

PECOS AND REPUBLICAN RIVER COMPACT COMPLIANCE ISSUES

by

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Introduction

This paper examines compact compliance issues following interstate litigation on the Pecos River in eastern New Mexico and the Republican River in south-central Nebraska. The Pecos River Compact was authorized by the United States Congress as the Act of June 9, 1949 (63 Stat. 159) following negotiation between the States of New Mexico and Texas. The Republican River Compact was ratified by the United States Congress in 1943 as the Act of May 26, 1943 (57 Stat. 86), after negotiation among the States of Colorado, Nebraska and Kansas. The Pecos and Republican are interstate rivers: the Pecos River flows between New Mexico and Texas, the Republican River flows between Colorado, Nebraska, and Kansas. There are important similarities:

- surface flows are fully appropriated in both basins;
- the surface waters were apportioned between the states by the compacts;
- interstate litigation followed allegations of compact violations by the downstream states based on depletions of apportioned surface flows caused by the pumping of hydrologically connected groundwater upstream.

There are also significant differences. On the Pecos, interstate litigation resulted in a series of United States Supreme Court decrees, and in a settlement in the case of the Republican. Although New Mexico did not achieve a defense verdict, it was successful in reducing its liability from depletions of 1,200,000 acre-feet to 340,000 acre-feet for the period 1950-1983, a reduction of 860,000 acre-feet, which New Mexico settled with \$14 million, enabling the State to employ strategies to meet its delivery obligations to Texas. Since the late 1970's, the State of New Mexico had sought, and employed, strategies for bringing the State into compliance with its delivery obligations. The last of these is

expected to be completed in the autumn of this year. A similar effort has yet to be undertaken on a basin-wide basis for the Republican. New Mexico's effort on the Pecos is intended to keep its irrigators whole, and fully compensated, for investments that they made in their farming enterprises under color of New Mexico state law. It contains the following components:

- purchase of water rights under fair market prices from willing sellers; and
- the use of the purchased water rights for river augmentation.

Geography

Pecos River

The Pecos River geography is divided into three parts: the Upper Pecos, the Middle Pecos, and the Lower Pecos, *i.e.*, that portion of the Pecos in the state of Texas. The Pecos River rises in the mountainous regions of upper New Mexico, in the vicinity of Las Vegas, New Mexico, and is fed by numerous mountain tributaries. Water use in this portion of the Pecos consists of numerous *acequia* (or community ditch) water uses of Hispanic origin. The Middle Pecos begins with Ft. Sumner Dam and Reservoir (formerly Alamogordo Dam and Reservoir), which has a capacity of approximately 44,000 acre-feet and is the first storage reservoir on the system serving the two principal irrigation districts: Ft. Sumner Irrigation District with some 4,100 acres of irrigated land, and the Carlsbad Irrigation District ("CID") with 25,025 acres of irrigated land. CID has the senior priority on the lower Pecos. Some 130 miles south of Ft. Sumner Reservoir is Brantley Dam and Reservoir (formerly McMillan Dam and Reservoir) constructed in 1892-1893 initially with a storage capacity of 138,000 acre-feet of water, now greatly

reduced by siltation. North of Brantley Reservoir are two other principal cities in the Basin, *i.e.*, Roswell and Artesia. Six miles below Brantley Reservoir is Avalon Dam and Reservoir, a regulating reservoir that serves as the outlet of water for the irrigated acres in Carlsbad Irrigation District, and which has a capacity of 4,600 acre-feet. Below Avalon Reservoir is the town of Carlsbad and the 25,025 irrigated acres of the Carlsbad Project. Below the Carlsbad Project, the river curves in what is known as the Malaga Bend before reaching the state line. Immediately south of the state line is the Red Bluff Reservoir which serves irrigated acres above Girvin, Texas. Between Brantley Reservoir and the CID irrigated acres lies the Pecos Valley Artesian Conservancy District ("PVACD"), whose water users divert with groundwater to irrigate approximately 60,000 acres from the shallow and artesian aquifers.¹ PVACD's water users have junior priorities.

Republican River

The Republican River rises in eastern Colorado and flows thorough south central Nebraska and into Kansas. Within Nebraska, the Republican River Basin is divided into four natural resource districts ("NRD"). These are the Upper Republican NRD, Middle Republican NRD, Lower Republican NRD, and Tri-Basin NRD. Under Nebraska law, natural resources districts have primary responsibility for groundwater regulation.

The main irrigation and storage facilities in the Republican Basin, corresponding to their counterparts on the Pecos, are the Nebraska Bostwick Irrigation District with 12,380 acres, Frenchman-Cambridge Irrigation District with 32,650 acres, (combined) Frenchman Valley and Hitchcock and Red Willow Irrigation Districts with 21,050 acres

¹ The water righted acreage is perhaps 120,000 acres.

and Riverside Irrigation Company with 675 acres.² Storage reservoirs serving this acreage include Swanson (120,160 acre-feet), Enders (44,480 acre-feet); Harry Strunk (37,140 acre-feet), Hugh Butler (37,780 acre-feet) and Harlan County (342,560 acre-feet).³

Pecos Background

The history of the Pecos River dispute between the States of New Mexico and Texas reveals two things. First, the Pecos dispute was one of the earliest interstate disputes in the western United States and established precedent for interstate water law. Second, the Pecos dispute displays an early effort on the part of water managers in the State of New Mexico to get control of groundwater usage. Chronologically, the development of the Pecos dates to the efforts of Francis Tracy, a transplanted New Yorker, to create a vast agricultural empire in the vicinity of Carlsbad, in the New Mexico Territory of the 1890's. The Tracys were successful in obtaining funding from Chicago, and as far away as Switzerland, to create the beginnings of what ultimately became the Carlsbad Irrigation District. By 1904, the storage and delivery structures on the river consisted of McMillan Dam and Reservoir, the Avalon diversion, and the Carlsbad flume.

These structures, and their private ownership, was radically changed by the flood of 1904. In October of that year, a massive flood caused by storm water runoff badly

² Frenchman Valley/H&RW diverted no water during any of the past three growing seasons. For 2007 growers have been told the districts again anticipate making no canal diversions. The districts have not diverted a fully supply since the early 1960's. The federal indebtedness for project construction was forgiven more than ten years ago. Frenchman-Cambridge operated only one of its four canals (Cambridge Canal; draws from Harry Strunk) during the past three years. As a means for the State to meet Compact requirements, Board members are considering selling all diversion rights for 2007.

³ Except for Harry Strunk, each of the reservoirs has remained near (or even below) dead pool levels since 2003. The hydrograph for Enders Reservoir (supplies Frenchman Valley/H&RW) illustrates an uninterrupted, long-term decline. It's been more than 45 years since Enders last filled to capacity.

damaged most of McMillan Dam and Reservoir, severely damaged the Avalon diversion and the Carlsbad flume. The financial setback represented by this flood necessitated sale of the Carlsbad project to the United States in 1905.

Parallel with the interstate tract, was the development of internal New Mexico water administration, which focused on the administration of groundwater rights due to the declining artesian head in the Roswell Artesian Basin. New Mexico's first groundwater code was promulgated in 1927, was declared unconstitutional, and was re-enacted in 1931.⁴ New Mexico's groundwater code extends State Engineer jurisdiction to groundwater basins "having reasonably ascertainable boundaries." *See* NMSA 1978, § 72-12-1 (1931). The Roswell Artesian Basin was declared by the State Engineer on August 21, 1931.⁵ Since 1963, groundwater and surface water in New Mexico have been conjunctively managed together where they are inter-related. *See Albuquerque v. Reynolds*, 71 N.M. 428, 379 P.2d 73 (1963). This differs from administrative practice in Nebraska, where surface and groundwater administration are divided between the Department of Natural Resources and the Natural Resource Districts.

Interstate Apportionments

The Pecos River Compact

The Pecos River Compact, as finally enacted in 1949, created an apportionment of the Pecos River based on the "1947 condition" of the river. *See* Attachment No. 1.

Article III(a) states:

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

⁴ *See Yeo v. Tweedy*, 34 N.M. 611, 286 P. 970 (1929). This problem was corrected, and the state's groundwater code, presently in existence, was enacted in 1931, and declared constitutional.

⁵ There have been subsequent extensions on various dates.

amount which will give to Texas a quantity of water equivalent to that available to Texas under the 1947 condition.

In Art. II(g) the "1947 condition" was defined as "that situation in the Pecos River Basin as described and defined in the "Report of the Engineering Advisory Committee." The Report was defined to include the "basic data." The routing studies were accompanied by a Manual of Inflow-Outflow Methods of Measuring Changes in Stream-flow Depletions (1948) (the "Inflow-Outflow Manual") to be used in determining how much water Texas should receive over any particular period under the conditions prevailing in New Mexico in 1947.

The Department of the Interior's 1942 survey of the basin entitled *Regional Planning, Part X: The Pecos River Joint Investigation in the Pecos River Basin in New Mexico and Texas* ("Pecos River Joint Investigation") described the basin conditions in terms of stream flow, groundwater usage, and irrigation demand. See Attachment No. 2.⁶ The Compact Commission's engineering advisory committee, including Royce Tipton who served as federal representative, utilized data from the *Pecos River Joint Investigation* to prepare a series of routing studies. These were intended to show how much water would reach the New Mexico-Texas state line (Red Bluff) under six conditions applied to historical river flows. Condition No. 1 represented actual 1940 conditions on the River with Alamogordo, McMillan, Avalon, and Red Bluff Dams in place, and with existing irrigation demands in New Mexico and Texas, but with base flow in the Roswell area reduced by wells and with flood inflow reaching the river as it was supposed to under natural conditions. The remaining five conditions added and

⁶ Copies are available from Mr. Jess.

subtracted dams and varied salt loads in the river to approximate different versions of “man’s activities” on the Pecos.⁷

The Republican River Compact

The Republican River Compact apportions surface flows of the Republican River among the States of Colorado, Nebraska, and Kansas, granting a consumptive use right to each from the surface flows of the Republican. The Republican Compact allocates the average annual water supply of the Republican River as follows: 11% to the State of Colorado, 49% to Nebraska, and 40% to Kansas. The apportionment provisions of the Republican River Compact are set forth in Article III. That Article provides that “[t]he specific allocations in acre-feet hereinafter made to each state are derived from the computed average annual virgin water supply originating in the following designated drainage basins, or parts thereof, in the amounts shown”. The Compact then identifies the allotted acre feet from each of the drainage basins, including those in Nebraska. Article IV allocates for beneficial consumptive use or amounts of acre-feet in each of the basins. See Attachment No. 3.⁸ The delivery obligation is implied, but not expressed.

Interstate Disputes

Texas v. New Mexico, No. 65, Original

Texas v. New Mexico, No. 65, Original, was litigated for fourteen years and resulted in several reported opinions from the United States Supreme Court.⁹ The reported opinions established the key principles of original actions in interstate water disputes. Compact enforcement issues developed soon after the Compact had been ratified by the United States Congress and administration was passed to the Pecos River

⁷ See S. Doc. No. 109, 81st Cong, 1st Sess., 9-11 (1949).

⁸ Copies are available from Mr. Jess.

⁹ See also *Texas v. New Mexico*, 446 U.S. 540 (1980).

Compact Commission. As the Supreme Court stated: “[I]t became clear soon after the Compact went into effect that the 1947 Study and, more importantly, the tables in the Inflow-Outflow Manual did not describe the actual state of the river. In almost every year following adoption of the Compact, state-line flows were significantly below the amount that one would have predicted on the basis of the Inflow-Outflow Manual, with no obvious change either in natural conditions along the river or in ‘man’s activities’” *Texas v. New Mexico*, 463 U.S. 554, 560 (1983). See Attachment No. 4. The response to this problem was to authorize a “Review of Basic Data” in 1957 to attempt to create a more accurate description of the “1947 condition.” This led to the conclusion that there had been shortfalls of some 53,000 acre-feet in the period 1950-1961. However, at the special meeting of the Pecos River Compact Commission in July of 1970, the Texas commissioner calculated that according to the original Inflow-Outflow Manual, there had been a cumulative shortfall in state-line flows of 1.1 million acre feet for the years 1950-1969, that the Review of Basic Data was “incomplete and replete with errors.” 462 U.S. at 561-62. All attempts at mediation failed. The Commission took no action because of the political voting formula of the Commission which required unanimous consent for Commission action. (The United States was a non-voting member.)

Texas filed suit against the State of New Mexico in June of 1974, alleging that New Mexico had breached its obligations under Article III(a) by “countenancing and permitting depletions by man’s activities within New Mexico to the extent that from 1950 through 1972 there has occurred a cumulative departure of the quantity of water available from the flow of the Pecos River at the Texas-New Mexico state line in excess of

1,200,000 acre-feet from the equivalent available under the 1947 condition” 462 U.S. at 562. Texas sought a decree committing New Mexico to deliver water in accordance with the Compact. The United States intervened. Leave to the file the complaint was granted, and a Special Master was appointed.

In the Court’s opinion in *Texas v. New Mexico*, 462 U.S. 554 (1983), the Supreme Court overruled New Mexico’s objections that the Supreme Court’s jurisdiction was limited to determining if Commission action was arbitrary or capricious. The Court concluded that its original jurisdiction “to resolve controversies between two States, U.S. Const., Art. III, § 2, Cal. 1; 28 U.S.C. § 1251 (a)(1), extends to a properly framed suit to apportion the waters of an interstate stream between States through which it flows, *e.g.*, *Kansas v. Colorado*, 185 U.S. 125, 145 (1902), or to a suit to enforce a prior apportionment, *e.g.*, *Wyoming v. Colorado*, 298 U.S. 573 (1936), including rights under a compact. *Id.* at 567. The Court ruled that: “[i]f there is a compact, it is a law of the United States . . . and our first and last order of business is interpreting the compact.” 463 U.S. at 567-68. The Court noted that “if all questions under the Compact had to be decided by the Commission in the first instance, New Mexico could indefinitely prevent authoritative Commission action solely by exercising its veto on the Commission.” 463 U.S. at 568.

In its 1987 opinion in *Texas v. New Mexico*, 482 U.S. 124 (1987), the Supreme Court addressed the Special Master’s ruling that New Mexico had defaulted by 340,000 acre-feet for the period 1950-1983 and he ordered “to make up the accumulated shortfall by delivering 34,010 acre-feet of water each year for 10 years, with a penalty in kind, *i.e.*, ‘water interest,’ for any bad-faith failure to deliver these additional amounts.” 482 U.S. at 127-28. *See* Attachment No. 5. The Court held that there was no merit to New

Mexico's contention that the Court may order only prospective relief and may not provide a remedy for past breaches of the Compact. *Id.* The Court held that "[w]e find no merit in [New Mexico's] submission that we may order only prospective relief, that is, requiring future performance of compact obligations without a remedy for past breaches. If that were the case, New Mexico's defaults could never be remedied." 482 U.S. at 128.

New Mexico contended that it be afforded the option of paying monetary damages rather than paying in kind, *i.e.*, in water. The Court noted that "[t]his possibility was discussed to some extent in hearings before the Master, who more than once stated that damages might be best for both parties." 482 U.S. at 129-130. The Court concluded that a remedy, either in water or money, was appropriate. 482 at 130. This issue was remanded to the Special Master for further proceedings.

Upon remand, a stipulated judgment was entered under which New Mexico agreed to pay \$14 million to Texas. In its Amended Decree in *Texas v. New Mexico*, 485 U.S. 388 (1988), New Mexico was enjoined "[t]o comply with Article III(a) of the Pecos River Compact and to meet the obligations thereof by delivering water to Texas at state line as prescribed in its Decree" Para. II(A)(1). The Court retained jurisdiction "for the purpose of any order, direction, or modification of the Decree as might at any time be deemed proper" The Court approved the Special Master's recommendation that a River Master be appointed in this case, and requested that on remand the Special Master:

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.

See Attachment No. 6.

Pecos River Compact Compliance

New Mexico's efforts to come into compliance on the Pecos River consist of two phases. First, in response to a priority call by CID in the late 1970's, the legal section of the New Mexico State Engineer Office had thought that responding to this priority call, New Mexico would meet its obligations to Texas with return flows following usage in CID.

To implement this, it was necessary to obtain State Supreme Court authorization. This was undertaken at the behest of the State Engineer and is set forth in *State of New Mexico, ex rel. S.E. Reynolds v. Pecos Valley Artesian Conservancy District*, 99 N.M. 699, 663 P.2d 358 (1983). The New Mexico Supreme Court held that the trial court, which was to adjudicate priorities in reverse order "simultaneously ordering each junior user to show cause why his right should not be terminated to satisfy . . . senior rights" "does not violate the appellants' rights to due process, as they would be afforded opportunity to contest priorities before any decree is adopted with respect to the rights of the Carlsbad Irrigation District." 99 N.M. at 701. Instead, the State decided to acquire water rights through a purchase program.¹⁰

The present Pecos River compliance plan is set forth in NMSA 1978, § 72-1-2.4 (2002) and the Settlement Agreement among the United States, the New Mexico Interstate Stream Commission, the Carlsbad Irrigation District, and the Pecos Valley Artesian Conservancy District. See Attachment No. 7. The statute states that its purpose

¹⁰ See NMSA 1978, § 72-1-2.2 (1991).

“is to achieve compliance for the Pecos River Compact, establish a base flow of the Pecos River of 50 cubic feet per second at the Artesia Bridge, and provide a reliable annual irrigation supply of 90,000 acre-feet of water for delivery of 3 acre-feet per acre of irrigated land in the Carlsbad Irrigation District, and for adequate water to fulfill delivery requirements to the Texas state line pursuant to the Pecos River Compact.”¹¹ See Attachment No. 8.

The Pecos River compliance project is based upon appropriations from the New Mexico Legislature to retire water rights that impact the flows of the Pecos River and to create augmentation well fields for supplementing flows to the Pecos River when that is necessary. The statute sets forth the sections of the reaches of the river from which the (initially) land with appurtenant water rights or with rights to the delivery of water should be purchased and consisted of the following: (a) 4,500 acres of land on the CID assessment rolls, and (b) 7,500 acres of irrigation rights in the Roswell Artesian Basin (PVACD).

The implementation program involves an extensive due diligence analysis. It was initiated, as per the statute, with the Interstate Stream Commission preparing “a comprehensive request for bids from owners of land with appurtenant water rights or rights to the delivery of water [who] shall evaluate and compare the bids and shall make offers to contract in response to the bids.” Certain criteria were contained in the requirements for the bids, including that they (1) provide for competition among the owners of land from whom bids are requested; (2) contain criteria to address the priority of the purchases based on the effectiveness of the purchased land with appurtenant water

¹¹ The compliance program initially required both the purchase of land and water rights, although legislation enacted in 2007 eliminated the requirement that land be purchased.

rights or rights to the delivery of water in increasing flows of the Pecos River and to address the different value of water rights associated with the degree of seniority of the water rights; (3) provide for the purchase of land water righted "assessed" by the Carlsbad Irrigation District; and (4) provide for the purchase of land upstream from the Carlsbad Irrigation District in amounts necessary to comply with the requirements of this section.

The program involves two components:

- purchase and retirement of groundwater and CID surface water rights;
- the use of the purchased groundwater artesian rights for augmentation of the Pecos River through existing wells and two new augmentation well fields.

The evaluation of the water rights for purchase involves the following activities:

- issuance of the request for bids;
- conducting a market analysis to determine the fair market value;
- analysis of the water right offers contained in the request for bids, including the water right type, the priority of the right, the historical use, the location of the right in terms of its impacts on the Pecos, and the price.

Different prices for rights have been established for rights according to the following categories: Carlsbad Irrigation District assessed lands, *i.e.*, surface water rights; Roswell Artesian Basin Hagerman Irrigation Company rights; Roswell Artesian Basin senior Artesian aquifer rights; Roswell Artesian Basin senior shallow rights; and Roswell

Artesian Basin senior surface rights. The most expensive of these are the Roswell Artesian Basin rights, as these are the rights that will be used in the augmentation well fields because they create an immediate surplusing of the river when necessary.

The acquisition process involves five steps, which can take from four months to one year. These include: a preliminary due diligence analysis to determine if there are any "fatal flaws" which would dismiss a right at the outset; contract execution; a final due diligence analysis to resolve any problems that may have been identified in the preliminary due diligence, including any corrective actions that are necessary; approval by the New Mexico Interstate Stream Commission; and closing. Of these, perhaps the most important is the preliminary due diligence "fatal flaw" analysis. This includes a title opinion, a commitment for title insurance, and a water right abstract to identify any potential "fatal flaws" in the water rights up for purchase.

To date, the New Mexico State Legislature has appropriated approximately close to \$100 million for the implementation program. It is expected that this amount is all that is required. Since New Mexico's debt was extinguished in 1985, the State has not been in default in its delivery obligations to Texas; and since the purchase and sale program was adopted in 2003, New Mexico has enjoyed a surplus status in deliveries to Texas.