the evaporation associated with water stored for Texas because New Mexico did not request review of the reports for those years within thirty days of delivery is misleading and incorrect. First the decision to request review of the River Master's report is unrelated to the River Master's authority to make equitable adjustments to the accounting. Barring

the River Master's authority to make such adjustments is contrary to principles of equity and fairness, the fundamental principles that underlie this Compact. As fully explained in New Mexico's Motion and additionally set forth herein, Texas and New Mexico were actively engaged in discussions on the procedure for accounting for the 2014 storm event throughout 2015 and 2016. New Mexico's decision not to appeal the River Master's accounting was premised on the consistent assurances made by Texas during those discussions that Texas intended to bear the evaporative losses associated with the storage of Texas' water in Brantley Reservoir. *See Declaration of Hannah Riseley-White ¶¶ 7-9* (attached as **Exhibit 1**). (New Mexico should not be punished for its reliance on Texas' assurances or for its efforts to work with Texas to come to an equitable resolution.)

Texas' additional arguments that the Amended Decree limits the River Master's authority to make necessary and equitable adjustments to the accountings for Water Years 2014 and 2015 to credit New Mexico for the evaporative loss associated with water stored for Texas are equally unavailing for the following reasons.

A. Compact Deadlines do not Preclude Adjustments to the Accounting for Water Years 2014 and 2015

Texas first argues without analysis or authority that the deadlines set forth in Sections III(B) and III(D) limit the authority of the River Master to adjust accountings. *See Response at 8*. This assertion ignores the express and unrestricted authority granted to the River Master under Section III(C) of the Amended Decree to make modifications to the Manual for good cause. *See Section III(C)(2)* ("Absent written agreement of the parties, upon motion by either party and for good cause shown, the River Master may modify the Manual."). Pursuant to this provision, the River Master may make the requested adjustments to the accounting for Water Years 2014 and 2015 via a modification to the Manual. And, as argued in New Mexico's Motion, the River Master is obligated to do so. Texas does not argue and Section III(C)(2) does not impose any qualifications or limits on the River Master's authority that changes this result. And, in line with established principles of law, the Court should decline Texas' request to impose such nonexistent limitations here. *See Gurley v. Lindsley*, 459 F.2d 268, 275 (5th Cir. 1972) ("Ordinary principles of construction apply to judgments.").

B. Application of the River Master's Modifications is Not Subject to Agreement by the Parties.

Texas next relies on language from Section III(C)(1) of the Amended Decree which directs the parties to state whether agreed to modifications will be applied retroactively to argue that, even if the River Master has authority to make equitable adjustments, such adjustments to the accounting for Water Year 2014 and 2015 are retroactive and thus cannot be imposed without agreement of the parties. Again this assertion is both misleading and contrary to the plain language of the Amended Decree. First, Section III(C)(1) only applies to modifications based on written agreement of the parties and is not applicable to modifications made by the River Master for good cause—the type of modification at issue here. Instead, such modifications are governed by Section III(C)(2) which, unlike Section III(C)(1), does not dictate or otherwise restrict how the River Master's modifications may

be imposed. Consequently, the decision to modify the Manual for good cause to adjust the accounting for Waters Year 2014 and 2015 and the decision to apply that modification retroactively or prospectively should be left to the sound discretion of the River Master. The Courts should refrain from imposing non-existent limitations into the decree to dictate otherwise. *See Gurley*, 459 F. 2d at 275.

Texas' argument is unpersuasive for the additional reason that New Mexico is asking the River Master to modify the current (and not yet finalized) water year, Water Year 2017, in recognition of past errors. As such, the requested modification is not retroactive.

C. Compact Deadlines Are Not Bars to Correcting Accounting Errors

Texas next argues that despite the River Master's express obligation under Section III(B)(1)(b) of the Amended Decree to "calculate . . . any shortfall or overage" that would affect New Mexico's delivery obligation, the River Master should be barred by principles of finality from "reach[ing] back" to make such corrections. *See* Response at 10. This cannot be correct. If errors in previous years—particularly errors arising under such unusual circumstances as the 2014 storm event—have negatively impacted New Mexico, the River Master is obligated under the Amended Doctrine to make necessary corrections and the Compact must be interpreted in a manner that allows him to do so. The finality doctrine should not be applied in such an inflexible manner to contravene this express directive and extend an unfair benefit to the State of Texas.

D. Equitable Tolling Applies to the Current Circumstances

Finally, Texas' argument that equitable tolling should not allow for the River Master to make necessary and equitable adjustments to the accounting for Water Year 2017 is not supported by the cases cited in Texas' Response. *See* Response at 10-11. Although the case law on this topic is not abundant, a review of cases discussing the issue in fact seem to favor New Mexico's position that the doctrine may be applied to violations of the Amended Decree. For example, in *U.S. Philips Corp. v. KBC Bank N.V.*, 590 F.3d 1091, 1095 n.3 (9th Cir. 2010), the circuit court strongly implied that equitable tolling could apply to deadlines associated with claimed violations of a preliminary injunction. A preliminary injunction is, of course, simply another form of judgment, decree, or court order.

If ever a circumstance existed in which the doctrine should apply, it is here. From its first formal correspondence on the topic of accounting for the water from the 2014 storm event, New Mexico has held the position that its consent to store Texas' water in Brantley Reservoir was conditioned on the mutual agreement that "[e]vaporative losses on all water above the Carlsbad Project storage limit should . . . be borne by Texas." *See* Exhibit B to Motion at 2. New Mexico maintained this position throughout the 2015 and 2016 discussions with Texas on the procedure for accounting for the 2014 storm event. The meeting notes from the February 11, 2016 meeting between New Mexico and Texas and the River Master reflect this collective decision. New Mexico even drafted a Joint Motion to Reconcile and Account for Texas Water Stored in New Mexico Reservoirs during Water Years 2014 and 2015 because it believed Texas' ongoing representations that Texas would bear the evaporative losses to the 2014 storm event water. It was New Mexico's reliance on Texas'

representations that led to New Mexico's decision not to appeal the final results of Water Years 2014 and 2015. *See* Declaration of Hannah Riseley-White ¶¶ 9-10 (attached as **Exhibit 1**).

As discussed above, New Mexico's conduct with respect to the appeal period outlined in the Amended Decree was not the result of neglect or a strategic mistake as stated by Texas. It was, instead, a calculated decision based on New Mexico's mistaken belief that it could rely upon Texas' representations. This is the exact circumstance—where one party misses filing or other deadlines because of the conduct of another—that justifies the implementation of equitable tolling. *See Robert v. Barreras*, 484 F.3d 1236, 1241 (10th Cir. 2007) (internal quotation marks and citation omitted) (holding that extraordinary circumstances justifying implementation of equitable tolling “include conduct by a defendant that caused the plaintiff to refrain from filing an action during the applicable period”).

Texas suggests that the cases cited by New Mexico in support of its argument that New Mexico did not take an appeal because of its reliance on Texas' assertions do not stand for the general propositions for which they were cited. *See* Response at 12-13. New Mexico therefore directs the River Master to *Glus v. Brooklyn Eastern Dist. Terminal*, 359 U.S. 231, 234-35 (granting equitable tolling where the adversary's misrepresentation caused the plaintiff to let the filing period lapse), and *Holmberg v. Armbrecht*, 327 U.S. 392, 397 (1946) (granting equitable tolling where the plaintiff is unaware of the defendant's fraudulent conduct). It is well-established that a person, including Texas here, cannot engage in a long-term deception of another and then complain that the deceived party took too long to assert his or her rights. *See Glus*, 359 U.S. at 234-35. Texas' admission that it finally divulged its intention to renege on the February 11, 2016 agreement while New Mexico could have appealed the final report for Water Year 2016 is not a defense to the doctrine of equitable tolling; it is evidence that the doctrine should apply. *See* Response at 13. Equitable tolling may apply where a litigant shows “(1) *that he has been pursuing his rights diligently*, and (2) that some extraordinary circumstances stood in his way.” *Credit Suisse Securities (USA) LLC v. Simmonds*, 556 U.S. 221, 227 (2012) (emphasis in original). While *Credit Suisse* does stand for the proposition that tolling may cease when a plaintiff becomes aware of the facts underlying his or her claim, this principle should not apply here because New Mexico continued to diligently pursue the agreed upon terms for evaporative accounting as demonstrated in its April 26, 2017 letter, which stated that “[i]ssues associated with the WY 2014 and 2015 accounting should be resolved in advance of the Pecos River Master's final accounting for WY 2016” and proposed “a meeting with the Pecos River Master at the earliest possible date” to review and discuss Texas' January 11, 2017 letter. *See* Exhibit J of Motion at 5-6.

For the reasons' stated, Texas arguments that the River Master lacks authority to go back and correct obvious errors to the accounting that would prevent Texas from gaining an unfair benefit from New Mexico's agreement to store water on its behalf are unpersuasive.

III. New Mexico's Proposed Credit Does not Violate the Compact

Texas' next argument, related to when the Compact allows evaporative losses to be charged to a state, is incorrect for the following reasons.

A. Pecos River Compact Article XII

Article XII of the Compact provides that consumptive use incident to the impounding of water by the United States "in one state for use in the other state shall be charged to the later state." Consumptive use includes evaporative loss. Texas first argues that the water from the 2014 storm event should not be charged to Texas because it was stored in Brantley Reservoir for flood control purposes and was not used by Texas. *See* Response at 14. First, this argument is contrary Texas' own statements. The communication from Commissioner Tate that triggered New Mexico's involvement in this dispute expressly requested that "New Mexico store Texas' portion of the flows until such time as they can be utilized" in Texas. *See* Response at 3; Exhibit A to Motion. This email inarguably expresses Texas' wish to "utilize[]" the water and does not support the conclusion that Texas' primary concern was related to flood control or public safety. Moreover, that email request was not sent until November 20, 2014, after the public safety risk had subsided. Consequently, Texas' argument that the water was stored for flood control purposes is without merit.

The contradiction in Texas' position is further illustrated by Reclamation's expressed understanding that it was storing water for Texas. *See* Exhibit D to Motion (stating Reclamation could no longer store Texas' water and "ask[ing] that Texas begin moving this water out of Brantley[.]"). This request to Texas is consistent with Reclamation's implied belief that public safety concerns would not preclude the release of the water during February or March 2015. *See* Exhibit 3 to Response. All evidence supports the conclusion that water was stored in Brantley Reservoir for subsequent use by Texas. As such, evaporative losses associated with such storage should be charged to Texas. *See* Pecos River Compact, Art. XII.

Whether or not the water was in fact "used" in Texas relates to management of Red Bluff Reservoir and not to which state is charged for evaporative losses from Texas' water. *See* Response at 15 (stating that the water was not "used" in Texas). New Mexico cannot be charged for water that Texas initially claimed but for which there was ultimately no demand in Texas.

B. Pecos River Compact Article VI

The Compact defines unappropriated flood waters as those that would be unused if not impounded in 1947. Despite Texas' arguments to the contrary, the water from the 2014 storm event does not meet this definition. Water cannot be categorized as unappropriated flood waters in the absence of a unanimous declaration by the states, or a finding by the River Master. *See* Pecos River Compact, Art. V(a) (providing that any acts of the Commission require unanimous consent of the states); Manual at 26 ("Unappropriated Flood Waters Analysis Criteria and Procedures. The River Master shall determine and apportion any unappropriated flood waters using the methodologies not inconsistent with the applicable provision of the Compact and this Manual.").

Texas' argument that the released water from the 2014 Storm water passed Girvin, Texas unused does not change this result. As a threshold matter, New Mexico disagrees that spills from Red Bluff Reservoir are to be shared for accounting purposes under the Compact. *See* Declaration of Hannah Riseley-White ¶ 11 (attached as **Exhibit 1**). Even if spills from Red Bluff Reservoir were to be shared under the Compact, Texas' analysis on this point is flawed.

Texas' position, disregards the fact that, under the Compact, storage capacity of Red Bluff Reservoir refers to the "the 1947 condition" and not its current condition. *See* Pecos River Compact, Art. II(i). Consequently, the fact that the reservoir could not contain the released water in 2015 has no bearing on the determination of whether the water would have spilled under the 1947 storage capacity.

Texas' calculations showing that under 1947 conditions "Red Bluff would have started to spill on October 10, 2015," and would have spilled approximately 32,583 AF does not cure this flaw in their argument. *See* Response at 17. To the contrary, these calculations showing a spill would not occur until October conclusively establishes that Red Bluff Reservoir would have had the capacity to store the water from the 2014 storm event that was released in August and September 2015. *See* Response at 3 (stating New Mexico began releasing portions of the flood water in August 2015.)

Finally, Texas' argument that New Mexico's conduct indicates that New Mexico treated the water from the 2014 storm event as unappropriated flood waters is unsupported. Regardless of Texas' citation to related resolutions and decrees governing the storage of water in Brantley Reservoir, New Mexico's conduct in this instance does not support such a determination. While New Mexico speculated that the water from the 2014 storm event might be unappropriated flood water, such speculation is neither binding on New Mexico nor the River Master. As discussed in the Motion and above, only the River Master can make a unilateral determination as to the existence and amount of unappropriated flood waters.

Additionally, New Mexico had no discussion of or intent to store the water from the 2014 storm event or putting that water to beneficial use. *See* Declaration of Hannah Riseley-White ¶ 4 (attached as **Exhibit 1**). If not for Texas' storage request and tacit agreement to New Mexico's conditions for approval, New Mexico would have released the water to the state line as soon as public safety allowed. *See* Exhibit B to Motion at 2; Exhibit C to Motion ¶¶ 9-10. New Mexico agreed to store water for Texas in the spirit of comity and cooperation given Texas' request. Such action should not be interpreted as New Mexico "seeking" additional storage capacity as contemplated in the documents cited by Texas in its Response.

C. Pecos River Compact Article III

Texas argues that Article III(f) of the Compact requires that beneficial consumptive use of unappropriated flood waters should be apportioned equally to the states. *See* Response at 18. For all the reasons discussed in the Motion and herein—including Texas' agreement at the February 11, 2016 meeting between New Mexico and Texas with the

River Master—the water from the 2014 storm event is not to be treated as unappropriated flood waters as defined in the Compact. Setting that issue aside, a weighing of the equities in this case demands that (1) Texas be charged with the evaporative losses associated with its storage request, and (2) New Mexico not be penalized for assisting its neighbor in a time of need. *See* Motion at 22-23. *See also Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982) (“[T]he power of the [court] to do equity and to mould each decree to the necessities of the particular case.” (internal quotation marks and citation omitted)). It would be profoundly unfair to charge New Mexico with evaporative losses for water that (1) it had no intent to put to beneficial use, and (2) were impounded only to accommodate Texas’ request to do so. New Mexico outlined this argument in its Motion and Texas has not responded. If the River Master were to determine, in contravention of the determination made at the February 11, 2016 meeting, that the water from the 2014 storm event is to be treated as unappropriated flood waters, equitable principles weigh against counting the evaporative losses from any of that water stored above the Carlsbad Project conservation maximum in Brantley Reservoir against New Mexico.

IV. Charging Texas with the Evaporative Loss to Texas’ Water does not Violate the Compact

Texas finally argues that it cannot be held to the terms of its agreement with New Mexico because such agreement constitutes an amendment of, or otherwise violates, the Compact. *See* Response at 19-21. Again, this argument is without merit.

It is undisputed that a Compact cannot be amended without congressional action. This principle is not at issue, however, because New Mexico’s proposal does not in any way amount to an amendment of, or otherwise violate, the Compact. Instead, New Mexico’s proposal provides for an accounting adjustment based on a calculation of evaporative loss to the water from the 2014 storm event as contemplated under Article XII of the Compact. *See Section III(A) supra*. Texas again attempts to evade responsibility for its decisions by arguing that Article XII does not apply where it was ultimately unable to put the water to beneficial use. This is not correct. Contrary to Texas’ assertion, there is no requirement that water be impounded and used in the other state. Instead, Article XII applies where “consumptive use incident to the . . . impounding . . . of water in one state **for use** in the other state shall be charged to such latter state.” (Emphasis added.) Texas alone is responsible for the consequences of failing to use or have storage capacity for the water. Such consequences should not be borne by New Mexico.

Texas’ argument that its silence or delay in response to New Mexico’s conditional offer does not constitute an acceptance of the terms is equally unavailing as it contravenes black-letter contract law. *See, e.g., McGurn v. Bell Microproducts, Inc.*, 284 F.3d 86, 91 (1st Cir. 2002) (holding that “silence in response to an offer may constitute an acceptance if an offeree who takes the benefit of offered services knew or had reason to know of the existence of the offer, and had a reasonable opportunity to reject it” (citing Restatement Second of Contracts § 69(1)(a))); *Galloway v. Santander Consumer USA, Inc.*, 819 F.3d 89, 87 (4th Cir. 2016) (noting that an “offeree’s silence can constitute acceptance if the offeree

has accepted the benefit of the offer” (citation omitted)). New Mexico’s proposal does not violate the Compact as suggested by Texas and should be granted in full.

CONCLUSION

New Mexico recognizes the need to establish protocols for the future declaration and accounting of unappropriated flood waters, as defined in the Pecos River Compact. As previously stated, New Mexico is prepared to work collectively with Texas and the River Master to accomplish that goal. That said, for all of the reasons discussed herein, New Mexico respectfully requests that the River Master (1) determine that New Mexico is entitled to an adjustment of the Pecos River accounting in the amount of 21,071 acre-feet, and (2) affect this adjustment in the manner determined to be most efficient and consistent with the Compact, the Amended Decree, and the Manual.

Dated: August 10, 2018

Respectfully submitted,

FOR THE STATE OF NEW MEXICO

/s/ Jeffrey J. Wechsler

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HANNAH RISELEY-WHITE

Technical Representative for the State
of New Mexico

CERTIFICATE OF SERVICE

I hereby certify that on August 10, 2018, the foregoing Reply in Support of New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 And 2015 was sent by electronic mail and U.S. Mail, postage prepaid to the following:

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No. 65, ORIGINAL



IN THE
SUPREME COURT OF THE UNITED STATES



STATE OF TEXAS,
PLAINTIFF,

v.

STATE OF NEW MEXICO
DEFENDANT.



BEFORE THE HONORABLE DR. NEIL S. GRIGG
RIVER MASTER



**SECOND DECLARATION OF HANNAH RISELEY-WHITE IN SUPPORT OF
NEW MEXICO’S MOTION TO RECONCILE AND ACCOUNT FOR TEXAS
WATER STORED IN NEW MEXICO DURING WATER YEARS 2014 AND 2015**

Comes now Hannah Riseley-White, pursuant to 28 U.S.C. § 1746, and states as follows:

1. I am over 18 years of age and have personal knowledge of the facts stated herein.
2. I have been employed by the New Mexico Interstate Stream Commission (“NMISC”) since August 25, 2014. The NMISC serves as the primary agency overseeing interstate water compacts for the State of New Mexico.
3. This declaration supplements my previous declaration attached as Exhibit C to New Mexico’s Motion to Reconcile and Account for Texas Water Stored in New Mexico during Water Years 2014 and 2015. All the statements therein are incorporated here by reference.

EXHIBIT 1

4. New Mexico had no discussion of or intent to store the water from the 2014 Storm Event above the Carlsbad Project conservation maximum in Brantley Reservoir for its own beneficial use.

5. New Mexico's consent to store Texas' water in Brantley Reservoir was expressly conditioned on Texas' continued assurance that all evaporative losses associated with such storage would be borne by Texas. This position was communicated to Texas, both in writing and verbally. Texas did not dispute this understanding, and based on numerous interactions with Texas, New Mexico understood that Texas agreed.

6. New Mexico would not have consented to the long-term storage of Texas water from the 2014 Storm Event in Brantley Reservoir under the accounting method now proposed by Texas. This is true because it would not be fair to charge New Mexico with evaporative losses from water that was stored for the benefit of Texas water users and at Texas' request.

7. Beginning in the Spring of 2015, representatives from both New Mexico and Texas discussed the need to account for the water from the 2014 Storm Event. It was generally understood that the evaporation would be charged to Texas, but the specific methodology to accomplish that goal was a matter of discussion. On February 11, 2016, technical representatives from New Mexico and Texas met with the River Master to discuss the procedure for accounting for the 2014 Storm Event. As I mentioned in my July 13, 2018 Declaration, during that meeting both New Mexico and Texas agreed that water from the Storm Event stored above the Carlsbad Project conservation maximum in Brantley Reservoir should be treated as water stored for Texas in New Mexico. Texas suggests that the notes memorializing that meeting, which are attached as Exhibit E to New Mexico's Motion, were not agreed to by both New Mexico and Texas. In fact, after New Mexico and Texas reached a consensus at the meeting, they worked jointly to draft and compile the meeting notes. We, the meeting attendees, shared the understanding that the compiled meeting notes represented the collective position of New Mexico and Texas on issues discussed during the meeting and all agreements reached.

8. The meeting notes from the February 11, 2016 meeting, as well as in-person, telephone, and email communications regarding accounting for the water from the 2014 Storm Event both before and after the February 11, 2016 meeting confirm New Mexico's understanding that Texas agreed to bear all evaporative losses associated with storage of Texas' water in Brantley Reservoir.

9. New Mexico's decision not to appeal the River Master's accounting for Water Year 2014 and 2015 was premised on Texas' continued assurance that it intended to bear the evaporative losses associated with the storage of Texas' water in Brantley Reservoir. In May 2016, one month before objections to the 2015 accounting were due, Texas sent New Mexico an email and an attached spreadsheet in which Texas agreed that New Mexico would be credited for the full evaporation amount of 21,071 acre-feet.

10. Had New Mexico known that Texas intended to default on this agreement, New Mexico would have aggressively pursued corrections to the River Master's Final Reports for Water Years 2014 and 2015.

11. New Mexico disagrees that spills from Red Bluff Reservoir are to be shared under the Compact.

12. Even if spills from Red Bluff Reservoir are to be shared under the Compact, Texas' analysis is flawed. In its Response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015, Texas provided analysis of possible spills from Red Bluff Reservoir in 2014-2016 at a hypothetical capacity of 270,000 acre-feet. Red Bluff Reservoir's current capacity of approximately 150,000 acre-feet is significantly less than its 1947 capacity of 270,000 acre-feet. New Mexico has identified a number of concerns related to Texas' response on this point. Given that no releases from Red Bluff Reservoir occurred between September 1, 2014, and September 18, 2014, Texas' methodology is flawed as it overestimates reservoir contents by approximately 10,000 acre-feet in that time period alone. Texas' technical work assumes zero losses, other than evaporation, from Red Bluff Reservoir. In addition, Texas uses calculations of daily evaporative losses from Red Bluff Reservoir which change dramatically each month. No documentation of how those losses were calculated was provided.

13. Analysis produced by Texas in support of its argument that water from the 2014 Storm Event would have spilled even if Texas had maintained Red Bluff Reservoir in its 1947 condition, actually show the opposite. Texas admits that Red Bluff Reservoir would not have spilled until October 10, 2015. But all of the water from the 2014 Storm Event was released by September of 2015, so Texas' analysis establishes that it would have been stored under the 1947 condition. A theoretical spill in October 2015 could have been avoided by normal reservoir operations. Diversions from Red Bluff Reservoir in 2015 amounted to approximately 30,000 acre-feet, significantly less than median historical diversions of approximately 60,000 acre-feet. New Mexico cannot be held responsible for lack of water use in Texas.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 10, 2018.

//s/ Hannah Riseley-White
Hannah Riseley-White

Table 1. Determination of Flood Inflows, Alamogordo Dam to Artesia [B.3.]
NEW MEXICO'S PECOS RIVER WATER DELIVERY OBLIGATION TO TEXAS
 Prepared by: Suzy Valentine, P.E. **2015**
 Today is: **05/05/16**

TAF for WY 2015 (CY 2015)

USGS Data Est. of CY Departure = **33.1****Table 1. General Calculation of Annual Departures**

	2012	Final RM Values		USGS 2015	Hypothetical	
		2013	2014		2016	2017
B.1.a. Index Inflows						
(1) Annual flood inflow	64.9	63.6	120.6	100.7	100.7	100.7
(a) Gaged flow Pecos R blw Summer Dam (Table 12)	-17.2	54.4	57.5	28.5	28.5	28.5
(b) Flood inflow Summer Dam to Artesia (Table 2)	11.2	39.9	42.5	3.1	3.1	3.1
(c) Flood inflow Artesia to Carlsbad (Table 3)	3.2	23.2	128.3	7.0	7.0	7.0
(d) Flood inflow Carlsbad to State Line (Table 4)	62.1	181.1	348.9	139.3	139.3	139.3
Total annual flood inflow			197.4	223.1	209.1	139.3
(2) Index inflow (3-year average)			90.5	107.8	98.3	55.1
B.1.b. 1947- Condition Delivery Obligation (Index Outflow)						
B.1.c. Average Historical (Gaged) Outflow						
(1) Annual historical outflow	17.7	51.0	146.6	101.1	101.1	101.1
(a) Gaged flow Pecos R at Red Bluff, NM (Table 12)	1.7	12.2	48.3	5.4	5.4	5.4
(b) Gaged flow Delaware R nr Red Bluff, NM (Table 12)	0	0.2	0.2	0.2	0.2	0.2
(c) Annual diversions for C-2713, Brine Partners, (Table 12)	0	0.0	0.0	0.0	0.0	0.0
(d) Annual evaporation from stored Texas water	19.4	63.4	195.1	106.6	106.6	106.6
Total annual historical outflow			92.6	121.7	136.1	106.6
(2) Average historical outflow (3-year average)			2.1	14.0	37.8	51.5
B.1.d. Annual Departure						
C. Adjustments to Computed Departure						
(1) Adjustments for depletions above Summer Dam						
(a) Depletions due to irrigation (Table 5)	3.2	2.0	-0.2	-3.2	-3.2	-3.2
(b) Depl from operation of Santa Rosa Reservoir (Table 6)	1	8.6	-1.7	-7.1	-7.1	-7.1
(c) Transfer of water use to upstream of Summer Dam (Table 12)	0	0.0	0.0	0.0	0.0	0.0
C.1. Recomputed Index Inflows						
(1) Annual flood inflow	69.1	74.2	118.7	90.5	90.5	90.5
(a) Gaged flow Pecos R blw Summer Dam	-17.2	54.4	57.3	28.5	28.5	28.5
(b) Flood inflow Summer Dam to Artesia	11.2	39.9	42.5	3.1	3.1	3.1
(c) Flood inflow Artesia to Carlsbad	3.2	23.2	128.3	7.0	7.0	7.0
(d) Flood inflow Carlsbad to State Line	66.3	191.7	346.8	129.0	129.0	129.0
Total annual flood inflow			201.6	222.5	201.6	129.0
Recomputed index inflow (3-year average)			93.3	107.4	93.3	49.4
C.1.c. Recomputed 1947-Condition Delivery Obligation (Recomputed Index Outflow)						
Recomputed Annual Departures						
			-0.7	14.4	42.8	57.2
Credits to New Mexico						
C.2. Depletions due to McMillan Dike			1.4	1.5	1.4	1.0
C.3. Salvage water analysis (Table 12)			0.0	0.0	0.0	0.0
C.4. Unappropriated flood waters			0.0	0.0	0.0	0.0
C.5. Texas water stored in NM reservoirs (Table 12)	0	0.0	3.8	17.2	0.0	0.0
C.6. Beneficial CU of Delaware River water (Table 12)			0.0	0.0	0.0	0.0
Final Calculated Departure, TAF			4.5	33.1	44.3	58.2

Evap added to C.5

140.0

Modification determination (draft)**New Mexico's Motion to Reconcile and Account for Texas Water Stored in
New Mexico During Water Years 2014 and 2015**

August 20, 2018

Introduction

This is a (draft) Modification Determination in response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015, dated July 13, 2018. New Mexico's request was that "...the River Master (1) determine that New Mexico is entitled to an adjustment of the Pecos River accounting in the amount of 21,071 acre-feet, and (2) affect this adjustment in the manner determined to be most efficient and consistent with the Compact, the Amended Decree, and the Manual."

Texas' Response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015 was dated July 27, 2018. Texas concluded that "When the states negotiated the Compact, they decided that neither state should be charged for water that it couldn't use...Providing credit for all evaporative losses for non-beneficial flood waters, plus giving full delivery credit for flood waters that wasted downstream is not an equitable distribution of the 2014 flood events..." Texas also concluded that "Because New Mexico failed to challenge the accounting for WY 2014 and WY 2015 within the time proscribed by the Supreme Court, and because its proposed adjustment would violate the Compact, Texas respectfully requests that the River Master deny New Mexico's Motion."

This document includes the River Master's Determination under the authority of the Amended Decree and the basis for the Determination. New Mexico's Motion resulted from a series of communications, meetings and documents that are listed in Appendix A, which comprises a summary of the background, the flood event, water management actions, and the decisions by the states and by the Bureau of Reclamation (Reclamation).

This Modification Determination is organized to answer four questions:

- Has the time expired to consider New Mexico's Motion?
- Did the flooding cause UAFWs?
- How should evaporation losses from stored water be allocated?
- How should the River Master's Manual be modified?

Has the time expired to consider New Mexico's Motion?

Texas argued that "Because New Mexico failed to challenge the accounting for WY 2014 and WY 2015 within the time proscribed by the Supreme Court, and because its proposed adjustment would violate the Compact, Texas respectfully requests that the River Master deny New Mexico's Motion." New Mexico took the opposite stance and argued that the Doctrine of Equitable Tolling applies and that approval of the Motion can be considered under authority of the Amended Decree.

The discussions about the flood and accounting for it equitably were continuous from the time it occurred until the present. The states were in active discussion, and after April 2015 they began to discuss the issue with the River Master. The first time the issue of time limits

was discussed, to the knowledge of the River Master, was at the May 31, 2018 meeting in Fort Collins.

When considering previous motions under the Amended Decree, the states agreed to toll the time for decisions and a possible time limit for a decision has not been an issue. Because equitable sharing and taking a cooperative approach are core purposes of the Pecos River Compact and the Amended Decree, the River Master finds no reason that New Mexico's Motion cannot be considered and resolved. The only unique attribute of Accounting for the 2014 flood is that it requires a retroactive adjustment of a Final Determination, which is not prohibited explicitly by either the Compact or the Amended Decree. It was known by the states from the time of the flood that such an adjustment would be required.

Did the flooding cause UAFWs?

The background of unappropriated flood waters is discussed in Appendix B. The core issue is whether the flood waters could have been stored or diverted under the 1947 condition. Prior to Brantley Reservoir construction, the only facility available to store the flood waters in New Mexico in any significant quantity would have been McMillan Reservoir. That reservoir had problems with leakage and sedimentation, and it is unknown exactly how much water it could have stored¹. Assuming that it could store very little, most of the flood waters originating in New Mexico would cross the state line and flow into Red Bluff reservoir.

An estimate of this quantity of water is 124,290 acre-feet, which was the quantity of unregulated water passing the Red Bluff gage from September 18 through September 30 (89,398 AF) plus 34,892 AF, which is the storage in Brantley on October 1 less the Carlsbad Project water of 42,057 AF. Transmission losses have not been applied to the Brantley storage water.

Whether Red Bluff Reservoir could have stored the full 124,290 AF under the 1947 condition would depend on its capacity and water level before the flood. In 2014, the volume of water in Red Bluff Reservoir on September 18 just before the flood was 84,841 AF. If the full 124,290 AF flowed into the reservoir, the required storage under the 1947 condition would be 209,131 AF, which seems to be within its capacity at that time.

Based on the conclusion that storing the flood waters was within the capacity of Texas and Red Bluff Reservoir under the 1947 condition, the River master concludes that the flood event of September 2014 did not comprise UAFW. If significant capacity had been available in McMillan Reservoir, this would constitute more evidence that the states could have handled the event under the 1947 condition.

If the flooding does not comprise UAFW, then the flood waters are part of ongoing inflow-outflow computations. That is, if they pass the state line, they are part of New Mexico's delivery credit. If they had been UAFW, half (less losses) would belong to Texas and not be credited to New Mexico as delivered water. Only New Mexico's half of the UAFW could flow across the state line for delivery credit.

¹ Bogener, Steve. Carlsbad Project. 1993 Reclamation project history document.

How should evaporation losses from stored water be allocated?

As the flows are not classified as UAFW, they are hydrologic flows to be accounted under the RMM. The accounting considers all hydrologic issues except evaporation losses that occur while water is stored. New Mexico provided a calculation of evaporation losses² of 21,071 AF

That occurred from September 19, 2014 to September 8, 2015. New Mexico's spreadsheet with the evaporation calculation provides the basis for the following analysis. Three issues that have risen in the discussions and documents from the states are considered:

1. Should the States share the evaporation loss for a period when water was being stored for public safety? If so, how should the end of this period be determined when Texas would assume all responsibility for evaporation loss?
2. The surface area of a reservoir increases with water elevation. Should Texas water be considered on top of the reservoir?
3. New Mexico accounted for delivery water at Avalon Reservoir. What would be the delivery loss to the state line?

The issue of public safety is germane to the allocation of evaporation losses because there were apparent concerns about flood impacts along the river in both states. The states' Technical Advisors reported different perceptions about the extent to which delays in releasing water were due to public safety concerns³. New Mexico's Technical Representative judged that after mid-November these concerns were over⁴. Texas' Technical Advisor testified that she was discussing public safety concerns with several parties in both states during February and March, 2015. Reclamation's written communication about this obligation was dated July 10, 2015, when, it indicated it would have to release the water once the public safety concerns were over unless a Warren Contract had been executed⁵. Reclamation had previously indicated an intention to release the water on or about March 1, 2015⁶.

During and soon after the flood the apparent public safety concerns were about Red Bluff Reservoir infrastructure and safety and river conditions where high water might threaten people and property. The specific public safety concerns raised in the communications from Texas were about bridge crossings in Eddy County, New Mexico, condition of the Red Bluff Reservoir spillway, and river conveyance downstream of Red Bluff Reservoir. The concerns in Texas are the responsibility of that state, and the bridge repairs in New Mexico are the responsibility of a private party that was attempting to get permits for the bridge repairs⁷.

² See New Mexico Exhibit 5 - Texas Water Stored in NM Tracking Table APPROVED USGS - NM Position Paper.xlsx.

³ See declarations of Technical Advisors in New Mexico's Motion and Reply in Support of Motion, and in Texas' reply to New Mexico's Motion.

⁴ Declaration of Hannah Riseley-White

⁵ July 10, 2015 email from Carolyn Donnelly to Suzy Valentine, Exhibit D of NM Motion.

⁶ January 28, 2015 email from Carolyn Donnelly to Greg Lewis and others, Exhibit 3 of Texas Response to New Mexico's Motion.

⁷ See Reclamation's January 28 email.

It is apparent that Texas was making good faith efforts to determine when it could receive waters that were stored in New Mexico but condition of its infrastructure and lack of storage space in Red Bluff Reservoir limited its options. The bridge crossing issue in Eddy County, New Mexico was not the responsibility of water users in New Mexico, who are entitled to their water allocation under the Compact. Because the concerns about public safety and how Texas could store the water shifted over time, it is apparent that a judgement is required to identify a date by which all responsibility for evaporation losses shift from being shared between the states to entirely Texas' responsibility. To probe when a fair date would be, the River Master studied the communications among the parties that have been provided in the course of this present discourse.

The main communications and declarations about public safety that are considered here are:

November 20, 2014	Texas formalized its request in an email to New Mexico to store its "portion" of the waters.
January 26, 2015	New Mexico's letter reply. It stated that that initial concurrence to store water was based on public safety but the basis evolved to comity. It states an intention to release the water before end of March 2015.
January 28, 2015	Reclamation email (from Carol Donnelly) notifying parties of intent to release water "on or about March 1."
February 3, 2015	Southwest Salt email to parties expressing concern about releases.
Hannah Riseley-White 1st declaration	Stated that after NM January 26 letter, "Pecos Bureau staff... were in communication with Texas on "numerous occasions" and that it was "generally understood" that water above Carlsbad Project limit belonged to Texas, who would assume responsibility for evaporation losses.
Suzy Valentine declaration	Reported conference calls in February and March with "various" New Mexico entities expressing concerns about public safety. Reports that Reclamation stated that "once public safety concerns had ended," it would release water even if Red Bluff was full.

From the communications, it is apparent that as time progressed the level of public safety concerns was diminishing, although New Mexico and Texas had different perceptions about them. The communications also point to Texas' concerns about releasing water when Red Bluff could not store it, which involves loss of water more than public safety. Per the communications toward the end of January, 2014 it is apparent that both NM and Reclamation were aiming at releasing the water with a start date of about March 1. While Texas reports concerns about public safety, it mainly cites concerns in New Mexico, which are not its primary responsibility. As New Mexico did not express the same concerns for

public safety in its own state, it shifts the spotlight to Texas' inability to store the water as the main cause of Texas' reluctance to accept the water.

Based on the communications discussed above it is the River Master's decision that March 1, 2015 is a fair date to shift all responsibility for evaporation to Texas. Prior to that date, the evaporation charge would be shared 50-50.

At what elevation in Brantley Reservoir is Texas' water stored?

A related issue is the elevation at which Texas water is stored in Brantley Reservoir. Texas has expressed concern that the computation by New Mexico unfairly places Texas water at the top, where the evaporation is greatest.

When the floodwater entered Brantley Reservoir in September 2014, the reservoir level was near the Carlsbad pool limit. As all water above that limit was available for New Mexico to deliver to Texas, either as UAFW or otherwise, it follows that the water to be delivered to Texas would sit on top of the Carlsbad water. If the reservoir level had been lower, it would be fair to say that as water volume was added to the lake, it should be stacked proportionally or "colored" to identify it. That is, if the water added to the Carlsbad Pool was 10,000 AF and the water stored for Texas was 20,000 AF, then each foot of elevation in the reservoir pool above the starting elevation would have one-third New Mexico water and two-thirds Texas water. By the same token, as New Mexico started drawing down the Carlsbad Pool, as it did starting about April 1, 2015, then it would be taking water from different strata in the reservoir as it was stacked when it was stored in the first place.

According to historical data, the Brantley Lake levels are normally well below the Carlsbad pool limit. USGS data for Brantley Lake level are available for 1990-1996, but data are missing after that until late 2017⁸. The available monthly data show fluctuations from 3229.8 to 3256.3 for the seven-year period. Most values are about 3245, which corresponds to a storage of about 20,000 acre-feet.

The question considered here is whether the actual 2014 elevation of the Brantley water level should govern how water was stored for each state or whether an average value should be used, such as 20,000 acre-feet. It is the River Master's decision that the 2014 elevation should be used, which indicates that New Mexico's primary responsibility for evaporation losses is for the Carlsbad pool and the Texas water is stored above that level. As a result, there is no apparent reason not to accept New Mexico's method for computation and allocation of evaporation loss.

What is the loss to the state line?

Beginning on August 5, 2015 and through September 8, 2015 New Mexico delivered 29,946 acre-feet from Avalon Reservoir, which is located downstream from Brantley Reservoir. Starting September 8 through October 5 they also delivered 23.230 acre-feet of "2015 State-Line Delivery Water."⁹ The credit to New Mexico for deliveries to Texas for both of these sets of water is measured at the Red Bluff gage. Therefore, there is no need to compute a delivery loss for these waters. However, if New Mexico could have delivered the evaporated

⁸ USGS gage 08401450 Brantley Lake Near Carlsbad, NM.

⁹ See NM delivery table for 2016

water to Texas, there would be some delivery loss to be accounted as outlined in the River Master's Manual¹⁰.

Water that New Mexico could have delivered to Texas if it was not evaporated in Brantley Reservoir would be released from Avalon Reservoir and requires a deduction for the losses to the state line. No formula for losses to the state line has been adopted in the Compact documents. In general, data to compute the losses are not adequate as explained in Section B.5. of the RMM:

“Because of the lack of sufficient data to accurately compute flood inflow in the Carlsbad to State Line reach by the inflow–outflow method, the flood inflow for this reach is to be determined by the hydrograph scalping method.” However, accounting for the evaporation credit requires that an estimate of the losses be made.

Some data on losses to the state line are available from the report of the Engineering Advisory Committee in Senate Document 109. A curve of these losses versus annual flow at Carlsbad was included in SD 109 at page 46, which states that the curve was taken from the Pecos River Joint Investigation (PRJI) study at page 69. That source includes a similar curve, but the values are different from those shown in SD 109 because the SD 109 curve includes irrigation and non-irrigation losses¹¹.

New Mexico regularly takes a loss for depletion from Carlsbad to Red Bluff, as explained in SD 109 and the PRJI report. Quantities of these losses are explained as including irrigation and other losses from evaporation and native vegetation. The irrigation depletions are considered in RMM accounting already, but non-irrigation depletions will vary by discharge through the reach. Data are not available to make a precise calculation of the added loss due to transmission of additional water delivery, but as the PRJI study shows, reasonable estimates can be made.

The procedure used here is to begin with the curve from the PRJI report, which is shown as Figure 1 below. This curve was derived as non-irrigation losses by the PRJI study team, as explained in its report.¹² As is evident, the scatter in the data is significant and the losses rise quickly with flow at lower flow values. The curve was for annual values, whereas the delivery in 2015 would be a single event of about a month.

¹⁰ See Section C.5. Texas water stored in New Mexico reservoirs.

¹¹ SD 109, page 46.

¹² PRJI page 69.

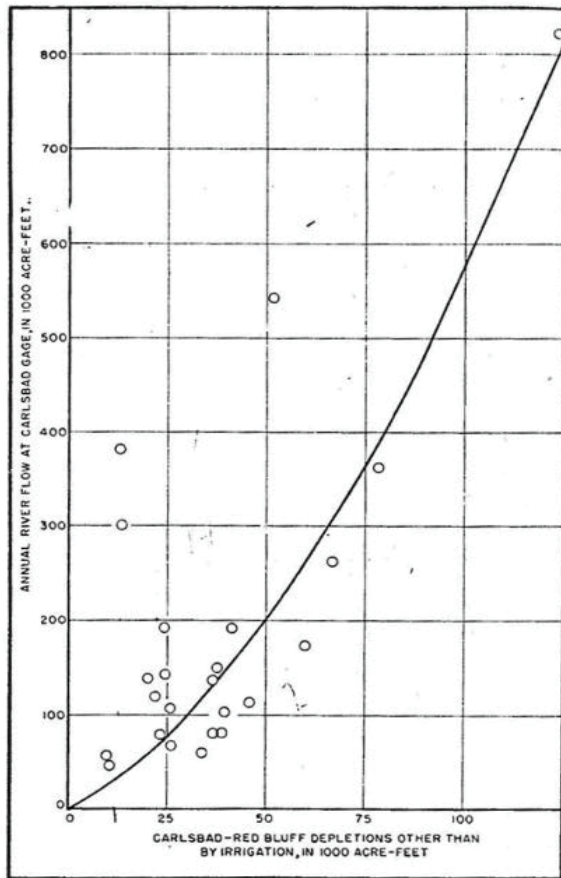


FIGURE 20.—Relation between annual depletions other than by irrigation, Carlsbad to Red Bluff, and annual river flow at Carlsbad, 1916 to 1939

Figure 1. Losses from Carlsbad to Red Bluff (from PRJI).

The PRJI data (Table 53) show an average total depletion of 12.2 TAF for August for the 1905-1939 period, which is the data series used in the Compact studies. The non-irrigation losses are 49.5% of the 12.2 TAF, or 6.03 TAF for an average year. These are a measure of the depletions that New Mexico has already been charged with. The needed calculation is how much additional loss would occur if a release of 17.9 TAF (the evaporation credit) was added to the flow.

NM's delivery from Avalon Reservoir took about a month, corresponding closely to August, 2015. Assuming it could have delivered the evaporated water in the same month, that would add 17.9 TAF to the August flow. The August flow at Carlsbad in 2015 was 19.9 TAF, so the release of evaporated water (if it had been available) would increase that to about 38 TAF.

Annual losses provide some idea of how losses vary with discharge, but monthly flows will be different. To assess how losses vary with annual flows, the curve for annual losses in Figure 1 was used. A regression equation was fitted to the curve:

Loss = $.00012 \cdot x^2 + 0.2474 \cdot x + 2.9484$; where x = annual flow at Carlsbad in TAF

The annual flow for WY 2015 at Carlsbad was 69.7 TAF, which is low as compared to the full record and corresponds to the part of Figure 1 where there is most scatter in the data. By adding 17.9 TAF, the total would be 87.6 TAF. Using the fitted equation for both flows, the incremental increase in depletion would be 20.9%. By applying this percentage to the monthly non-irrigation loss of 6.03 TAF, the indication is that New Mexico would be charged $0.209 \times 6.03 = 1.26$ TAF.

Computation of adjustments

Date to allocate responsibility for evaporation

New Mexico's spreadsheet is used to compute allocation of evaporation losses. A worksheet was added and the file was renamed "NM Motion Mod Determination NM Exhibit 5 - Texas Water Stored in NM Tracking Table.xlsx." The added worksheet is named "Evaporation allocation," and it is a copy of New Mexico's worksheet entitled "BRANTLEY accounting table." The computations of evaporation allocations are in rows N and O.

The result is that Texas is charged with 17,897 AF and New Mexico is charged with 3,174 AF. The interpretation is that if the water had not been evaporated, New Mexico could have delivered 17,897 additional AF by releasing it from Brantley Reservoir beginning in August, 2014.

When NM started the delivery on August 5, the available water would have been greater by the amount of loss from that date to the end of delivery on September 8, or 1,756 AF. The evaporation loss computations take that into account, and the loss to the state line is not affected significantly by the month that it takes to release the water.

Loss to state line

The estimated loss to the state line was explained above and is 1.26 TAF.

Computation of New Mexico evaporation credit

NM calculation of evaporation credit = 21,071 AF

Public safety concern and date for evaporation responsibility (credit to Texas) = 3,174 AF

Delivery loss to state line = 1,260 AF

Net NM credit for storing water = $21,071 - 3,174 - 1,260 = 16,637$ AF

How should the River Master's Manual be modified?

The flooding of 2014 precipitated two issues that had not been considered before under the Amended Decree: 1) a retroactive adjustment due to an error in gaged flows; and 2) water stored in New Mexico at Texas' request. For the gaging error, the Manual's existing provisions can be used to modify the flood inflows by using the correct gaged flows, and the computed values can be carried ahead for the three-year averages.

The stored water at Texas' request required an adjustment to allocate the evaporation losses and can be accounted either as a one-time credit or by changing the relevant tables in the annual accounting and spreading changes over three years by averaging. This is explained in an accompanying document about the revised accounting.

Regardless of how retroactive adjustments are made, whether to correct gage errors or to respond to unusual situations such as the 2014 flooding, the River Master's Manual should explain how to handle them. To accommodate this, a section is added to the Manual to read:

C.7. Adjustment to a Final Report

If information to compute New Mexico's Article III(a) obligation under the Pecos River Compact is delayed or shown to be in error, an adjustment to an annual Final Report may be required. Per a Motion by one or both States, the River Master will determine if good cause has been shown to make such an adjustment. If it has, the River Master will account for it using appropriate provisions of the Manual.

Summary

The 2014 flood flows were determined not to be unappropriated flood waters because under 1947 conditions the states would have been able to store and/or divert them. There is a hypothetical possibility that reservoirs in both states could have been full and unable to store the water, but there were no antecedent wet conditions or a series of earlier floods that would make this likely.

There is a dispute among the states as to when the public safety concerns for release of water were over. The River Master determined that March 1 is a reasonable date to set for this event. Evaporation responsibility was divided 50-50 between the states before that date and 100-percent to Texas after that date.

New Mexico would have delivered the water from Avalon Reservoir (if it had not evaporated). The River Master estimated a delivery loss from that point to the state line.

A section is added to the River Master's Manual to explain how to handle retroactive adjustments to annual accounting.

Appendix A: Communications, meetings and documents

The main written communications, meetings and documents related to New Mexico's Motion and considered by the River Master in preparing this Modification Determination are listed in this appendix. Other communications are included in the exhibits submitted by States.

Nov 20, 2014	TX email requesting storage
Jan 26, 2015	NM letter responding to TX request
Apr 20, 2015	NM email re 4-16-2015 conference call
Nov 3, 2015	TX email with Dark Canyon adjustment
Dec 29, 2015	TX transmits Brantley process agreement
Dec 29, 2015	NM transmits discuss draft spreadsheet
Feb 11, 2016	NM transmittal of meeting notes
Apr 15, 2016	NM TX email on process
Oct 13, 2016	NM TX email re process and inability to agree

Dec 12, 2016	NM email re meeting in February
Jul 27, 2017	TX email states discussing request to RM for assistance
Dec 13, 2017	NM TX letter requesting RM assistance
Dec 18, 2017	RM letter agreeing to process
Dec 22, 2017	TX position paper re UAFW
Dec 22, 2017	NM position paper re UAFW
Jan 3, 2018	RM letter on process
Jan 16, 2018	NM TX joint letter on process
Jan 17, 2018	NM letter proposed agenda March meeting
Jan 26, 2018	TX response to NM position paper (mentions Dark Canyon)
Jan 26, 2018	NM response to TX position paper
Feb 23, 2018	TX request to postpone scheduled meeting
April 5, 2018	NM letter informing agreement for May 31 rescheduled meeting
Jun 25, 2018	NM TX letter re briefing schedule on UAFW
Jun 28, 2018	SCOTUS approval of extension for WY 2017 Final Report
Jul 13, 2018	NM Motion on UAFW
Jul 27, 2018	TX response to NM motion
Aug 10, 2018	NM reply to TX response

Appendix B: Criteria to declare unappropriated flood waters

Purpose of the appendix

This appendix explains how the flood occurred, the concept of unappropriated flood water (UAFW) and the water management actions taken by the parties.

The flood flows and the impacts in the states are described in New Mexico's Motion¹³ and in Texas' response¹⁴, as well as in other documents exchanged by the states during the period between the flood and filing of New Mexico's motion. The flooding was caused by heavy rainfall resulting from the remnants of Tropical Storm Odie, which affected the Southwest and had the potential to cause the wettest September on record in parts of New

¹³ New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015, dated July 13, 2018.

¹⁴ Texas' Response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015, dated July 27, 2018.

Mexico.¹⁵ Table 12 of the River Master's Final Report for Water Year 2014 showed 10.98 inches of rain for September at the Brantley Lake gage. Rain gages in the upper Pecos Basin did not show such large precipitation totals for the month, which indicates that the main storm effects were in the lower part of the basin in New Mexico.

Explanation of unappropriated flood water in Compact documents

The concept of unappropriated flood water is included in the Pecos River Compact (Compact) and is explained in the report of the Engineering Advisory Committee (EAC) of the Pecos River Compact Commission¹⁶. The core concept that is implicit in the definition and explanations is that the Compact comprises an appropriation in the sense that New Mexico agreed not to deplete the water available to Texas under the 1947 condition. This established the water rights of New Mexico and Texas. Because the water flows are different each year, the annual entitlements of the States vary and depend on hydrologic conditions and capacity to store and divert water.

The EAC's discussions addressed two aspects of UAFW. One aspect was about development of new storage to capture the UAFW and is described this way: "There is a quantity of floodwater that is unappropriated in the basin. It wastes to the Gulf of Mexico unused. That quantity of water is that water which spills from Red Bluff Reservoir and is not used in the Texas area above Girvin. That water belongs to neither state. It can be made usable by the construction of additional storage facilities. The two States have agreed to apportion that on a 50-50 basis."¹⁷

The other aspect was about how to account for the UAFW when it occurs and is explained in this passage: "If there is no change in conditions on the stream from those which were estimated by the 1947 condition, the unappropriated floodwater will be the quantities as defined by the compact, namely, waters which will spill from Red Bluff Reservoir and which will pass Girvin, Tex., unused with existing storage and diversion facilities."¹⁸

Royce Tipton¹⁹, the Chairman of the EAC explained further: "I believe that the term 'Unappropriated floodwaters' which appears in subparagraph (i) is plain. It means just what it says, viz: that any floodwater that is not now used in the basin above Girvin, Tex., is unappropriated floodwater, or water that would spill from Red Bluff Dam and would pass all the present diversion and storage facilities in Texas and flow unused past Girvin, Tex."

While these definitions seem clear, the variability in the conditions introduces a complication in determining UAFW. Tipton explained it this way: "However, determination

¹⁵ Sosnowski, Alex. 2014. Odile Causes Tremendous Flooding in Southwest US. <https://www.accuweather.com/en/weather-news/flooding-threat-returns-to-ari/34047768>

¹⁶ The Compact and accompanying information are included in Senate Document 109, 81st Congress, 1st Session: "Pecos River Compact. Compact Entered Into by the States of New Mexico and Texas Relating to the Waters of the Pecos River, Together with the Report of the Engineering Advisory Committee to the Pecos River Compact Commission."

¹⁷ SD 109, page 98.

¹⁸ SD 109, page 162. EAC's "Manual of Inflow-Outflow Methods of Measuring Changes in Stream-Flow Depletion."

¹⁹ Royce Tipton had a key role in supporting development of the Pecos River Compact. He was chair of the EAC and had previously chaired the Consulting Board of the Pecos River Joint Investigation.

of such waters may be more complicated if the 1947 condition materially changed....It is apparent that to make a sufficiently accurate determination for the purpose intended of the unappropriated flood waters, it will be necessary to reconstruct the river to the 1947 condition and make a routing study by the methods used by the engineering advisory committee. Such studies will be necessary only at the times when it is believed that unappropriated flood waters under the definition of the compact have entered the river.²⁰

Routing studies were performed to develop the regression formula that divides the water between the States and is used in the River Master's Manual (RMM). The studies used the hydrologic record, which includes a few occasions prior to 1948 when large flows occurred and Red Bluff spilled²¹. If the states lacked storage and diversion facilities to capture and use the flood water, it would be wasted. However, it was not UAFW until the Compact was in effect.

From 1960-82 there were 12 periods where flood storage would have exceeded the Brantley conservation pool if the reservoir had been in place²², but whether any of these were UAFW has not been evaluated.

With the construction of Brantley Dam, Reclamation and New Mexico gained new capacity to store flood waters in conjunction with the Carlsbad project. Now, storage quantities are governed by the Project rules and the Resolution between the States²³. The Resolution specified that Reclamation has "developed a procedure for release and accounting to assure that NM does not unduly benefit from the release of water stored in Brantley Reservoir in excess of 42,000 acre-feet." The agreement also specifies that NM has no intention of seeking additional storage "...except for the storage of waters which have been determined by the Pecos River Commission to be 'unappropriated flood waters as defined by the Pecos River Compact...' It was unclear how this provision might be implemented, but a logical scenario is for UAFW to be designated and for New Mexico to seek storage of its part in Brantley Reservoir, maybe involving a Warren contract with Reclamation.

To summarize, prior to the Compact the flood waters that passed from New Mexico to Texas were included in the studies that led to the regression equation in the RMM. In some cases, they likely flowed past Girvin unused but there were no appropriated rights between the States because no Compact had been developed. The Compact set the appropriation, which is that New Mexico will not deplete the 1947 condition, on the average, with accounting on a three-year basis. The measure of appropriated quantities is the regression equation, which expresses the delivery obligation that does not deplete Texas' water below the 1947 condition. The regression equation was developed by correlating delivery to the state line as a function of inflows and outflows from river reaches in New Mexico. In the Compact, unappropriated flood waters were defined as those over and above the capability of the states to store and divert the waters under the 1947 condition, which includes the infrastructures of that time.

²⁰ SD 109, page 114.

²¹ SD 109, page 82.

²² Pecos River Commission Resolution dated March 6, 1984.

²³ Ibid. Resolution

If both states have the 1947 infrastructure for storage and diversion, flood waters that pass Girvin despite their efforts to store and divert them are UAFW. As an example, suppose a flood hits below Brantley and New Mexico has no capacity to store it. New Mexico wants to use it as state line delivery water. If Texas has capacity in Red Bluff to store it, then it is not UAFW and New Mexico gets credit for delivery. Now, suppose that for some reason Red Bluff reservoir is out-of-service due to an infrastructure problem. It is not New Mexico's responsibility that the Texas infrastructure is not able to store the flood and, even though the water passes Girvin unused, it is not UAFW. As another example, suppose that Red Bluff reservoir has its 1947 storage capacity, but is full when the flooding hits. Texas cannot store the water and it passes Girvin unused. It is not Texas' fault that the storage space was not available, so the water will be declared as UAFW and Texas receives credit for half. New Mexico is not able to claim delivery credit for the full flood, but only half. These examples illustrate importance of infrastructure condition or capacity and the state of storage levels when flooding occurs.

Water management actions

Through a series of communications the states arranged for New Mexico to store flood waters in Brantley Lake to help Texas manage storage volumes in Red Bluff Reservoir and to respond to public safety concerns. The stored water was still in Brantley Reservoir as of the beginning of summer, 2015. As a result of its determination that it could no longer store the water without a Warren Contract and per New Mexico's request, Reclamation released some 29,946 AF of water from Brantley Reservoir from August 5 through September 8, 2015. This water was then released by New Mexico from Avalon Reservoir.

In the first five days of flooding, Texas storage increased about 106,530 AF (to 191,371 AF from 84,841 AF), which included Delaware River flows of about 34,819 AF from September 19 through 24, plus rainfall directly on the surface, less outflows and less any losses. Outflows from the spills and gate releases totaled 11,758 AF for those five days. If Red Bluff capacity had been at the 1947 condition level, there was have been additional capacity and Red Bluff operators would not have had to release water to a safe level. Red Bluff Reservoir's initial total capacity has been estimated at 310,000 AF and various reports cite a capacity of 270,000 AF, but dam safety concerns had reduced this by 2014²⁴. The maximum storage immediately after the flood was 191,371 AF on September 23, and the Red Bluff managers reduced the level to the range of 130,000 AF by the end of October²⁵, which was apparently regarded as a safe operational level at that time. Storage volume at the dam safety limit at the crest of the service spillway at elevation 2827.4 is apparently about 140,000 AF²⁶.

Red Bluff managers had lowered the water level to the range of 128,000 AF by early November, apparently for dam safety reasons. This required releases plus spills of 61,780 AF²⁷. By the end of October, Brantley Reservoir was 36,019 AF over the Carlsbad Project

²⁴ Texas Water Development Board. 2013. Volumetric Survey of Red Bluff Reservoir, November 2011 Survey.

²⁵ Brantley and Red Bluff Reservoir operations 2014-2015 Final REV 12-20-2017.

²⁶ Robin Prewit's email of December 7, 2014 to Suzy Valentine states that Red Bluff spilled in September 2014 at elevation 2828.21. See Exhibit 1 of Texas' Response to New Mexico's Motion.

²⁷ Per sum of September 19 through October 31, Brantley and Red Bluff operations at Column Q.

limit. If that reservoir was not available, as in 1947, some of that water could have been stored in a McMillan Reservoir that had diminished capacity, but if none of it could have been stored, a full-capacity Red Bluff Reservoir could have stored it.

Summary and conclusions

Although the 2014 flood was large, it did not involve magnitudes that were unprecedented in the record as shown in the Review of Basic Data²⁸. It is apparent that Red Bluff Reservoir was constructed with a large capacity to capture runoff for carry-over use in irrigation, as well as hydroelectric power generation. The River Master has not found an original design report to explain the purposes of the storage, but documents available indicate a storage of about 300,000 AF for irrigation and hydroelectric power²⁹. The power facilities are relatively small, which indicates that the intended major use is for irrigation.

The apparent reason that Texas could not store the flood water is diminished capacity in Red Bluff Reservoir. It is not New Mexico's responsibility that Texas was unable to store these waters.

²⁸ See page 1-24 and Table 21-7 of Review of Basic Data, 1960.

²⁹ A map downloaded from Texas Water Institute indicates authorization under state permit 1217 dated 1934 for 300,000 AF storage for power and irrigation. Also, A report dated 2007 "Water Issues Facing the Pecos Basin of Texas" refers to construction of up to 307,000 AF of storage for irrigation. <http://pecosbasin.tamu.edu/media/1885/pecos3.6.07.pdf>



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August 31, 2018

U.S. Mail and Email

River Master of the Pecos River
Department of Civil and Environmental
Engineering
Colorado State University
Campus Delivery 13 71
Fort Collins, Colorado 80523-1372
Neil.Grigg@colostate.edu

Re: Texas v. New Mexico
No. 65, Orig., U.S. Supreme Court
New Mexico's Comments on the Draft Modification Determination

Dear Dr. Grigg:

Thank you for the opportunity to comment on the Draft Modification Determination and related documents. New Mexico has no comments on the Final Draft Report for Accounting Year 2018 or the Summary of Revisions for Water Years 2014, 2015 and 2016, but pursuant to your letter of August 20, 2018, New Mexico submits the following comments on the Draft Modification Determination:

1. (Draft Modification Determination pages 5-7) The Draft Modification Determination uses the Pecos River Joint Investigation ("PRJI") in calculating conveyance loss of water from Brantley Reservoir to the state line. New Mexico agrees that it is reasonable to utilize the PRJI, particularly given the prominence of the 1947 condition in the Pecos River Compact. However, the Draft Modification Determination bases this calculation on data from the month of August, a process that is inconsistent with the River Master's determination that the water could have been released by March 1st Draft Modification Determination at 4. This is important because conveyance loss is sensitive to temperature and weather conditions, and therefore the time of year. If New Mexico had released the water at issue on March 1, 2015, when the River Master has determined that the public safety concerns had abated, the conveyance losses would have been significantly less. Using the methodology employed in the Draft Modification Determination for a hypothetical release in March, results in a 0.62 thousand acre feet ("TAF") loss, approximately half

of the 1.26 TAF loss calculated in the Draft Modification Determination for a release in August.

2. (Draft Modification Determination pages 6-7) The incremental increase in depletion calculated in the Draft Modification Determination using the regression equation generated for Figure 1 appears to contain an error. New Mexico calculates the incremental increase in depletion to be 22.9%, not 20.9% as reflected in the Draft Modification Determination. *See* Draft Modification Determination at 7. Although the perceived error does not inure to New Mexico's benefit, New Mexico suggests that the calculation be verified to ensure it is correct.
3. (Draft Modification Determination page 7) The Draft Modification Determination cites to Table 53 for the PRJI data. New Mexico submits that this should be corrected to Table 54.
4. (Draft Modification Determination pages 8) New Mexico suggests an edit to the language to be added to the River Master's Manual in order to broaden the provision to be more consistent with the Compact and the Amended Decree. The following insertion (shown in italics, underlining, and the color red) is suggested:

“C.7. Adjustment to a Final Report

If information to compute New Mexico's Article III(a) obligation, *shortfall, or overage* under the Pecos River Compact is delayed or shown to be in error, an adjustment to an annual Final Report may be required. Per a Motion by one or both States, the River Master will determine if good cause has been shown to make such an adjustment. If it has, the River Master will account for it using appropriate provisions of the Manual.

The current dispute does not clearly fit within the category of an “obligation,” and New Mexico's proposed addition would help ensure that future issues could be corrected.

5. (Draft Modification Determination pages 12) In the first paragraph under the heading “Water management actions,” third sentence, the Draft Modification Determination suggests that New Mexico requested that Reclamation release the water stored in Brantley for Texas. New Mexico does not believe this is accurate, and requests that the phrase “and per New Mexico's request,” be deleted from the Final Modification Determination.

Thank you for your consideration.

Respectfully submitted,

/s/

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Jeffrey Wechsler

*Counsel for the New Mexico Interstate Stream
Commission*

And

Hannah Riseley-White

Technical Advisor for the State of New Mexico

cc: Mary Smith (Legal Advisor for the State of Texas)
Suzy Valentine (Technical Advisor for the State of Texas)
John Longworth (Director of the New Mexico Interstate Stream Commission)
Dominique Work (NMISC Legal Counsel)

No. 65, Original

IN THE
SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 2017

STATE OF TEXAS, Plaintiff,

V.

STATE OF NEW MEXICO, Defendant.

Before the River Master:
Neil S. Grigg

TEXAS' RESPONSE TO THE PECOS RIVER MASTER'S DRAFT
MODIFICATION DETERMINATION

TO THE RIVER MASTER OF THE PECOS RIVER:

The State of Texas has reviewed the River Master's Draft Modification Determination, which was submitted via email to the State of Texas on August 20, 2018. The River Master asked for the States to respond by August 31, 2018. Texas' comments and objections to the River Master's Draft Modification Determination are contained in Exhibit 1 and incorporated fully herein for all purposes. Texas respectfully requests the River Master make the changes outlined in Exhibit 1.

Respectfully submitted on this 31st day of August, 2018.

/s/Mary E. Smith

/s/ Suzy Valentine, P.E.

Texas State Bar No. 24041947

Texas Commission on Environmental Quality

Assistant Attorney General

P. O. Box 13087

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ATTORNEY FOR THE STATE OF
TEXAS

CERTIFICATE OF SERVICE

On August 31, 2018, a true and correct copy of Texas' foregoing Response to the Pecos River Master's Draft Modification Determination was sent to the following:

Dominique Work
New Mexico Interstate Stream Commission
Room 101, Bataan Memorial Building
P. O. Box 25102
Santa Fe, New Mexico 87504-5102
Via Email and Certified Mail, Return Receipt Requested

Jeffrey Wechsler
Montgomery & Andrews, P.A.
325 Paseo de Peralta (87501)
P. O. Box 2307
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jwechsler@montand.com
(505) 986-2637
(505) 982-4289 (fax)
Via E-mail and Certified Mail, Return Receipt Requested

Hannah Riseley-White, P .E
Engineer Advisor, Pecos River Compact
New Mexico Interstate Stream Commission
P. O. Box 25102
Santa Fe, New Mexico 87504
Hannah.Riseley-White@state.nm.us
Via E-mail and Certified Mail, Return Receipt Requested

/s/ Mary E. Smith

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EXHIBIT 1

TEXAS' COMMENTS/OBJECTIONS**River Master's Draft Modification Determination**

Texas' comments and objections to the River Master's Draft Modification Determination (Draft Modification), dated August 20, 2018, are described below. Texas reasserts and incorporates by reference all arguments made in its response to New Mexico's motion. Finally, Texas reiterates its request to deny New Mexico's motion and grant the joint motion submitted by Texas and New Mexico regarding the Dark Canyon Draw gage error in WY 2014.

1. The deadline for consideration of New Mexico's motion has passed.

New Mexico's motion seeks to amend the WY 2015 accounting. The Amended Decree requires a party to deliver any objections to the River Master's preliminary accounting for that water year by June 15, 2016, and to seek review of any final determination by July 25, 2016.¹ Although New Mexico knew that it disagreed with the accounting, knew that the accounting was in Texas' favor, and even knew how it would propose to amend the accounting,² New Mexico did not object to the preliminary accounting or seek review in the Supreme Court.

This error cannot be circumvented by modification of the River Master Manual (RMM). The Amended Decree expressly requires that modifications of the RMM made by the motion of one party are prospective: "A modification of the Manual by motion shall first be applicable to the water year in which the modification becomes effective."³ Retroactive modification of the RMM is only authorized when the parties agree to make a modification retroactive.⁴

Despite New Mexico's failure to preserve its objection and follow the process set out by the Supreme Court in the Amended Decree, Texas, for reasons of comity, has continued to attempt to resolve the dispute over these floodwaters with New Mexico. However, at no time during the history of Texas' attempt to resolve this matter has Texas stated that it intended to waive any deadline or defense under the Amended Decree.

The undersigned are unaware of any deadlines that Texas has waived in the past. Texas has cooperated on joint motions with New Mexico in the past, when parties agreed that a correction to a final accounting was appropriate, as permitted by the Amended Decree. However, even if Texas had waived a deadline in the past, it does not mean that Texas is obligated to waive all deadlines in the future.

¹ See *Texas v. New Mexico*, 485 U.S. 388, 391-92 (1988).

² See Exhibit (Ex.) G to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico during Water Years 2014 and 2015 (New Mexico's Motion).

³ *Texas v. New Mexico*, 485 U.S. at 392, ¶ C.3.

⁴ *Texas v. New Mexico*, 485 U.S. at 392, ¶ C.1.

2. Unappropriated floodwater designation.

The Compact defines unappropriated floodwaters as “water originating in the Pecos River Basin above Red Bluff Dam in Texas, the impoundment of which will not deplete the water usable by the storage and diversion facilities existing in either state under the 1947 condition and which if not impounded will flow past Girvin, Texas.”⁵ It is not limited to storm events or flood inflows.

The Draft Modification does not comply with the Compact because it limits the evaluation of unappropriated floodwaters to the time that the storm occurred⁶ and fails to account for other inflows and releases that contribute to the volume of water in Red Bluff Reservoir. For example, the Draft Modification does not include inflows from the Delaware, which also experienced heavy flooding during the storm, or the inflows that occurred later in 2014, in 2015, and in 2016. It does not account for CID releases. These flows and releases all contribute to the amount of water that Red Bluff would have stored. When they are accounted for, Red Bluff, even at a 270,000 acre-feet capacity, would have spilled.⁷

At current capacity,⁸ Red Bluff Reservoir released 106,101 AF in 2014 and 2015 to accommodate floodwater inflows and releases from New Mexico.⁹ If Red Bluff had a 270,000 AF capacity,¹⁰ it would have spilled at least 32,447 AF in 2015 and 2016.¹¹ Some portion of these waters should be designated unappropriated floodwaters under the Compact.

⁵ Pecos River Compact, Art. II(i).

⁶ Moreover, the period selected for the storm in the Draft Modification, September 18-30, 2014, is inconsistent with the period selected in the WY 2014 accounting. The scalping performed in the WY 2014 Preliminary Report, which was the basis for Table 4 in the Final Report, indicates that floodwaters continued downstream through at least October 15, 2014.

⁷ Red Bluff Reservoir operations with Brantley flood releases in 2014-2015 Incl losses 8-31-18.xlsx, 270 TAF Cap Table at column O. This spreadsheet analyzes the event assuming that floodwaters were immediately released, rather than stored. New Mexico criticized Texas’ original submission because it did not include losses that occurred before September 18, 2014, at Red Bluff Reservoir. The attached analysis begins at September 18, 2014, and corrects this error. This analysis also includes a conservative estimate for losses other than evaporation, addressing New Mexico’s other critique. Finally, the new file includes the Texas Water Development Board evaporation data used to calculate evaporative losses in both spreadsheets.

⁸ The Draft Modification, Appendix B, page 13, states that “[s]torage volume at the dam safety limit at the crest of the service spillway at elevation 2827.4 is apparently about 140,000 AF.” Red Bluff Reservoir’s capacity at 2827.4 ft. NGVD29 (2828.91 ft. NAVD88) is 151,110 AF. Volumetric Survey of Red Bluff Reservoir, November 2011 Survey, Texas Water Development Board, 2013. However, the reservoir began to spill on September 21, 2014, at 2826.7 ft. NGVD29 (2828.21 ft. NAVD88) at 145,972 AF. Brantley and Red Bluff Reservoir Operations 2014-2015 FINAL Rev 12-20-2017.xlsx, RB EL-Cap.

⁹ Brantley and Red Bluff Reservoir Operations 2014-2015 FINAL Rev 12-20-2017.xlsx, sum of Q125, 2014 Table, and O368, 2015 Table. At page 13, footnote 28, the Draft Modification compares the flows at Carlsbad, rather than Red Bluff, which is on pages 1-26 of the Review of Basic Data, 1960. Taken together, the September 2014 flows for both Red Bluff and Delaware are about the sixth largest monthly flow.

¹⁰ The Draft Modification suggests that Red Bluff may have initially had a larger capacity. However, the Report of the Engineering Advisory Committee, January 14, 1948, which was adopted by the Pecos Compact Commission, states that the intended capacity for Red Bluff Reservoir under the 1947 Condition was 270,000 acre-feet. Report of the Engineering Advising Committee, January 14, 1948, at p. 10.

¹¹ Red Bluff Reservoir operations with Brantley flood releases in 2014-2015 Incl losses 8-31-18.xlsx, 270 TAF Cap Table at O550.

3. Calculation of evaporative loss.

a. Apportionment of evaporative loss.

The Compact contemplates only two instances in which evaporative losses may be apportioned. First, under Article VI(d)(iii), if unappropriated floodwaters are stored in New Mexico, reservoir losses are to be charged to each state in proportion to the quantity of water belonging to the state in storage. Second, under Article XII, “[t]he consumptive use of water by the United States . . . shall be charged as a use by the state in which the use is made; provided that such consumptive use incident to the . . . impounding . . . in one state for use in the other state shall be charged to such latter state.”¹² Article XII provides a means of apportioning evaporative losses for water impounded in New Mexico for federal projects in Texas.

If, as New Mexico argues and the River Master has preliminarily concluded, the floodwaters stored in Brantley Reservoir are not unappropriated floodwater under the Compact, then New Mexico must rely on Article XII to charge Texas for reservoir losses. But Article XII does not apply, because the stored water was not stored for Texas’ use, for a federal project or otherwise.

The Bureau of Reclamation did not have the authority to store water for use in Texas.¹³ Its only authority to store water above the Carlsbad Irrigation District conservation pool was for flood control.¹⁴ Therefore New Mexico was unable to store the water until Texas could use it, as Texas requested. When Reclamation determined that the flood control purpose had ended, it released the floodwaters.¹⁵ To safely receive deliveries, Red Bluff Reservoir, beginning in March 2015, released water downstream, wasted.¹⁶

b. Public safety.

The Draft Modification erroneously concludes that as of March 1, 2015, Reclamation was solely storing floodwaters for the benefit of Texas. This is directly contradicted by Reclamation’s July 10, 2015, email stating that its flood control purpose was coming to an end as of August 2015 and Red Bluff Reservoir’s releases for floodwater deliveries, which began in March 2015.¹⁷

Reclamation was not authorized to store water for use in Texas.¹⁸ Reclamation stated that it had stored the water to prevent further damage to Red Bluff, to reduce flood damage downstream from Red Bluff, and because of safety concerns related to Pecos River crossings in Eddy County, New Mexico.¹⁹ In November 2014, Red Bluff explained to

¹² Pecos River Compact, Art. XII.

¹³ Ex. D to New Mexico’s Motion.

¹⁴ Ex. D to New Mexico’s Motion.

¹⁵ See Ex. D to New Mexico’s Motion. See also, Brantley and Red Bluff Reservoir Operations 2014-2015 FINAL Rev 12-20-2017.xlsx, 2015 Table.

¹⁶ See Brantley and Red Bluff Reservoir Operations 2014-2015 FINAL Rev 12-20-2017.xlsx, 2015 Table.

¹⁷ Ex. D to New Mexico’s Motion; see Brantley and Red Bluff Reservoir Operations 2014-2015 FINAL Rev 12-20-2017.xlsx, 2015 Table.

¹⁸ Ex. D to New Mexico’s Motion.

¹⁹ Ex. D to New Mexico’s Motion.

Reclamation that debris would be cleared and reservoir repairs would be completed in time to allow Red Bluff to begin accepting water in March.²⁰ Red Bluff began releasing water in anticipation of Brantley releases on March 8, 2015.²¹ Therefore, the only remaining public safety concerns in March 2015 were New Mexico's concerns.

The Draft Modification concludes that public safety concerns in New Mexico were private concerns. This conclusion is incorrect and irrelevant. Eddy County, which was requesting additional time to obtain funding and permits for bridge construction, is a subdivision of the State of New Mexico.²² But even if Reclamation was holding water to help private parties in New Mexico, it was helping New Mexico's citizens, not Texas. Finally, Texas did not request that New Mexico hold water for New Mexico entities. Nothing in the record supports this conclusion.

Reclamation was never holding water for use in Texas – it was holding water for flood control. And by March 2015, that flood control was no longer benefiting Texas. In March 2015, Red Bluff began releasing water in anticipation of Reclamation floodwater releases. Therefore, Texas should not be charged for evaporative losses that occurred from March – September 2015.

c. Calculation of evaporative loss.

As set forth in the Pecos River Compact, “[r]eservoir losses shall be charged to each state in proportion to the quantity of water belonging to the state in storage at the time the losses occur.”²³ The Draft Modification calculates losses based on elevation of the assumed Carlsbad Irrigation District (CID) storage rather than based on the quantity of water belonging to the state in storage at the time the losses occur. This “stacked” methodology first calculates the evaporation as if the reservoir was at the maximum allowable volume for CID and then allocates the remaining evaporation up to the actual reservoir level to the additional storage. This method ignores the fact that water is mixed in the reservoir. For example, the floodwater was released from the same outlet that CID releases are made from. But more importantly, this method incorrectly applies all the evaporation at the top layer of the reservoir and its larger area to the floodwater storage instead of allocating the total evaporation for the reservoir in proportion to the amount of water in the reservoir allocated to each state.

When distributed by volume, as the Compact requires, rather than the stacked methodology that the Draft Modification adopts, only 18,548 acre-feet of the evaporative losses are attributable to floodwater storage.²⁴

²⁰ Attachment 1, November 25, 2014, email between Donnelly (Reclamation) and Prewit (Red Bluff Reservoir).

²¹ Brantley and Red Bluff Reservoir Operations 2014-2015 FINAL Rev 12-20-2017.xlsx, 2015 Table at O69.

²² Ex. 3 to Texas' Response to New Mexico's Motion; Ex. D to New Mexico's Motion; Attachment 2, July 24, 2015, email between Reclamation, Texas, New Mexico, Eddy County, and others.

²³ Pecos River Compact, Art. VI(d)(iii).

²⁴ First the total reservoir evaporation based on the pan evaporation and reservoir area was calculated. The amount of allowable storage for New Mexico is then subtracted from the daily total storage in Brantley Reservoir between September 19, 2014, and September 13, 2015, when the deliveries to Texas were completed and unappropriated flood waters were reduced to zero, to determine the evaporation related to storage of

4. Proposal for River Master Manual modification.

a. Gaging error at Dark Canyon Draw.

Texas agrees with the proposal to amend the WY 2014, 2015, and 2016 final reports to correct the Dark Canyon Draw gage error.

b. Proposal for amending WY 2015 final report to account for evaporative losses from floodwater stored in Brantley Reservoir in WY 2014 and 2015.

For the reasons stated above, Texas does not agree to the proposal for amending the final reports regarding evaporative losses from floodwater stored in Brantley Reservoir in WY 2014 and 2015.

c. Proposal for RMM modification.

The River Master proposes that the RMM be modified to allow for adjustments to a final report if information necessary to compute New Mexico's Article III(a) obligation "is delayed or shown to be in error." No party has moved to make this modification, and the Amended Decree does not authorize the RMM to make a modification on his own motion. More importantly, the proposal contradicts the Amended Decree, which requires parties to object to a final accounting within prescribed timeframes, by creating a process for amending and objecting to a final accounting at any time and for almost any reason. Therefore, it would be clearly erroneous to modify the RMM as proposed.

floodwater for each year. Evap Summary, Pro-rated Evap 2014-2015 Final 12-20-17 b.xlsx, Evap Summary and Brantley rev accounting table. The total evaporation for each water year is then divided on volume percentage between the CID storage and the stored floodwater. The amount for 2014 was 3.297 TAF and for 2015 was 15.251 TAF based on this method. Evap Summary, Pro-rated Evap 2014-2015 Final 12-20-17 b.xlsx.

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ATTACHMENT 1

11.25.14 Email from Donnelly to Prewit.txt

From: Donnelly, Carolyn <cdonnelly@usbr.gov>

Sent: Tuesday, November 25, 2014 9:18 AM

To: Robin Prewit

Cc: Suzy Valentine; Lewis, Greg J., OSE

Subject: Re: Brantley and Red Bluff

Robin,

Thanks for the update. I'll probably check in again in the spring to see how things are going.

Have a great Thanksgiving!

Carolyn

On Mon, Nov 24, 2014 at 4:33 PM, Robin Prewit <redbluff@windstream.net> wrote:
Hi Carolyn:

We cut the release for my downstream districts and as of today, we shut the gates completely. This was at the request of 3 of my districts so they could start clearing out the dead salt cedars. They have equipment rented and are just waiting for the water to go down. I will resume releasing as soon as they give me the word. The grouting project looks like it will finish up right before Christmas. Red Bluff's water year starts March 1st, but we make the allotment in January. I will inform the districts that we can start releasing to them as early as February if needed. I am hoping that by March, you can start sending us water. Thank you for all your help and feel free to give me a call if you have an additional questions.

Thanks,
Robin

From: Donnelly, Carolyn [mailto:cdonnelly@usbr.gov]

Sent: Monday, November 24, 2014 2:33 PM

To: Robin Prewit <redbluff@windstream.net> (redbluff@windstream.net); Shoemaker, Rich

Cc: Lewis, Greg J., OSE; Suzy Valentine

Subject: Brantley and Red Bluff

Robin and Rich,

Hi, I wanted to check in and see how the construction at Red Bluff is going, and also if you have any estimate of when we can move the additional water out of Brantley. I notice that your release has gone down to about 50 cfs.

Please let me know, Carolyn

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ATTACHMENT 2

From: Donnelly, Carolyn

To: Curtis McFadden; Suzy Valentine; Robin Prewit
<redbluff@windstream.net>(redbluff@windstream.net); Lewis, Greg J., OSE;
davis, daniel, OSE; Riseley-White, Hannah, OSE; Dale Ballard; Kyle Davis; Jay
Cederberg; rromero@co.eddy.nm.us

Cc: Anthony Vigil; Michael Sanchez; Garret Ross; Michelle Estrada-Lopez; Raymond
Abeyta; Kenneth Rice

Subject: summary of 7/24 Brantley ops call

Date: Friday, July 24, 2015 1:23:39 PM

I wanted to make sure everyone is on the same page, so here are important points from this morning's conference call.

- The release from Brantley will begin on Monday, August 3rd, at about 8 am.
 - Reclamation is taking this opportunity to exercise the radial gates at Brantley, so releases will begin via the radial gates. This will last about half a day, at which point a release from the outlet works will begin.
 - Releases from Avalon will be made via the unregulated spillways. This means the reservoir will have to fill before releases will begin. Therefore releases from Avalon are not likely to begin until late on August 3rd or possibly not until the 4th.
 - Initially, the target for the Avalon release will be about 500 cfs, with an aim of keeping total flow at the Dog Town crossing at about 600 cfs.
 - Eddy County staff will perform a visual inspection of the Dog Town crossing to ascertain if the Avalon release can be increased.
 - To comply with Safety of Dams procedures concerning extended releases via the uncontrolled spillways, flow from Avalon will need to be stopped every 10 days to allow for inspection of these spillways. There must be at least one full day of no flow between releases.
- Water ops estimates that this will mean at least a 3 day pause between releases.
- CID, NMISC, Red Bluff ID, and Texas will confer on the volume to be moved - whether it will only be unappropriated floodwaters of about 35,000 ac-ft, or if it will also include an additional 15,000 to 20,000 ac-ft of settlement/Compact delivery.
 - If there are large storms during the release, the group may be re-convened to discuss operational decisions.
 - In any case, there will be Monday and Friday conference calls at 930 am during the release.

The first one will occur on Friday, August 7th.

If you have changes or additions, please let me know.

Thanks, Carolyn

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PECOS RIVER COMPACT

Report of the River Master

Water Year 2017

Accounting Year 2018

Final Report

Neil S. Grigg

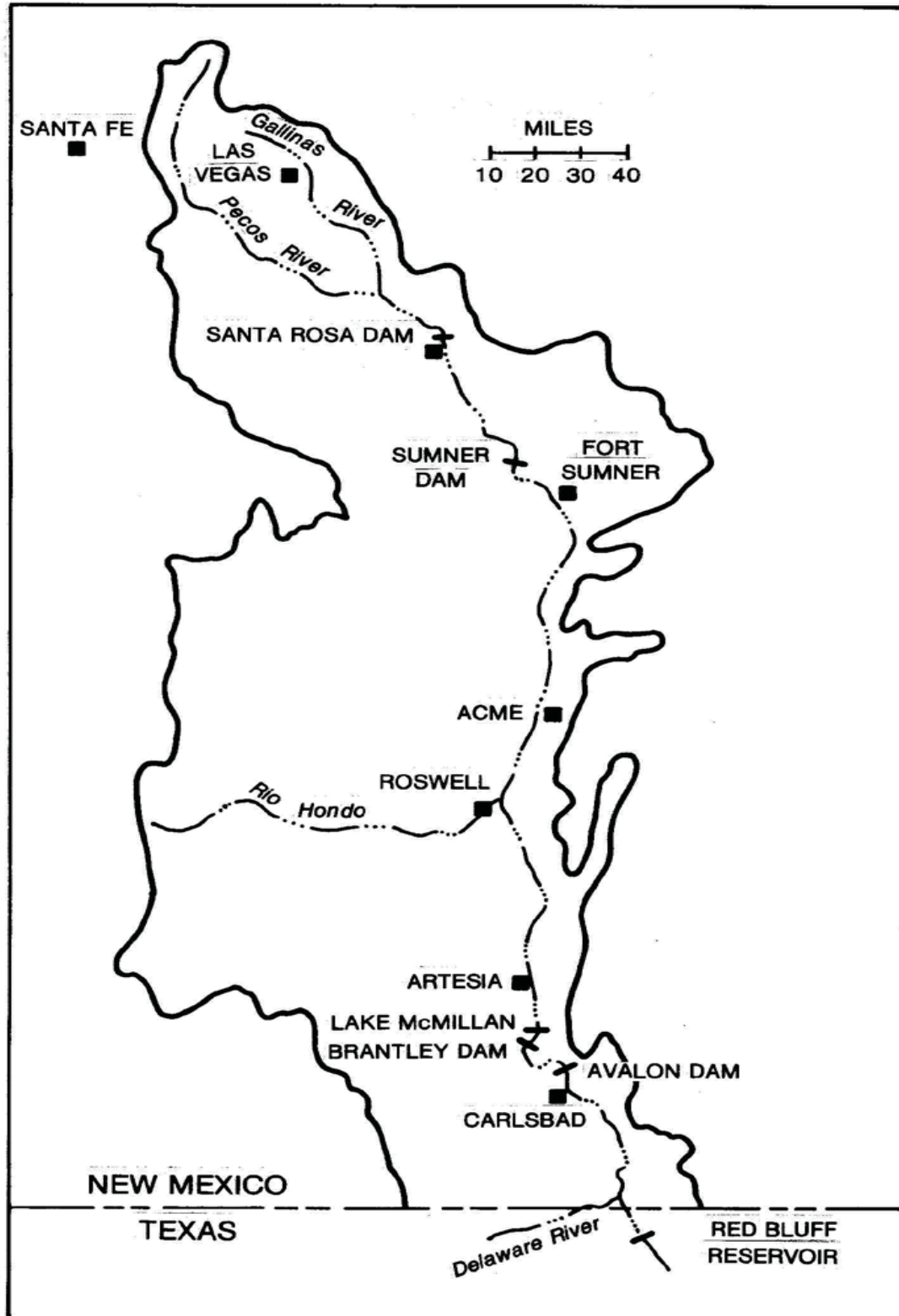
River Master of the Pecos River

905 Edwards Street

Fort Collins, Colorado 80524

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Map of Pecos River Basin Showing Accounting Reaches

PECOS RIVER COMPACT
Supreme Court of the United States
No. 65, Original
Amended Decree

Final Report of the River Master
Water Year 2017 - Accounting Year 2018
August 18, 2018

Purpose of the Report. In its Amended Decree issued March 28, 1988 the Supreme Court of the United States appointed a River Master of the Pecos River and directed him to “... Deliver to the parties a Preliminary Report setting forth the tentative results of the calculations required by Section III.B.1 of this Decree by May 15 of the accounting year...” and to consider “... any written objections to the Preliminary Report submitted by the parties prior to June 15 of the accounting year...” and to deliver “... to the parties a Final Report setting forth the final results of the calculations required by Section III.B.1 of this Decree by July 1 of the accounting year.” This is the required Final Report with the determination of:

- a. The Article III(a) obligation;
- b. Any shortfall or overage, which calculation shall disregard deliveries of water pursuant to an Approved Plan;
- c. The net shortfall, if any, after subtracting any overages accumulated in previous years, beginning with water year 1987.

Result of Calculations and Statement of Shortfall or Overage. The results of the calculations in this Final Report show that New Mexico’s delivery in Water Year 2017 was an overage of 19,900 acre-feet. The accumulated overage since the beginning of Water Year 1987 is 170,800 acre-feet.

Neil S. Grigg

River Master of the Pecos River

Pecos River Compact		
Accumulated Shortfall or Overage		
	August 18, 2018	
Water Year	Annual Overage or Shortfall, AF	Accumulated Overage or Shortfall, AF
1987	15,400	15,400
1988	23,600	39,000
1989	2,700	41,700
1990	-14,100	27,600
1991	-16,500	11,100
1992	10,900	22,000
1993	6,600	28,600
1994	5,900	34,500
1995	-14,100	20,400
1996	-6,700	13,700
1997	6,100	19,800
1998	1,700	21,500
1999	1,400	22,900
2000	-12,300	10,600
2001	-700	9,900
2002	-3,000	6,900
2003	2,000	8,900
2004	8,300	17,200
2005	24,000	41,200
2006	26,100	67,300
2007	25,200	92,500
2008	6,000	98,500
2009	1,600	100,100
2010	-500	99,600
2011	500	100,100
2012	1,900	102,000
2013	-6,300	95,700
2014	700	96,400
2015	27,300	123,700
2016	27,200	150,900
2017	19,900	170,800

Table 1. General Calculation of Annual Departures in TAF (B.1)			
Water Year	2017		
8/18/2018			
	WY 2015	WY 2016	WY 2017
B.1.a. Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	100.7	128.6	89.7
(b) Flood Inflow Alamogordo - Artesia (Table 2)	28.5	-2.6	33.0
(c) Flood Inflow Artesia - Carlsbad (Table 3)	3.2	15.3	13.1
(d) Flood Inflow Carlsbad - State Line (Table 4)	6.2	9.5	6.2
Total (annual flood inflow)	138.6	150.8	142.0
(2) Index Inflow (3-year avg)			143.8
B.1.b. 1947 Condition Delivery Obligation (Index Outflow)			57.7
B.1.c. Average Historical (Gaged) Outflow			
(1) Annual historical outflow			
(a) Gaged Flow Pecos River at Red Bluff NM	101.1	75.4	46.9
(b) Gaged Flow Delaware River nr Red Bluff NM	5.4	6.2	3.3
(c) Metered diversions Permit 3254 into C-2713	0.2	0.2	0.4
Total Annual Historical Outflow	106.7	81.8	50.6
(2) Average Historical Outflow (3-yr average)			79.7
B.1.d. Annual Departure			22.0
C. Adjustments to Computed Departure			
1. Adjustments for Depletions above Alam Dam			
a. Depletions Due to Irrigation (Table 5)	-3.2	1.3	-1.0
b. Depl fr Operation of Santa Rosa Reservoir (Table 6)	16.7	-6.3	9.2
c. Transfer of Water Use to Upstream of AD	0	0	0
Recomputed Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	114.2	123.6	97.9
(b) Flood Inflow Alamogordo - Artesia	28.5	-2.6	33.0
(c) Flood Inflow Artesia - Carlsbad	3.2	15.3	13.1
(d) Flood Inflow Carlsbad - State Line	6.2	9.5	6.2
Total (annual flood inflow)	152.1	145.8	150.2
Recomputed Index Inflow (3-year avg)			149.4
Recomputed 1947 Condition Del Outflow (Index Outflow)			60.9
Recomputed Annual Departures			18.8
Credits to New Mexico			
C.2 Depletions Due to McMillan Dike			1.0
C.3 Salvage Water Analysis			0
C.4 Unappropriated Flood Waters			0
C.5 Texas Water Stored in NM Reservoirs			0
C.6 Beneficial C.U. Delaware River Water			0
Final Calculated Departure, TAF			19.9

Table 4. Summary Table for Computations, Carlsbad to State Line (B.5)						
Water Year		2017				
8/19/2018						
		BCB - RB		Del R	DC	
		RM				
Jan		0.1		0.003	0.0	
Feb		0.0		0.000	0.0	
Mar		0.0		0.000	0.0	
Apr		0.2		0.003	0.0	
May		0.3		0.004	0.0	
Jun		0.3		0.007	0.0	
Jul		0.5		0.033	0.0	
Aug		1.2		0.314	0.0	
Sep		1.1		1.661	0.0	
Oct		0.4		0.013	0.0	
Nov		0.1		0.005	0.0	
Dec		0.1		0.001	0.0	
Total		4.1		2.044	0.0	
Summary of flood inflows, Carlsbad to State Line, TAF						
Red Bluff - Carlsbad + Dark C RM calcs)						4.1
Delaware River						2.0
Total Flood Inflow, Carlsbad to State Line						6.2

Table 7. Carlsbad Springs New Water [B.4.c.(2)]					
Water Year	2017				
8/19/2018					
		TAF	AF/day	cfs	Totals
Pecos R bel DC		21.1	57.8	29.1	29.1
Dark Canyon		0.0	0.0	0.0	0.0
Pecos R bel Lake Avalon		0.0	0.0	0.0	0.0
Depletion, cfs					2.0
CID lag seep, cfs (from Table 8)					6.8
Return flow, cfs					1.0
Lake Av lagged seep, cfs (from Table 9)					20.1
PR seepage, cfs					3.0
Carls new water, cfs					0.22
Carls new wat, TAF					0.2
Carls new wat monthly, TAF					0.0

Table 8. Carlsbad Main Canal Seepage Lagged [B.4.c.(2)(e)]												
Water Year	2017											
5/5/2018												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
												TOTAL
WY 2017												
CID, TAF	0	0.0	5.6	8.7	10.1	11.5	10.9	7.1	8.9	6.9	0.5	0.0
days/mo	31	28	31	30	31	30	31	31	30	31	30	31
cfs	0	0	90.6	146.9	164.4	194.1	176.9	115.1	149.2	112.3	8.2	0.0
cfs, qtr avg			31.2			168.4			147.0			40.5
WY 2016		1Q	2Q	3Q	4Q							
FLows, cfs				127.8	50.7							
SEVEN %				8.9	3.6							
WY 2017 lagged		1Q	2Q	3Q	4Q							
FLows, cfs		31.2	168.4	147.0	40.5							
SEVEN %		2.2	11.8	10.3	2.8							
LAG		3.8	7.2	9.4	6.8	Avg =	6.8	cfs				

Table 12. Data Required for River Master Manual Calculations

Table 12. Data Required for River Master Manual Calculations													
Water Year 2017													
8/19/2018	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	TOTAL
.													
STREAMFLOW GAGING RECORDS, TAF													
Pecos R b Sumner Dam	1.5	1.1	5.3	6.2	6.1	38.4	15.7	5.5	5.5	3.3	0.2	0.9	89.7
Fort Sumner Main C	0.0	0.0	4.2	4.9	4.5	5.8	5.4	4.2	4.7	2.6	0.0	0.0	36.4
Pecos R nr Artesia	4.0	3.7	3.9	2.7	2.5	11.9	19.9	13.2	7.3	21.0	6.1	4.7	101.0
Rio Penasco at Dayton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fourmile Draw nr Lakewood	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Seven Rivers nr Lkwd	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Rocky Arroyo at Hwy Br nr	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pecos R at Dam Site 3	1.5	1.2	5.3	10.2	10.8	14.3	11.4	7.5	9.5	5.0	0.0	0.0	76.6
Pecos bel Avalon Dam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Carlsbad Main Canal	0.0	0.0	5.6	8.7	10.1	11.5	10.9	7.1	8.9	6.9	0.5	0.0	70.2
Dark Canyon at Carlsbad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pecos below Dark Canyon	2.0	1.7	1.9	1.8	1.9	1.8	1.6	1.9	1.8	1.8	1.6	1.5	21.1
Pecos R at Red Bluff	4.8	3.7	3.7	3.5	3.8	3.4	3.3	4.5	4.3	4.0	4.1	4.0	46.9
Delaware R nr Red Bluff	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.4	1.8	0.2	0.1	0.2	3.3
GAGE HEIGHTS													
Avalon gage ht, end mo	76.6	75.8	74.0	74.0	73.1	75.0	74.0	74.5	75.0	72.4	60.0	60.0	
Avalon gage ht, avg	75.2	75.8	75.3	74.3	73.9	74.3	74.6	74.6	74.7	74.1	60.4	60.0	
Sumner Lake ga ht, end mo	58.3	59.3	58.5	57.1	56.4	55.9	54.6	54.0	53.0	59.5	60.8	62.1	
Sumner Lake gage ht, avg	57.6	58.9	58.8	57.9	57.2	55.5	55.2	54.5	53.1	59.0	60.2	61.5	
Lake S Rosa ga ht, end mo	34.0	33.9	35.1	37.8	41.4	30.2	26.4	33.4	37.9	48.4	48.1	48.0	
Lake S Rosa ga ht, avg	34.0	34.0	34.1	36.2	39.7	39.6	26.6	31.4	33.6	46.9	48.3	48.1	
PRECIPITATION, INCHES													
Brantley Lake	1.02	0.13	0.03	1.97	0.74	1.67	2.38	3.37	1.41	0.42	0.40	0.25	13.79
Las Vegas FAA AP	1.73	0.37	0.18	0.66	1.44	2.21	3.00	6.30	6.28	0.75	0.26	0.01	23.19
Pecos National Monument	1.42	0.29	1.20	0.00	0.00	0.00	3.39	2.16	3.37	1.66	0.15	0.00	13.64
Santa Rosa	2.08	0.37	0.84	0.25	1.73	0.80	1.86	3.53	4.32	3.04	0.00	0.00	18.82
Lake Santa Rosa	2.08	0.37	0.84	0.25	1.73	0.80	1.86	3.53	4.32	3.04	0.00	0.00	18.82
Sumner Lake	0.98	0.07	0.88	1.23	0.53	1.03	1.71	2.68	3.52	6.54	0.00	0.00	19.17
PAN EVAPORATION, INCHES													
Lake Santa Rosa	3.7	5.0	8.6	8.5	10.7	12.9	12.3	8.5	8.7	6.3	5.0	3.7	93.8
Lake Sumner	2.8	3.9	10.7	11.3	14.3	16.1	15.7	11.1	10.6	7.6	3.6	2.8	110.5
Brantley Lake	3.9	6.5	9.6	11.9	14.2	15.0	13.9	9.8	10.1	6.9	5.8	4.6	112.1
OTHER REPORTS													
Base Acme-Art, TAF (USGS)	1.2	1.9	2.0	0.7	0.6	0.0	0.0	0.2	0.7	1.5	2.1	2.0	12.9
Pump depl Ac-Artesia, TAF	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.4
Pumping, C-2713, Malaga B													0.4
NM irrig inv, acres (3/9/2000)													11529
NM Transfer water use, TAF													
NM salvaged water, TAF													0.00
Texas, water stored NM, TAF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Texas, use Del water, TAF													

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APPENDIX A
RESPONSE TO STATES’
OBJECTIONS

RESPONSE TO STATES' OBJECTIONS**Final Report, Accounting Year 2018****NEW MEXICO OBJECTIONS****I. WY 2017 Accounting, Accumulated Overage, and Omission of Evaporative Losses from Water Stored at Texas' Request in 2014 and 2015**

This objection concerns the unappropriated flood flow issue, which has been the subject of communications, meetings and negotiations between the States since late 2014. New Mexico filed a Motion to address this issue, and it has been addressed through the Modification Determination of that process.

II. USGS Dark Canyon at Carlsbad Gage Data Adjustment for WY 2014

NM explained the status of the correction needed for USGS Dark Canyon at Carlsbad gage adjustment for WY 2014. The States have subsequently submitted a Joint Motion to address this issue for WY 2014 and it has been incorporated retroactively in the revised Final Reports for Water Years 2014, 2015 and 2016.

III. Updated 2017 USACE Santa Rosa Reservoir Area Capacity Table

NM provided the updated USACE Santa Rosa Reservoir tables and stated that it should be used in WY 2017 accounting. The River Master did not have the table for the Preliminary Report, and has used it for this Final Report for Water Year 2017.

IV. Table 6. Depletions Due to Santa Rosa Reservoir Operations (C.1.b)

NM objected to the omission of the required storage adjustment in Table 6. This objection is accepted and the omission has been corrected.

V. Response to River Master Request for Information Regarding Avalon Reservoir Operations in November 2017.

This issue requires no adjustment in the water accounting, and a discussion of it is included in Appendix B of this Final Report.

VI. Table 12. Data Required for River Master Calculations

New Mexico noted that legacy notes were left on the table, and they have been removed.

TEXAS OBJECTIONS**1. Table 4. Summary Table for Computations, Carlsbad to State Line [B.5]:**

Texas objected in the omission of a flood period on the Delaware River. Section B.5.b. of the River Master's Manual (Flood Inflow, Delaware River) states: "Use the daily records furnished by the USGS for the gaging station, Delaware River near Red Bluff, N.M. and select flood inflows by inspection of daily data." This objection is accepted. The additional flood inflow is small but recognizable. TX computation of 2.043 TAF is accepted.

2. Table 7. Carlsbad Springs New Water [B.4.c(2)], TAF for WY 2017

Texas noted that the calculation was done for a 366-day year. The objection is accepted and the change has been made.

3. Table 3. Flood Inflows, Artesia to Carlsbad [B.4], TAF for WY 2017

Table 3 has been updated.

4. Table 6. Depletions due to Santa Rosa Reservoir Operations [C.1.b]

Texas noted the same problem with Table 6 as in New Mexico's objection IV. The objection is accepted, and the change has been made. However, Texas' computation is based on the outdated Santa Rosa elevation-capacity table, and the computation for the correction in this Final Report uses the 2017 table recently provided by New Mexico.

5. Table 1. General Calculation of Annual Departures [B.1] in TAF for WY 2017:

The final departure has been modified. It is different from Texas' computation due to the issue noted above about Table 6.

FINAL CALCULATED DEPARTURE

The Preliminary Report had a Final Calculated Departure as an overage of 20.8 TAF. After considering the states' objections, the Final Determination is an overage of 19.9 TAF.

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APPENDIX B
COMMENTS ABOUT AVALON
RESERVOIR DRAINAGE
OCTOBER-NOVEMBER 2018

Maintenance of Avalon Reservoir November 2017 to February 2018

Background

In the Preliminary Report for AY 2018, the River Master asked New Mexico to report about whether Avalon releases into the main canal instead of into the Pecos River affected quantities of state-line delivery water. New Mexico had explained earlier (April 24, 2018 email) that from November 2017 through February 2018 the Carlsbad Irrigation District (CID) drained Avalon for maintenance by releasing water into their main canal.

New Mexico's explanation

New Mexico replied along with her objections to the Preliminary Report that CID drained Avalon Reservoir through reservoir releases for irrigation during October 2017 and after November 1 the remaining 553 acre-feet were released by November 12 through the CID Main Canal, to be delivered downstream.

NM reported that these releases from the Main Canal to the Pecos occur through CID's Black River Supply Ditch which empties into the Black River between two USGS gages (Black River above Malaga (8405500) and Black River at Malaga (8406000)). The Black River itself discharges to the Pecos River below the USGS Pecos River below Dark Canyon at Carlsbad (8405200) gage and is not captured as inflow on Table 3 of the Pecos River Final Report.

According to NM, no adjustment is needed for the October 2017 releases as they were used for irrigation and CID irrigation water is accounted for in Table 3. November releases of 486.9 AF (USGS gaged value for November) were not for irrigation but were released back to the river. Although they did not flow through the Carlsbad below Dark Canyon gage, they were still accounted as outflow in Table 3, so the result is the same. However, they might not require the 7-percent adjustment that irrigation water receives (although losses are unknown). In any event, NM concluded that 7-percent of 486.9 AF or 34 AF is *de minimis* and does not require any change in Table 3.

Texas' analysis and reply

Texas provided an analysis to consider the effects on changed delivery through the CID Main Canal instead of directly to the Pecos River. This analysis discusses how the changed route of discharge will affect Carlsbad Springs New Water and how changes in Avalon operations also affect changes in lake storage, evaporation and leakage, as well as CID canal flows and seepage. Texas provided a spreadsheet with the results of her computations.

River Master's analysis

The River Master agrees with New Mexico that the change in route of flow for delivery water of only 486.9 AF results in a *de minimis* effect on water delivery. Texas' identification of the effect on Carlsbad Springs New Water is relevant, although we lack an agreed-upon mechanism to quantify this effect. The effects on Avalon storage and evaporation have been considered in the accounting already. New Mexico operates Avalon Reservoir for its own benefit and is not liable for storage and evaporation changes due to its decisions about

operations because they will be accounted under the Rover Master's Manual. Texas' identification of issues with Carlsbad Main Canal seepage and Avalon seepage are relevant, and a change in the route of state-line delivery water will affect their computation. However, as New Mexico has accounted for most of the Avalon release as irrigation water and only 486.9 AF was delivery water, it is apparent that any changes in computation of canal or reservoir seepage will also be *de minimis*.

If for any reason a more significant change in Avalon operations occurred, the observations that resulted from this query would require additional study to determine if adjustments to water accounting will be required. Per the *de minimis* changes described above, no adjustments to the WY 2017 Preliminary Report accounting is required for the November flows described.

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APPENDIX C
SUMMARY OF REVISIONS
WATER YEARS
2014, 2015, 2016

Summary of revisions for Water Years 2014, 2015, 2016

August 18, 2018

Final Reports for Water Years 2014, 2015, and 2016 have been revised in response to:

- Joint Motion Requesting Review of the River Master's Final Determination for WaterYears 2014, 2015, and 2016
- New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015

The Joint Motion provides revised Dark Canyon Draw flows for September 18-30, 2014 and a revised Table 4 for utilization in the Final Reports for Water Years 2014, 2015, and 2016. These have been incorporated in the revised Table 4 for Water Year 2014 and the revised Table 1 for the three water years (attached).

Water Year 2015 accounting is affected by adjustments for evaporation credits to New Mexico for storage of Texas water. The procedure is explained in the Modification Determination for New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015. The adjustment has been incorporated into Table 1 for Water Year 2015.

A summary of the revisions is provided in this table:

WY	AY	Original Final Report, TAF	Revised Final Report, TAF	Revisions
2014	2015	1.9	0.7	Revised 2014 DCD gage record
2015	2016	11.9	27.3	Revised 2014 DCD gage record and one-time credit for evaporation loss
2016	2017	28.4	27.2	Revised 2014 DCD gage record

Pecos River Compact		
Accumulated Shortfall or Overage (revised)		
	August 18, 2018	
Water Year	Annual Overage or Shortfall, AF	Accumulated Overage or Shortfall, AF
1987	15,400	15,400
1988	23,600	39,000
1989	2,700	41,700
1990	-14,100	27,600
1991	-16,500	11,100
1992	10,900	22,000
1993	6,600	28,600
1994	5,900	34,500
1995	-14,100	20,400
1996	-6,700	13,700
1997	6,100	19,800
1998	1,700	21,500
1999	1,400	22,900
2000	-12,300	10,600
2001	-700	9,900
2002	-3,000	6,900
2003	2,000	8,900
2004	8,300	17,200
2005	24,000	41,200
2006	26,100	67,300
2007	25,200	92,500
2008	6,000	98,500
2009	1,600	100,100
2010	-500	99,600
2011	500	100,100
2012	1,900	102,000
2013	-6,300	95,700
2014	700	96,400
2015	27,300	123,700
2016	27,200	150,900

Table 1. General Calculation of Annual Departures in TAF (B.1)			
Water Year	2014		
8/18/2018			
	WY 2012	WY 2013	WY 2014
B.1.a. Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	64.9	63.6	120.6
(b) Flood Inflow Alamogordo - Artesia (Table 2)	-17.2	54.4	57.3
(c) Flood Inflow Artesia - Carlsbad (Table 3)	11.2	39.9	42.5
(d) Flood Inflow Carlsbad - State Line (Table 4)	3.2	23.2	128.3
Total (annual flood inflow)	62.1	181.1	348.7
(2) Index Inflow (3-year avg)			197.3
B.1.b. 1947 Condition Delivery Obligation (Index Outflow)			90.5
B.1.c. Average Historical (Gaged) Outflow			
(1) Annual historical outflow			
(a) Gaged Flow Pecos River at Red Bluff NM	17.7	51.0	146.6
(b) Gaged Flow Delaware River nr Red Bluff NM	1.7	12.2	48.3
(c) Metered diversions Permit 3254 into C-2713	0.0	0.2	0.2
Total Annual Historical Outflow	19.4	63.4	195.1
(2) Average Historical Outflow (3-yr average)			92.6
B.1.d. Annual Departure			2.2
C. Adjustments to Computed Departure			
1. Adjustments for Depletions above Alam Dam			
a. Depletions Due to Irrigation (Table 5)	3.2	2	-0.2
b. Depl fr Operation of Santa Rosa Reservoir (Table 6)	1.0	8.6	-1.7
c. Transfer of Water Use to Upstream of AD	0	0	0
Recomputed Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	69.1	74.2	118.7
(b) Flood Inflow Alamogordo - Artesia	-17.2	54.4	57.3
(c) Flood Inflow Artesia - Carlsbad	11.2	39.9	42.5
(d) Flood Inflow Carlsbad - State Line	3.2	23.2	128.3
Total (annual flood inflow)	66.3	191.7	346.8
Recomputed Index Inflow (3-year avg)			201.6
Recomputed 1947 Condition Del Outflow (Index Outflow)			93.3
Recomputed Annual Departures			-0.6
Credits to New Mexico			
C.2 Depletions Due to McMillan Dike			1.4
C.3 Salvage Water Analysis			0
C.4 Unappropriated Flood Waters			0
C.5 Texas Water Stored in NM Reservoirs			0
C.6 Beneficial C.U. Delaware River Water			0
Final Calculated Departure, TAF			0.7

Table 1. General Calculation of Annual Departures in TAF (B.1)			
Water Year	2015		
8/18/2018			
	WY 2013	WY 2014	WY 2015
B.1.a. Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	63.6	120.6	100.7
(b) Flood Inflow Alamogordo - Artesia (Table 2)	54.4	57.3	28.5
(c) Flood Inflow Artesia - Carlsbad (Table 3)	39.9	42.5	3.2
(d) Flood Inflow Carlsbad - State Line (Table 4)	23.2	128.3	6.2
Total (annual flood inflow)	181.1	348.7	138.6
(2) Index Inflow (3-year avg)			222.8
B.1.b. 1947 Condition Delivery Obligation (Index Outflow)			107.5
B.1.c. Average Historical (Gaged) Outflow			
(1) Annual historical outflow			
(a) Gaged Flow Pecos River at Red Bluff NM	51.0	146.6	101.1
(b) Gaged Flow Delaware River nr Red Bluff NM	12.2	48.3	5.4
(c) Metered diversions Permit 3254 into C-2713	0.2	0.2	0.2
Total Annual Historical Outflow	63.4	195.1	106.7
(2) Average Historical Outflow (3-yr average)			121.7
B.1.d. Annual Departure			14.2
C. Adjustments to Computed Departure			
1. Adjustments for Depletions above Alam Dam			
a. Depletions Due to Irrigation (Table 5)	2.0	-0.2	-3.2
b. Depl fr Operation of Santa Rosa Reservoir (Table 6)	8.6	-1.7	16.7
c. Transfer of Water Use to Upstream of AD	0	0	0
Recomputed Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	74.2	118.7	114.2
(b) Flood Inflow Alamogordo - Artesia	54.4	57.3	28.5
(c) Flood Inflow Artesia - Carlsbad	39.9	42.5	3.2
(d) Flood Inflow Carlsbad - State Line	23.2	128.3	6.2
Total (annual flood inflow)	191.7	346.8	152.1
Recomputed Index Inflow (3-year avg)			230.2
Recomputed 1947 Condition Del Outflow (Index Outflow)			112.7
Recomputed Annual Departures			9.1
Credits to New Mexico			
C.2 Depletions Due to McMillan Dike			1.6
C.3 Salvage Water Analysis			0
C.4 Unappropriated Flood Waters			0
C.5 Texas Water Stored in NM Reservoirs			16.6
C.6 Beneficial C.U. Delaware River Water			0
Final Calculated Departure, TAF			27.3

Table 1. General Calculation of Annual Departures in TAF (B.1)			
Water Year	2016		
8/18/2018			
	WY 2014	WY 2015	WY 2016
B.1.a. Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	120.6	100.7	128.6
(b) Flood Inflow Alamogordo - Artesia (Table 2)	57.3	28.5	-2.6
(c) Flood Inflow Artesia - Carlsbad (Table 3)	42.5	3.2	15.3
(d) Flood Inflow Carlsbad - State Line (Table 4)	128.3	6.2	9.5
Total (annual flood inflow)	348.7	138.6	150.8
(2) Index Inflow (3-year avg)			212.7
B.1.b. 1947 Condition Delivery Obligation (Index Outflow)			100.7
B.1.c. Average Historical (Gaged) Outflow			
(1) Annual historical outflow			
(a) Gaged Flow Pecos River at Red Bluff NM	146.6	101.1	75.4
(b) Gaged Flow Delaware River nr Red Bluff NM	48.3	5.4	6.2
(c) Metered diversions Permit 3254 into C-2713	0.2	0.2	0.2
Total Annual Historical Outflow	195.1	106.7	81.8
(2) Average Historical Outflow (3-yr average)			127.9
B.1.d. Annual Departure			27.2
C. Adjustments to Computed Departure			
1. Adjustments for Depletions above Alam Dam			
a. Depletions Due to Irrigation (Table 5)	-0.2	-3.2	1.3
b. Depl fr Operation of Santa Rosa Reservoir (Table 6)	-1.7	16.7	-6.3
c. Transfer of Water Use to Upstream of AD	0	0	0
Recomputed Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	118.7	114.2	123.6
(b) Flood Inflow Alamogordo - Artesia	57.3	28.5	-2.6
(c) Flood Inflow Artesia - Carlsbad	42.5	3.2	15.3
(d) Flood Inflow Carlsbad - State Line	128.3	6.2	9.5
Total (annual flood inflow)	346.8	152.1	145.8
Recomputed Index Inflow (3-year avg)			214.9
Recomputed 1947 Condition Del Outflow (Index Outflow)			102.2
Recomputed Annual Departures			25.7
Credits to New Mexico			
C.2 Depletions Due to McMillan Dike			1.5
C.3 Salvage Water Analysis			0
C.4 Unappropriated Flood Waters			0
C.5 Texas Water Stored in NM Reservoirs			0
C.6 Beneficial C.U. Delaware River Water			0
Final Calculated Departure, TAF			27.2

Water Year	2014					
8/18/2018						
	BCB - RB	BCB - RB*	Del R***	DC		
	RM	USGS	USGS			
Jan	0.0	0.0	0.0	0.0		
Feb	0.0	0.2	0.0	0.0		
Mar	0.0	0.2	0.0	0.0		
Apr	0.2	0.7	0.0	0.0		
May	0.2	0.1	0.0	0.0		
Jun	0.2	0.2	0.0	0.0		
Jul**	0.1	0.3	0.1	0.0		
Aug	0.2	0.0	0.0	0.0		
Sep**	79.7	59.6	46.3	0.0		
Oct	0.8	1.0	0.0	0.0		
Nov	0.3	0.8	0.0	0.0		
Dec	0.0	0.2	0.0	0.0		
Total	81.9	63.2	46.4	0.0		
Summary of flood inflows, Carlsbad to State Line, TAF						
Red Bluff - Carlsbad + Dark C RM calcs)				81.9		
Delaware River (USGS Computation)				46.4		
Total Flood Inflow, Carlsbad to State Line				128.3		
* USGS calculations BCB-RB for comparison only. Negative FIF reports not included.						
** See separate calculation for BCB to RB in the Preliminary Report						
*** As corrected, see Response to Objections.						

How to record New Mexico's evaporation credit?

The accounting for New Mexico's evaporation credit is retroactive, and how to record the credit must be determined. The River Master's Manual at C.5 addresses the issue of stored Texas water:

5. Texas Water Stored in New Mexico Reservoirs

If a quantity of the Texas allocation is stored in facilities constructed in New Mexico at the request of Texas, then to the extent not inconsistent with the conditions imposed pursuant to Article IV(e) of the Compact, this quantity will be reduced by the amount of reservoir losses attributable to its storage, and, when released for delivery to Texas, the quantity released less channel losses is to be delivered by New Mexico at the New Mexico–Texas state line.

This general instruction applies to the water storage situation in Water Years 2014 and 2015 but does not specify when and how to account for the released water.

The credit can be entered in either of two ways:

- The gaged flows for the actual time of the releases could be modified, which would change Table 3 and Table 1. In that way, the assumption would be that New Mexico would have been entitled to deliver the water if it had not been evaporated at the same time that it delivered the remaining stored water. This approach would spread the credit over three water years due to the three-year averaging.
- The credit could be entered for item C.5 on Table 1, which is Texas Water Stored in New Mexico Reservoirs. This would apply all of the credit in one year and it would not be spread over the three-years by averaging.

If New Mexico was close to a shortfall situation as described in the Amended Decree, it would matter which approach is taken because the three-year averaging approach might trigger the actions required in Section II.A.2 of the Decree, which outlines requirements for a delivery plan. However, New Mexico has an accumulated overage and neither approach creates an advantage to either state. The second approach, to enter the credit at item C.5 on Table 1, offers more simplicity and was selected by the River Master.

No. 65, Original

In the Supreme Court of the United States

STATE OF TEXAS, Plaintiff

v.

STATE OF NEW MEXICO, Defendant

Neil S. Grigg, River Master

Modification Determination

September 6, 2018

**New Mexico's Motion to Reconcile and Account for Texas Water Stored in
New Mexico During Water Years 2014 and 2015**

Introduction

This is a Modification Determination in response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015, dated July 13, 2018. New Mexico's request was that "...the River Master (1) determine that New Mexico is entitled to an adjustment of the Pecos River accounting in the amount of 21,071 acre-feet, and (2) affect this adjustment in the manner determined to be most efficient and consistent with the Compact, the Amended Decree, and the Manual."

This Modification Determination follows a draft sent to the States on August 20, which was based on New Mexico's Motion and Texas' initial response that was dated July 27, 2018. The States evaluated the draft Modification Determination and provided comments on August 31¹. This final Modification Determination considers those comments as well as the initial rounds of negotiations and review of New Mexico's Motion. The River Master's response to the States' comments on the Draft Modification Determination are included as Appendix C to this document.

Texas' Response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015 was dated July 27, 2018. Texas concluded that "When the states negotiated the Compact, they decided that neither state should be charged for water that it couldn't use...Providing credit for all evaporative losses for non-beneficial flood waters, plus giving full delivery credit for flood waters that wasted downstream is not an equitable distribution of the 2014 flood events..." Texas also

¹ NM Comments on Draft Modification Determination and Texas' Comments/Objections. River Master's Draft Modification Determination.

concluded that “Because New Mexico failed to challenge the accounting for WY 2014 and WY 2015 within the time proscribed by the Supreme Court, and because its proposed adjustment would violate the Compact, Texas respectfully requests that the River Master deny New Mexico’s Motion.”

This document includes the River Master’s Determination under the authority of the Amended Decree and the basis for the Determination. New Mexico’s Motion resulted from a series of communications, meetings and documents that are listed in Appendix A. Appendix B provides a discussion of the unappropriated flood water (UAFW) concept as explained in Pecos River Compact documents. Appendix C is a series of responses by the River Master to the states’ comments on the draft Modification Determination..

This Modification Determination is organized to answer four questions:

- Has the time expired to consider New Mexico’s Motion?
- Did the flooding cause UAFWs?
- How should evaporation losses from stored water be allocated?
- How should the River Master’s Manual be modified?

Has the time expired to consider New Mexico’s Motion?

Texas wrote that “Because New Mexico failed to challenge the accounting for WY 2014 and WY 2015 within the time proscribed by the Supreme Court, and because its proposed adjustment would violate the Compact, Texas respectfully requests that the River Master deny New Mexico’s Motion.” New Mexico took the opposite stance and argued that the Doctrine of Equitable Tolling applies and that approval of the Motion can be considered under authority of the Amended Decree.

The discussions about the flood and accounting for it equitably were continuous from the time the flood occurred until the present. During these discussions the River Master did not note any urgency expressed by the states to resolve the matter. The states were in active discussion during and after the flood because new issues required their attention. After April 2015 the states began to discuss the issue with the River Master. The first time the issue of time limits was discussed, to the knowledge of the River Master, was by Texas at the May 31, 2018 meeting in Fort Collins.

When considering previous motions under the Amended Decree, a possible time limit for a decision has not been an issue. The unified management philosophy of the Compact, the Pecos River Commission, and the Amended Decree is to seek agreement among the states. Preventing such agreement or fair resolution of issues by imposing an unnecessary time limit, absent agreement of the states, seems to the River Master to be contrary to the spirit of the quest for cooperation in managing shared water resources. As far as he can tell, there is no explicit rule in the Compact documents about curtailing negotiations or their resolution through the motion process on the basis of a time limit.

Because equitable sharing and taking a cooperative approach are core purposes of the Pecos River Compact and the Amended Decree, the River Master finds no reason that New Mexico’s Motion cannot be considered and resolved. The only unique attribute of Accounting for the 2014 flood is that it requires a retroactive adjustment of a Final

Determination, which is not prohibited explicitly by either the Compact or the Amended Decree. The states knew from the time of the flood that such an adjustment would be required.

Did the flooding cause UAFWs?

The background of unappropriated flood waters is discussed in Appendix B. The core issue is whether the flood waters could have been stored² or diverted under the 1947 condition. Prior to Brantley Reservoir construction, the only facility available to store the flood waters in New Mexico in any significant quantity would have been McMillan Reservoir. That reservoir had problems with leakage and sedimentation, and it is unknown exactly how much water it could have stored². Assuming that it could store very little, most of the flood waters originating in New Mexico would cross the state line and flow into Red Bluff reservoir.

An estimate of this quantity of water is 124,290 acre-feet, which was the quantity of unregulated water passing the Red Bluff gage from September 18 through September 30 (89,398 AF) plus 34,892 AF, which is the storage in Brantley on October 1 less the Carlsbad Project water of 42,057 AF. Transmission losses have not been applied to the Brantley storage water.

Whether Red Bluff Reservoir could have stored the full 124,290 AF under the 1947 condition would depend on its capacity and water level before the flood. In 2014, the volume of water in Red Bluff Reservoir on September 18 just before the flood was 84,841 AF. If the full 124,290 AF flowed into the reservoir, the required storage under the 1947 condition would be 209,131 AF, which seems to be within its capacity at that time. See Appendix C for a discussion of how Delaware River flows were considered.

The capacity of diversion facilities in both states under the 1947 condition should also be considered. The River Master did not have information on the 1947 capacity to compare with current capacities in both states.

Based on the conclusion that storing the flood waters was within the capacity of Texas and Red Bluff Reservoir under the 1947 condition, the River Master concludes that the flood event of September 2014 did not comprise UAFW. If significant capacity had been available in McMillan Reservoir, this would constitute more evidence that the states could have handled the event under the 1947 condition.

If the flooding does not comprise UAFW, then the flood waters are part of ongoing inflow-outflow computations. That is, if they pass the state line, they are part of New Mexico's delivery credit. If they had been UAFW, half (less losses) would belong to Texas and not be credited to New Mexico as delivered water. Only New Mexico's half of the UAFW could flow across the state line for delivery credit.

How should evaporation losses from stored water be allocated?

As the flows are not classified as UAFW, they are hydrologic flows to be accounted under the RMM. The accounting considers all hydrologic issues except evaporation losses that

² Bogener, Steve. Carlsbad Project. 1993 Reclamation project history document.

occur while water is stored. New Mexico provided a calculation of evaporation losses³ of 21,071 AF That occurred from September 19, 2014 to September 8, 2015. New Mexico's spreadsheet with the evaporation calculation provides the basis for the following analysis. Three issues that have risen in the discussions and documents from the states are considered:

1. Should the States share the evaporation loss for a period when water was being stored for public safety? If so, how should the end of this period be determined when Texas would assume all responsibility for evaporation loss?
2. The surface area of a reservoir increases with water elevation. Should Texas water be considered on top of the reservoir?
3. New Mexico accounted for delivery water at Avalon Reservoir. What would be the delivery loss to the state line?

The issue of public safety is germane to the allocation of evaporation losses because there were apparent concerns about flood impacts along the river in both states. The states' Technical Advisors reported different perceptions about the extent to which delays in releasing water were due to public safety concerns⁴. New Mexico's Technical Representative judged that after mid-November these concerns were over⁵. Texas' Technical Advisor testified that she was discussing public safety concerns with several parties in both states during February and March, 2015. Reclamation's written communication about this obligation was dated July 10, 2015, when, it indicated it would have to release the water once the public safety concerns were over unless a Warren Contract had been executed⁶. Reclamation had previously indicated an intention to release the water on or about March 1, 2015⁷.

During and soon after the flood the apparent public safety concerns were about Red Bluff Reservoir infrastructure and safety and river conditions where high water might threaten people and property. The specific public safety concerns raised in the communications from Texas were about bridge crossings in Eddy County, New Mexico, condition of the Red Bluff Reservoir spillway, and river conveyance downstream of Red Bluff Reservoir. The concerns in Texas are the responsibility of that state, and the bridge repairs in New Mexico are the responsibility of a private party that was attempting to get permits for the bridge repairs⁸.

It is apparent that Texas was making good faith efforts to determine when it could receive waters that were stored in New Mexico but condition of its infrastructure and lack of storage space in Red Bluff Reservoir limited its options. The bridge crossing issue in Eddy

³ See New Mexico Exhibit 5 - Texas Water Stored in NM Tracking Table APPROVED USGS - NM Position Paper.xlsx.

⁴ See declarations of Technical Advisors in New Mexico's Motion and Reply in Support of Motion, and in Texas' reply to New Mexico's Motion.

⁵ Declaration of Hannah Riseley-White

⁶ July 10, 2015 email from Carolyn Donnelly to Suzy Valentine, Exhibit D of NM Motion.

⁷ January 28, 2015 email from Carolyn Donnelly to Greg Lewis and others, Exhibit 3 of Texas Response to New Mexico's Motion.

⁸ See Reclamation's January 28 email.

County, New Mexico was not the responsibility of water users in New Mexico, who are entitled to their water allocation under the Compact. Because the concerns about public safety and how Texas could store the water shifted over time, it is apparent that a judgement is required to identify a date by which all responsibility for evaporation losses shift from being shared between the states to entirely Texas' responsibility. To probe when a fair date would be, the River Master studied the communications among the parties that have been provided in the course of this present discourse.

The main communications and declarations about public safety that are considered here are:

November 20, 2014	Texas formalized its request in an email to New Mexico to store its "portion" of the waters.
January 26, 2015	New Mexico's letter reply. It stated that that initial concurrence to store water was based on public safety but the basis evolved to comity. It states an intention to release the water before end of March 2015.
January 28, 2015	Reclamation email (from Carol Donnelly) notifying parties of intent to release water "on or about March 1."
February 3, 2015	Southwest Salt email to parties expressing concern about releases.
Hannah Riseley-White 1st declaration	Stated that after NM January 26 letter, "Pecos Bureau staff... were in communication with Texas on "numerous occasions" and that it was "generally understood" that water above Carlsbad Project limit belonged to Texas, who would assume responsibility for evaporation losses.
Suzy Valentine declaration	Reported conference calls in February and March with "various" New Mexico entities expressing concerns about public safety. Reports that Reclamation stated that "once public safety concerns had ended," it would release water even if Red Bluff was full.

From the communications, it is apparent that as time progressed the level of public safety concerns was diminishing, although New Mexico and Texas had different perceptions about them. The communications also point to Texas' concerns about releasing water when Red Bluff could not store it, which involves loss of water more than public safety. Per the communications toward the end of January, 2014 it is apparent that both NM and Reclamation were aiming at releasing the water with a start date of about March 1. While Texas reports concerns about public safety, it mainly cites concerns in New Mexico, which are not its primary responsibility. As New Mexico did not express the same concerns for public safety in its own state, it shifts the spotlight to Texas' inability to store the water as the main cause of Texas' reluctance to accept the water.

Based on the communications discussed above it is the River Master's decision that March 1, 2015 is a fair date to shift all responsibility for evaporation to Texas. Prior to that date, the evaporation charge would be shared 50-50.

At what elevation in Brantley Reservoir is Texas' water stored?

A related issue is the elevation at which Texas water is stored in Brantley Reservoir. Texas has expressed concern that the computation by New Mexico unfairly places Texas water at the top, where the evaporation is greatest.

When the floodwater entered Brantley Reservoir in September 2014, the reservoir level was near the Carlsbad pool limit. As all water above that limit was available for New Mexico to deliver to Texas, either as UAFW or otherwise, it follows that the water to be delivered to Texas would sit on top of the Carlsbad water. If the reservoir level had been lower, it would be fair to say that as water volume was added to the lake, it should be stacked proportionally or "colored" to identify it. That is, if the water added to the Carlsbad Pool was 10,000 AF and the water stored for Texas was 20,000 AF, then each foot of elevation in the reservoir pool above the starting elevation would have one-third New Mexico water and two-thirds Texas water. By the same token, as New Mexico started drawing down the Carlsbad Pool, as it did starting about April 1, 2015, then it would be taking water from different strata in the reservoir as it was stacked when it was stored in the first place.

According to historical data, the Brantley Lake levels are normally well below the Carlsbad pool limit. USGS data for Brantley Lake level are available for 1990-1996, but data are missing after that until late 2017⁹. The available monthly data show fluctuations from 3229.8 to 3256.3 for the seven-year period. Most values are about 3245, which corresponds to a storage of about 20,000 acre-feet.

The question considered here is whether the actual 2014 elevation of the Brantley water level should govern how water was stored for each state or whether an average value should be used, such as 20,000 acre-feet. It is the River Master's decision that the 2014 elevation should be used, which indicates that New Mexico's primary responsibility for evaporation losses is for the Carlsbad pool and the Texas water is stored above that level.

⁹ USGS gage 08401450 Brantley Lake Near Carlsbad, NM.

As a result, there is no apparent reason not to accept New Mexico's method for computation and allocation of evaporation loss.

What is the loss to the state line?

Beginning on August 5, 2015 and through September 8, 2015 New Mexico delivered 29,946 acre-feet from Avalon Reservoir, which is located downstream from Brantley Reservoir. Starting September 8 through October 5 they also delivered 23.230 acre-feet of "2015 State-Line Delivery Water."¹⁰ The credit to New Mexico for deliveries to Texas for both of these sets of water is measured at the Red Bluff gage. Therefore, there is no need to compute a delivery loss for these waters. However, if New Mexico could have delivered the evaporated water to Texas, there would be some delivery loss to be accounted as outlined in the River Master's Manual¹¹.

Water that New Mexico could have delivered to Texas if it was not evaporated in Brantley Reservoir would be released from Avalon Reservoir and requires a deduction for the losses to the state line. No formula for losses to the state line has been adopted in the Compact documents. In general, data to compute the losses are not adequate as explained in Section B.5. of the RMM: "Because of the lack of sufficient data to accurately compute flood inflow in the Carlsbad to State Line reach by the inflow–outflow method, the flood inflow for this reach is to be determined by the hydrograph scalping method." However, accounting for the evaporation credit requires that an estimate of the losses be made.

Some data on losses to the state line are available from the report of the Engineering Advisory Committee in Senate Document 109. A curve of these losses versus annual flow at Carlsbad was included in SD 109 at page 46, which states that the curve was taken from the Pecos River Joint Investigation (PRJI) study at page 69. That source includes a similar curve, but the values are different from those shown in SD 109 because the SD 109 curve includes irrigation and non-irrigation losses¹².

New Mexico regularly takes a loss for depletion from Carlsbad to Red Bluff, as explained in SD 109 and the PRJI report. Quantities of these losses are explained as including irrigation and other losses from evaporation and native vegetation. The irrigation depletions are considered in RMM accounting already, but non-irrigation depletions will vary by discharge through the reach. Data are not available to make a precise calculation of the added loss due to transmission of additional water delivery, but as the PRJI study shows, reasonable estimates can be made.

The procedure used here is to begin with the curve from the PRJI report, which is shown as Figure 1 below. This curve was derived as non-irrigation losses by the PRJI study team, as explained in its report.¹³ As is evident, the scatter in the data is significant and the losses rise quickly with flow at lower flow values. The curve was for annual values, whereas the delivery in 2015 would be a single event of about a month.

¹⁰ See NM delivery table for 2016

¹¹ See Section C.5. Texas water stored in New Mexico reservoirs.

¹² SD 109, page 46.

¹³ PRJI page 69.

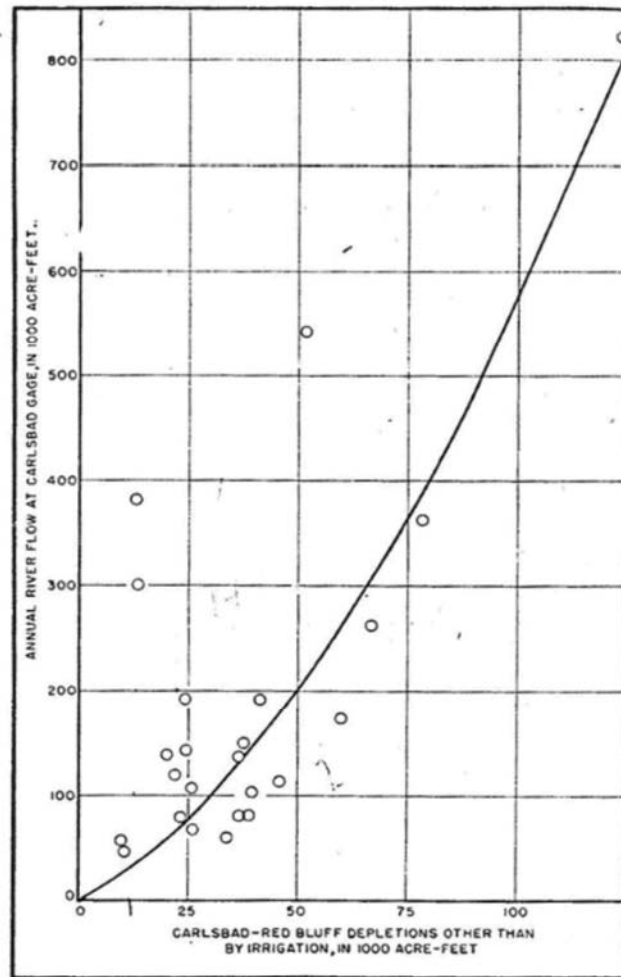


FIGURE 20.—Relation between annual depletions other than by irrigation, Carlsbad to Red Bluff, and annual river flow at Carlsbad, 1916 to 1939

Figure 1. Losses from Carlsbad to Red Bluff (from PRJI).

Table 53 shows irrigation and non-irrigation depletions for the annual data series, but not by month. For an average year, non-irrigation losses are 49.5% of total losses. New Mexico has already been charged with depletions due to irrigation in the summer. The needed calculation is how much additional loss would occur if a release of 17.9 TAF (the evaporation credit) was added to the flow during March.

NM's delivery from Avalon Reservoir took about a month, corresponding closely to August, 2015, but if NM could have delivered the water when it chose to after the end of the public safety period, it would have delivered the water in March. The PRJI data (Table 54) show an average total depletion of 6.0 TAF for March during the 1905-1939 period, which is the data series used in the Compact studies. As March is before the irrigation season, all losses would be non-irrigation losses, so the division into irrigation and non-irrigation losses would not apply for that month.

Annual losses provide some idea of how losses vary with discharge, but monthly flows will be different. To assess how losses vary with annual flows, the curve for annual losses in Figure 1 was used. A regression equation was fitted to the curve:

$\text{Loss} = .00012 * x^2 + 0.2474 * x + 2.9484$; where x = annual flow at Carlsbad in TAF

The annual flow for WY 2015 at Carlsbad was 69.7 TAF (or 68.9 after deducting Dark Canyon flow), which is low as compared to the full record and corresponds to the part of Figure 1 where there is most scatter in the data. By adding 17.9 TAF, the total would be 87.6 TAF. Using the fitted equation for both flows, the incremental increase in depletion would be 21.1%. By applying this percentage to the monthly non-irrigation loss of 6.0 TAF, the indication is that New Mexico would be charged $0.211 * 6.0 = 1.27$ TAF. While the lack of data and requirement to make assumptions create uncertainty in this estimate, the computed loss amounts to some 7.1% of the added flow of 17.9 TAF, which seems reasonable and within the ranges discussed by the PRJI.

Computation of adjustments

Date to allocate responsibility for evaporation

New Mexico's spreadsheet is used to compute allocation of evaporation losses. A worksheet was added and the file was renamed "NM Motion Mod Determination NM Exhibit 5 - Texas Water Stored in NM Tracking Table.xlsx." The added worksheet is named "Evaporation allocation," and it is a copy of New Mexico's worksheet entitled "BRANTLEY accounting table." The computations of evaporation allocations are in rows N and O.

The result is that Texas is charged with 17,897 AF and New Mexico is charged with 3,174 AF. The interpretation is that if the water had not been evaporated, New Mexico could have delivered 17,897 additional AF by releasing it from Brantley Reservoir beginning in August, 2014.

When NM started the delivery on August 5, the available water would have been greater by the amount of loss from that date to the end of delivery on September 8, or 1,756 AF. The evaporation loss computations take that into account, and the loss to the state line is not affected significantly by the month that it takes to release the water.

Loss to state line

The estimated loss to the state line was explained above and is 1.26 TAF.

Computation of New Mexico evaporation credit

NM calculation of evaporation credit = 21,071 AF

Public safety concern and date for evaporation responsibility (credit to Texas) = 3,174 AF

Delivery loss to state line = 1,270 AF

Net NM credit for storing water = $21,071 - 3,174 - 1,270 = 16,627$ AF

How should the River Master's Manual be modified?

The flooding of 2014 precipitated two issues that had not been considered before under the Amended Decree: 1) a retroactive adjustment due to an error in gaged flows; and 2) water stored in New Mexico at Texas' request. For the gaging error, the Manual's existing provisions can be used to modify the flood inflows by using the correct gaged flows, and the computed values can be carried ahead for the three-year averages.

The stored water at Texas' request required an adjustment to allocate the evaporation losses and can be accounted either as a one-time credit or by changing the relevant tables in the annual accounting and spreading changes over three years by averaging. This is explained in an accompanying document about the revised accounting.

Regardless of how retroactive adjustments are made, whether to correct gage errors or to respond to unusual situations such as the 2014 flooding, the River Master's Manual should explain how to handle them. To accommodate this, a section is added to the Manual to read:

C.7. Adjustment to a Final Report

If information to compute New Mexico's Article III(a) obligation, shortfall, or overage under the Pecos River Compact is delayed or shown to be in error, an adjustment to an annual Final Report may be required. Per a Motion by one or both States, the River Master will determine if good cause has been shown to make such an adjustment. If it has, the River Master will account for it using appropriate provisions of the Manual.

Summary

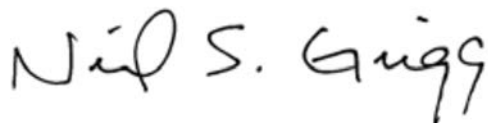
New Mexico's Motion has been amended in this Modification Determination. The 2014 flood flows were determined not to be unappropriated flood waters because under 1947 conditions the states would have been able to store and/or divert them. There is a hypothetical possibility that reservoirs in both states could have been full and unable to store the water, but there were no antecedent wet conditions or a series of earlier floods that would make this likely.

There is a dispute among the states as to when the public safety concerns for release of water were over. The River Master determined that March 1 is a reasonable date to set for this event. Evaporation responsibility was divided 50-50 between the states before that date and 100-percent to Texas after that date.

New Mexico would have delivered the water from Avalon Reservoir (if it had not evaporated). The River Master estimated a delivery loss from that point to the state line.

A section is added to the River Master's Manual to explain how to handle retroactive adjustments to annual accounting.

By the River Master:

A handwritten signature in black ink, reading "Neil S. Grigg". The signature is written in a cursive, slightly slanted style.

Neil S. Grigg

Appendix A: Communications, meetings and documents

The main written communications, meetings and documents related to New Mexico's Motion and considered by the River Master in preparing this Modification Determination are listed in this appendix. Other communications are included in the exhibits submitted by States.

Nov 20, 2014	TX email requesting storage
Jan 26, 2015	NM letter responding to TX request
Apr 20, 2015	NM email re 4-16-2015 conference call
Nov 3, 2015	TX email with Dark Canyon adjustment
Dec 29, 2015	TX transmits Brantley process agreement
Dec 29, 2015	NM transmits discuss draft spreadsheet
Feb 11, 2016	NM transmittal of meeting notes
Apr 15, 2016	NM TX email on process
Oct 13, 2016	NM TX email re process and inability to agree
Dec 12, 2016	NM email re meeting in February
Jul 27, 2017	TX email states discussing request to RM for assistance
Dec 13, 2017	NM TX letter requesting RM assistance
Dec 18, 2017	RM letter agreeing to process
Dec 22, 2017	TX position paper re UAFW
Dec 22, 2017	NM position paper re UAFW
Jan 3, 2018	RM letter on process
Jan 16, 2018	NM TX joint letter on process
Jan 17, 2018	NM letter proposed agenda March meeting
Jan 26, 2018	TX response to NM position paper (mentions Dark Canyon)
Jan 26, 2018	NM response to TX position paper
Feb 23, 2018	TX request to postpone scheduled meeting
April 5, 2018	NM letter informing agreement for May 31 rescheduled meeting
Jun 25, 2018	NM TX letter re briefing schedule on UAFW
Jun 28, 2018	SCOTUS approval of extension for WY 2017 Final Report
Jul 13, 2018	NM Motion on UAFW
Jul 27, 2018	TX response to NM motion
Aug 10, 2018	NM reply to TX response
Aug 20, 2018	RM transmittal of draft Modification Determination (DMD)

Aug 31, 2018	NM and TX responses to DMD
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Appendix B: Criteria to declare unappropriated flood waters

Purpose of the appendix

This appendix explains how the flood occurred, the concept of unappropriated flood water (UAFW) and the water management actions taken by the parties.

The flood flows and the impacts in the states are described in New Mexico's Motion¹⁴ and in Texas' response¹⁵, as well as in other documents exchanged by the states during the period between the flood and filing of New Mexico's motion. The flooding was caused by heavy rainfall resulting from the remnants of Tropical Storm Odie, which affected the Southwest and had the potential to cause the wettest September on record in parts of New Mexico.¹⁶ Table 12 of the River Master's Final Report for Water Year 2014 showed 10.98 inches of rain for September at the Brantley Lake gage. Rain gages in the upper Pecos Basin did not show such large precipitation totals for the month, which indicates that the main storm effects were in the lower part of the basin in New Mexico.

Explanation of unappropriated flood water in Compact documents

The concept of unappropriated flood water is included in the Pecos River Compact (Compact) and is explained in the report of the Engineering Advisory Committee (EAC) of the Pecos River Compact Commission¹⁷. The core concept that is implicit in the definition and explanations is that the Compact comprises an appropriation in the sense that New Mexico agreed not to deplete the water available to Texas under the 1947 condition. This established the water rights of New Mexico and Texas. Because the water flows are different each year, the annual entitlements of the States vary and depend on hydrologic conditions and capacity to store and divert water.

The EAC's discussions addressed two aspects of UAFW. One aspect was about development of new storage to capture the UAFW and is described this way: "There is a quantity of floodwater that is unappropriated in the basin. It wastes to the Gulf of Mexico unused. That quantity of water is that water which spills from Red Bluff Reservoir and is not used in the Texas area above Girvin. That water belongs to neither state. It can be made usable by the construction of additional storage facilities. The two States have agreed to apportion that on a 50-50 basis."¹⁸

¹⁴ New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015, dated July 13, 2018.

¹⁵ Texas' Response to New Mexico's Motion to Reconcile and Account for Texas Water Stored in New Mexico During Water Years 2014 and 2015, dated July 27, 2018.

¹⁶ Sosnowski, Alex. 2014. Odile Causes Tremendous Flooding in Southwest US. <https://www.accuweather.com/en/weather-news/flooding-threat-returns-to-ari/34047768>

¹⁷ The Compact and accompanying information are included in Senate Document 109, 81st Congress, 1st Session: "Pecos River Compact. Compact Entered Into by the States of New Mexico and Texas Relating to the Waters of the Pecos River, Together with the Report of the Engineering Advisory Committee to the Pecos River Compact Commission."

¹⁸ SD 109, page 98.

The other aspect was about how to account for the UAFW when it occurs and is explained in this passage: “If there is no change in conditions on the stream from those which were estimated by the 1947 condition, the unappropriated floodwater will be the quantities as defined by the compact, namely, waters which will spill from Red Bluff Reservoir and which will pass Girvin, Tex., unused with existing storage and diversion facilities.¹⁹”

Royce Tipton²⁰, the Chairman of the EAC explained further: “I believe that the term ‘Unappropriated floodwaters’ which appears in subparagraph (i) is plain. It means just what it says, viz: that any floodwater that is not now used in the basin above Girvin, Tex., is unappropriated floodwater, or water that would spill from Red Bluff Dam and would pass all the present diversion and storage facilities in Texas and flow unused past Girvin, Tex.”

While these definitions seem clear, the variability in the conditions introduces a complication in determining UAFW. Tipton explained it this way: “However, determination of such waters may be more complicated if the 1947 condition materially changed....It is apparent that to make a sufficiently accurate determination for the purpose intended of the unappropriated flood waters, it will be necessary to reconstruct the river to the 1947 condition and make a routing study by the methods used by the engineering advisory committee. Such studies will be necessary only at the times when it is believed that unappropriated flood waters under the definition of the compact have entered the river.”²¹

Routing studies were performed to develop the regression formula that divides the water between the States and is used in the River Master’s Manual (RMM). The studies used the hydrologic record, which includes a few occasions prior to 1948 when large flows occurred and Red Bluff spilled²². If the states lacked storage and diversion facilities to capture and use the flood water, it would be wasted. However, it was not UAFW until the Compact was in effect.

From 1960-82 there were 12 periods where flood storage would have exceeded the Brantley conservation pool if the reservoir had been in place²³, but whether any of these were UAFW has not been evaluated.

With the construction of Brantley Dam, Reclamation and New Mexico gained new capacity to store flood waters in conjunction with the Carlsbad project. Now, storage quantities are governed by the Project rules and the Resolution between the States²⁴. The Resolution specified that Reclamation has “developed a procedure for release and accounting to assure that NM does not unduly benefit from the release of water stored in Brantley Reservoir in excess of 42,000 acre-feet.” The agreement also specifies that NM has no intention of seeking additional storage “...except for the storage of waters which have been determined

¹⁹ SD 109, page 162. EAC’s “Manual of Inflow-Outflow Methods of Measuring Changes in Stream-Flow Depletion.”

²⁰ Royce Tipton had a key role in supporting development of the Pecos River Compact. He was chair of the EAC and had previously chaired the Consulting Board of the Pecos River Joint Investigation.

²¹ SD 109, page 114.

²² SD 109, page 82.

²³ Pecos River Commission Resolution dated March 6, 1984.

²⁴ Ibid. Resolution

by the Pecos River Commission to be ‘unappropriated flood waters as defined by the Pecos River Compact...” It was unclear how this provision might be implemented, but a logical scenario is for UAFW to be designated and for New Mexico to seek storage of its part in Brantley Reservoir, maybe involving a Warren contract with Reclamation.

To summarize, prior to the Compact the flood waters that passed from New Mexico to Texas were included in the studies that led to the regression equation in the RMM. In some cases, they likely flowed past Girvin unused but there were no appropriated rights between the States because no Compact had been developed. The Compact set the appropriation, which is that New Mexico will not deplete the 1947 condition, on the average, with accounting on a three-year basis. The measure of appropriated quantities is the regression equation, which expresses the delivery obligation that does not deplete Texas’ water below the 1947 condition. The regression equation was developed by correlating delivery to the state line as a function of inflows and outflows from river reaches in New Mexico. In the Compact, unappropriated flood waters were defined as those over and above the capability of the states to store and divert the waters under the 1947 condition, which includes the infrastructures of that time.

If both states have the 1947 infrastructure for storage and diversion, flood waters that pass Girvin despite their efforts to store and divert them are UAFW. As an example, suppose a flood hits below Brantley and New Mexico has no capacity to store it. New Mexico wants to use it as state line delivery water. If Texas has capacity in Red Bluff to store it, then it is not UAFW and New Mexico gets credit for delivery. Now, suppose that for some reason Red Bluff reservoir is out-of-service due to an infrastructure problem. It is not New Mexico’s responsibility that the Texas infrastructure is not able to store the flood and, even though the water passes Girvin unused, it is not UAFW. As another example, suppose that Red Bluff reservoir has its 1947 storage capacity, but is full when the flooding hits. Texas cannot store the water and it passes Girvin unused. It is not Texas’ fault that the storage space was not available, so the water will be declared as UAFW and Texas receives credit for half. New Mexico is not able to claim delivery credit for the full flood, but only half. These examples illustrate importance of infrastructure condition or capacity and the state of storage levels when flooding occurs.

Water management actions

Through a series of communications the states arranged for New Mexico to store flood waters in Brantley Lake to help Texas manage storage volumes in Red Bluff Reservoir and to respond to public safety concerns. The stored water was still in Brantley Reservoir as of the beginning of summer, 2015. As a result of its determination that it could no longer store the water without a Warren Contract and per New Mexico’s request, Reclamation released some 29,946 AF of water from Brantley Reservoir from August 5 through September 8, 2015. This water was then released by New Mexico from Avalon Reservoir.

In the first five days of flooding, Texas storage increased about 106,530 AF (to 191,371 AF from 84,841 AF), which included Delaware River flows of about 34,819 AF from September 19 through 24, plus rainfall directly on the surface, less outflows and less any losses. Outflows from the spills and gate releases totaled 11,758 AF for those five days. If Red Bluff

capacity had been at the 1947 condition level, there would have been additional capacity and Red Bluff operators would not have had to release water to a safe level. Red Bluff Reservoir's initial total capacity has been estimated at 310,000 AF and various reports cite a capacity of 270,000 AF, but dam safety concerns had reduced this by 2014²⁵. The maximum storage immediately after the flood was 191,371 AF on September 23, and the Red Bluff managers reduced the level to the range of 130,000 AF by the end of October²⁶, which was apparently regarded as a safe operational level at that time. Storage volume at the dam safety limit at the crest of the service spillway at elevation 2827.4 is apparently about 140,000 AF²⁷.

Red Bluff managers had lowered the water level to the range of 128,000 AF by early November, apparently for dam safety reasons. This required releases plus spills of 61,780 AF²⁸. By the end of October, Brantley Reservoir was 36,019 AF over the Carlsbad Project limit. If that reservoir was not available, as in 1947, some of that water could have been stored in a McMillan Reservoir that had diminished capacity, but if none of it could have been stored, a full-capacity Red Bluff Reservoir could have stored it.

Summary and conclusions

Although the 2014 flood was large, it did not involve magnitudes that were unprecedented in the record as shown in the Review of Basic Data²⁹. It is apparent that Red Bluff Reservoir was constructed with a large capacity to capture runoff for carry-over use in irrigation, as well as hydroelectric power generation. The River Master has not found an original design report to explain the purposes of the storage, but documents available indicate a storage of about 300,000 AF for irrigation and hydroelectric power³⁰. The power facilities are relatively small, which indicates that the intended major use is for irrigation.

The apparent reason that Texas could not store the flood water is diminished capacity in Red Bluff Reservoir. It is not New Mexico's responsibility that Texas was unable to store these waters.

²⁵ Texas Water Development Board. 2013. Volumetric Survey of Red Bluff Reservoir, November 2011 Survey.

²⁶ Brantley and Red Bluff Reservoir operations 2014-2015 Final REV 12-20-2017.

²⁷ Robin Prewit's email of December 7, 2014 to Suzy Valentine states that Red Bluff spilled in September 2014 at elevation 2828.21. See Exhibit 1 of Texas' Response to New Mexico's Motion.

²⁸ Per sum of September 19 through October 31, Brantley and Red Bluff operations at Column Q.

²⁹ See page 1-24 and Table 21-7 of Review of Basic Data, 1960.

³⁰ A map downloaded from Texas Water Institute indicates authorization under state permit 1217 dated 1934 for 300,000 AF storage for power and irrigation. Also, A report dated 2007 "Water Issues Facing the Pecos Basin of Texas" refers to construction of up to 307,000 AF of storage for irrigation. <http://pecosbasin.tamu.edu/media/1885/pecos3.6.07.pdf>

Appendix C: River Master's responses to comments from the states

New Mexico's Comments

1. Computation of delivery loss

Summary of comment. Computation of delivery loss should be as of March rather than August.

The River Master agrees because the end of the public safety period would have been NM's chosen time to deliver the water. An adjustment has been made. The adjustment required a different assumption about the allocation of irrigation and non-irrigation losses because March is before the irrigation season. As a result, the new computation has a result that is almost the same as the previous one.

2. Potential calculation error

Summary of comment. NM computed an incremental increase of 22.9% as opposed to 20.9% and the calculation should be checked.

This was recomputed. The discrepancy was due to not specifying that the flow had been adjusted to Carlsbad gage above Dark Canyon Draw. By using the final figures, including 17.9 TAF as the evaporation charge, the percentage is 21.1%.

3. PRJI table number

Summary of comment. Table 53 with PRJI data should be corrected to Table 54.

NM is correct and the change has been made.

4. River Master Manual language

Summary of comment. NM suggested an edit to the language to be added to the River Master's Manual.

NM's suggestion clarifies the issue and is accepted.

Texas' Comments

1. Deadline for consideration of motion

Summary of comment. Texas argued that New Mexico's motion should be denied because NM did not object to preliminary accounting for Water Year 2015 or seek review in the Supreme Court.

The question of whether the deadline for annual accounting prohibits making an adjustment through NM's Motion was addressed by the states in negotiations and in written statements³¹. The states disagree. In deciding between the conflicting opinions, the River Master is relying on the principles of equitable administration of annual accounting as contained in the Compact and the Amended Decree. These rely on the inflow-outflow method and three-year averaging to assure that water entitlements to each state under the 1947 condition are met. As a result of the 2014 flood, there was uncertainty about how to

³¹ The question of the deadline was discussed by the States and the River Master at the meeting held in Fort Collins on May 31, 2018. It was also addressed in NM's and TX's exchange of views in this Motion and responses.

manage it and account for the water. The states cooperated in seeking an equitable resolution, but ultimately they could not agree about certain matters of water accounting. While the flood occurred in 2014, the adjustments due to Texas' initial request to New Mexico to store the water are to be made in Water Years 2015, 2016 and 2017, which are included in the current Final Report that is due September 10, 2018 as approved by the Supreme Court. The adjustment of the gage error is to be made for Water Year 2014, but Texas does not object to it. The Amended Decree authorizes the River Master to amend motions, as well as to approve or deny them. The River Master's finding is that making the adjustments requested by New Mexico's Motion is not prohibited.

2. Designation of unappropriated flood waters

Summary of comment. Texas' wrote that the Draft Modification limits the evaluation of unappropriated floodwaters to the time that the storm occurred and fails to account for other inflows and releases that contribute to the volume of water in Red Bluff Reservoir.

In their comments on the DMD, Texas wrote that the DMD "limits the evaluation of unappropriated floodwaters to the time that the storm occurred and fails to account for other inflows and releases that contribute to the volume of water in Red Bluff Reservoir." Examples cited are Delaware River inflows and CID releases. Texas' argument would consider a full year or more: "At current capacity, Red Bluff Reservoir released 106,101 AF in 2014 and 2015 to accommodate floodwater inflows and releases from New Mexico. If Red Bluff had a 270,000 AF capacity, it would have spilled at least 32,447 AF in 2015 and 2016³². Some portion of these waters should be designated unappropriated floodwaters under the Compact."

In addition to the factors listed by Texas, the River Master considered other factors in preparing the DMD. As explained to the Pecos River Commission by Royce Tipton, if river conditions changed from the 1947 condition, routing studies would be required to determine if UAFW occurred³³. These routing studies would require consideration of additional factors such as capacity, condition and contents of reservoirs, as well as diversion facilities in both states.

In addition, the analysis would have to consider the actions of the states in managing available storage and diversions because use of flood waters depends not only on the facilities but on how they are operated. The River Master based his analysis on the assumption that NM would store water up to the Carlsbad Project limit and deliver all additional water to Texas, thereby receiving credit for delivering the water.

It is not clear why TX considers flows into 2016 as relevant to analysis of potential UAFW arising from a 2014 event, but in any case the total cited by TX includes water labeled by NM as "stateline delivery water," or some 23,230 AF from September 8 to October 5, 2015³⁴. These deliveries came about a year later than the flood. While it is normal that reservoir

³² The River Master could not locate this number on the spreadsheet referenced by Texas. He assumed that TX meant cell L580, which shows 32,583 AF in spills for the period through 3/31/2016.

³³ SD 109, page 162.

³⁴ NM Exhibit 5 - Texas Water Stored in NM Tracking Table APPROVED USGS - NM Position Paper.xlsx. Brantley Accounting Table, sum of column V.

operations due to a flood will extend beyond the flood period, the standard practice is to evacuate the flood storage pool as soon as practicable.

The River Master's analysis was reported in the paragraph in the DMD that explained Red Bluff capacity to store the flood water: "Whether Red Bluff Reservoir could have stored the full 124,290 AF under the 1947 condition would depend on its capacity and water level before the flood. In 2014, the volume of water in Red Bluff Reservoir on September 18 just before the flood was 84,841 AF. If the full 124,290 AF flowed into the reservoir, the required storage under the 1947 condition would be 209,131 AF, which seems to be within its capacity at that time."

Delaware River flows for the period September 19 through 30 were 36,687 AF, according to the spreadsheet provided by Texas³⁵. If this flow was stored and added to the worst-case from New Mexico (release all above Carlsbad Project limit), the total required storage would be 245,818 AF, still well below the 270,000 AF capacity. The required storage in Red Bluff would have been diminished by any storage available in McMillan Reservoir and likely been well below the estimate of 245,818 AF.

In summary, the most critical item of information in assessing whether UAFW occurred was the capacity of Red Bluff Reservoir in its 1947 condition to store the waters. It is apparent that an important element of this information is the content in Red Bluff when the flood occurred because the less the content, the greater the capacity of Red Bluff to store the water. This fact demonstrates that the statements by the EAC in SD109 should be studied further to study the roles of reservoir operations in capturing flood waters and/or declaring future UAFW events. For example, flood control capacity in Brantley Reservoir might be utilized to the benefit of both states or mutually-beneficial agreements might be reached on schedules for water deliveries.

3. Calculation of evaporation loss

Summary of comment(s). a. There are two instances where the Compact envisions assessment of evaporative losses: during storage of unappropriated floodwaters and when water is impounded in one state for use by the other; b. Reclamation was not holding water for Texas but for flood control; c. Evaporative losses should not be calculated with Texas' water on top.

Comments a. and b. stem to the same issue of whether the water was stored for TX or not. TX's request to NM of November 20, 2014 was to "store Texas' portion of the flows until such time as they can be used in Red Bluff Reservoir." Also: "It is my understanding that the losses due to storage will be allocated in accordance with the Pecos River Master Manual." This request seems to indicate clearly that TX understood the water stored in NM to be TX water.

Regarding computation of evaporation losses, the RMM at C.5. (Texas Water Stored in New Mexico Reservoirs): "If a quantity of the Texas allocation is stored in facilities constructed in New Mexico at the request of Texas, then to the extent not inconsistent with the conditions imposed pursuant to Article IV(e) of the Compact, this quantity will be

³⁵ Brantley and Red Bluff Reservoir operations 2014-2015 Final REV 12-20-2017sub 8 31 18 .xlsx.

reduced by the amount of reservoir losses attributable to its storage, and, when released for delivery to Texas, the quantity released less channel losses is to be delivered by New Mexico at the New Mexico–Texas state line.” This provision seems to govern the situation under consideration here.

The justification of charging evaporative losses with Texas’ water on top was explained in the DMD and does not deny that the waters are mixed and not stratified. The logic stems from equity to NM: the TX water would not have been in the reservoir at all except for TX request for storage.

4. River Master Manual modifications

Summary of comment. a. Gaging error at Dark Canyon Draw (Texas agrees with the proposal to amend the WY 2014, 2015, and 2016 final reports to correct the Dark Canyon Draw gage error); b. Proposal for amending WY 2015 final report to account for evaporative losses from floodwater stored in Brantley Reservoir in WY2014 and 2015 (Texas does not agree to the proposal for amending the final reports regarding evaporative losses from floodwater stored in Brantley Reservoir in WY 2014 and 2015); c. (Proposal for RMM modification): The River Master is not authorized to add a provision to the RMM.

TX agreed with the change to the Dark Canyon Draw gage record. Her objection to the revisions in final reports related to evaporative losses was discussed above. On the change to the RMM, NM made the motion and did not object. NM’s suggested modification was accepted. A provision is needed in the RMM so that the River Master and the states have guidance about handling future changes, which may be required. An example of such changes was the gage error, about which TX agrees. The RM is authorized under the Amended Decree to amend motions for such good causes as these.