

PECOS RIVER COMPACT

Report of the River Master

Water Year 2024

Accounting Year 2025

Final Report

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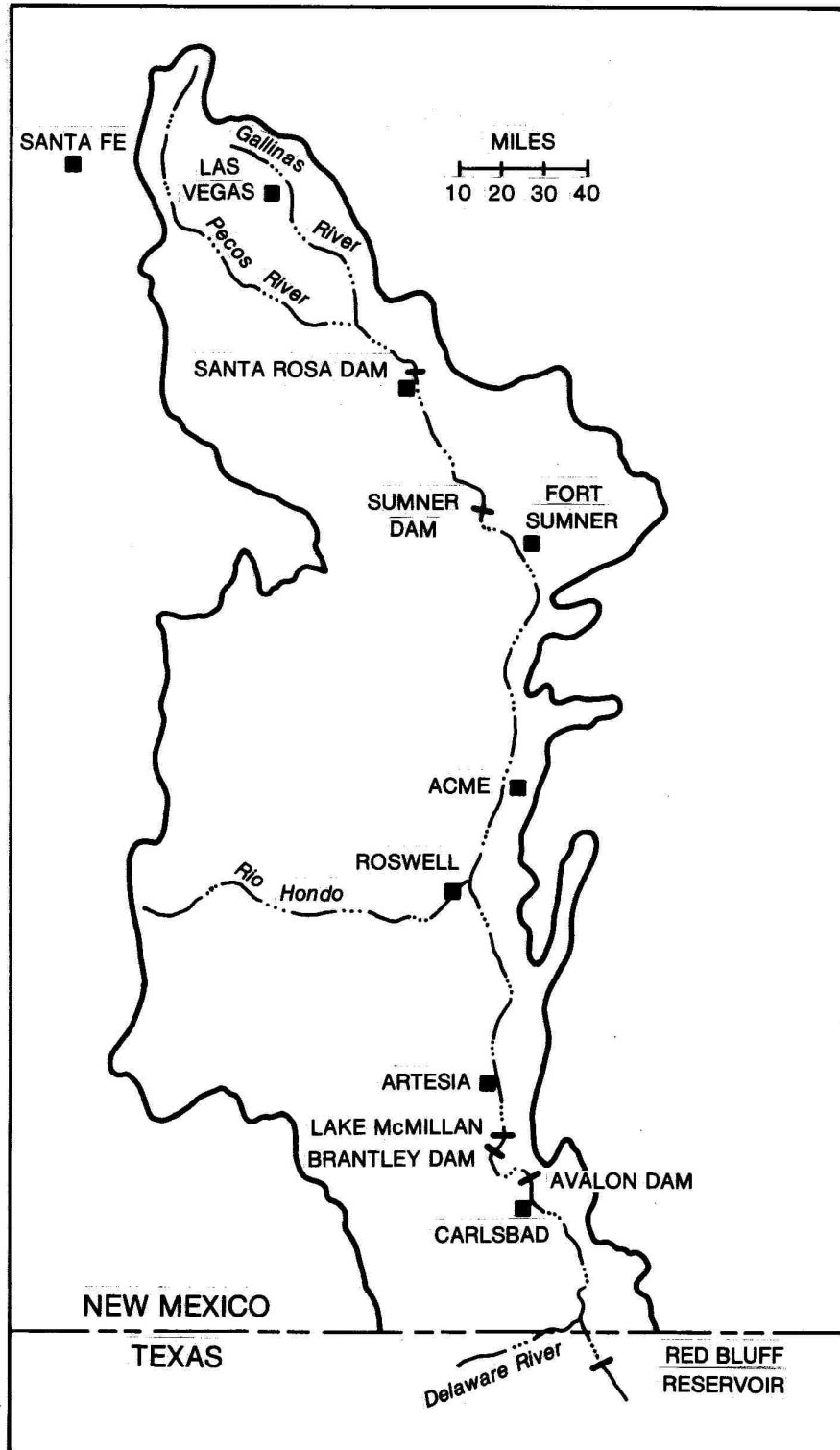
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Map of Pecos River Basin Showing Accounting Reaches

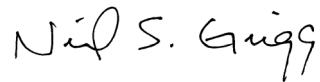
PECOS RIVER COMPACT
Supreme Court of the United States
No. 65, Original
Amended Decree

Final Report of the River Master
Water Year 2024 - Accounting Year 2025
June 18, 2025

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 2024 was a shortfall of 22,200 acre-feet. The accumulated overage since the beginning of Water Year 1987 is 126,000 acre-feet.



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Pecos River Compact		
Accumulated Shortfall or Overage		
	June 17, 2025	
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
2018	5,300	176,100
2019	-9,800	166,300
2020	-4,700	161,600
2021	-4,400	157,200
2022	-600	156,600
2023	-8,400	148,200
2024	-22,200	126,000

Table 1. General Calculation of Annual Departures in TAF (B.1)			
Water Year	2024		
6/16/2025			
	WY 2022	WY 2023	WY 2024
B.1.a. Index Inflows			
(1) Annual flood inflow			
(a) Gaged flow Pecos R bel Alamogordo Dam	78.5	122.7	112.3
(b) Flood Inflow Alamogordo - Artesia (Table 2)	22.1	-6.4	41.1
(c) Flood Inflow Artesia - Carlsbad (Table 3)	15.4	10.5	9.9
(d) Flood Inflow Carlsbad - State Line (Table 4)	3.2	3.8	2.4
Total (annual flood inflow)	119.2	130.6	165.7
(2) Index Inflow (3-year avg)			138.5
B.1.b. 1947 Condition Delivery Obligation (Index Outflow)			54.7
B.1.c. Average Historical (Gaged) Outflow			
(1) Annual historical outflow			
(a) Gaged Flow Pecos River at Red Bluff NM	33.2	33.7	28.7
(b) Gaged Flow Delaware River nr Red Bluff NM	1.6	1.2	0.3
(c) Metered diversions Permit 3254 into C-2713	0.5	0.5	0.6
Total Annual Historical Outflow	35.3	35.4	29.5
(2) Average Historical Outflow (3-yr average)			33.4
B.1.d. Annual Departure			-21.2
C. Adjustments to Computed Departure			
1. Adjustments for Depletions above Alam Dam			
a. Depletions Due to Irrigation (Table 5)	1.3	3.3	-2.6
b. Depl fr Operation of Santa Rosa Reservoir (Table 6)	2.8	3.1	2.5
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	82.6	129.1	112.3
(b) Flood Inflow Alamogordo - Artesia	22.1	-6.4	41.1
(c) Flood Inflow Artesia - Carlsbad	15.4	10.5	9.9
(d) Flood Inflow Carlsbad - State Line	3.2	3.8	2.4
Total (annual flood inflow)	123.3	137.0	165.7
Recomputed Index Inflow (3-year avg)			142.0
Recomputed 1947 Condition Del Outflow (Index Outflow)			56.6
Recomputed Annual Departures			-23.2
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			-22.2

Table 3. Determination of Flood Inflows, Artesia to Carlsbad (B.4)													
Water Year	2024												
6/16/2025													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	TOT
Rio Penasco at Dayton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Fourmile Draw nr Lakew	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	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
Rocky Arroyo at Hwy Br	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
Flood Inflow, Art-DS3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Pecos R at Dam Site 3	1.1	1.4	1.3	11.2	10.5	10.5	10.0	8.4	7.6	12.5	1.2	1.1	76.9
CB Sprgs New Water (from Table 7)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-5.7
Total Inflow, DS3 - CB	0.6	0.9	0.9	10.8	10.0	10.0	9.6	7.9	7.1	12.0	0.7	0.6	71.2
Evap Loss, Lake Avalon (from Table 10)	0.2	0.3	0.4	0.5	0.6	0.5	0.6	0.7	0.3	0.4	0.2	0.2	4.9
Storage Chg, Lake Avalon (from Table 11)	0.3	0.2	0.1	-1.3	0.2	0.1	1.1	0.3	-0.4	0.0	0.0	0.2	0.8
Carls ID diversions	0.0	0.0	0.1	11.7	9.2	8.7	6.9	7.4	6.9	12.2	0.1	0.0	63.1
93% CID diver	0.0	0.0	0.1	10.9	8.5	8.1	6.4	6.9	6.4	11.3	0.1	0.0	58.7
Other depletions	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	1.4
Dark Canyon at Carlsbad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.0	0.5
Pecos b Dark Canyon	1.7	1.5	1.4	1.4	1.4	1.2	0.8	1.1	1.2	1.3	1.3	1.5	15.7
Pecos R at Carlsbad	1.7	1.5	1.4	1.4	1.4	1.2	0.8	0.7	1.1	1.3	1.3	1.5	15.2
Total Outflow	2.3	2.1	2.1	11.6	10.9	10.1	9.0	8.8	7.5	13.1	1.6	2.0	81.0
Flood Inflow, DS3-CB	1.7	1.2	1.2	0.8	0.8	0.0	-0.6	0.9	0.3	1.1	0.9	1.4	9.8
Flood Inflow, Art-CB	1.7	1.2	1.2	0.8	0.8	0.0	-0.6	0.9	0.4	1.1	0.9	1.4	9.9

Table 4. Summary Table for Computations, Carlsbad to State Line (B.5)						
Water Year		2024				
5/3/2025						
		BCB - RB	Del R	DC		
Jan		0.0	0.0	0.0		
Feb		0.0	0.0	0.0		
Mar		0.0	0.0	0.0		
Apr		0.0	0.0	0.0		
May		0.0	0.0	0.0		
Jun		0.6	0.0	0.0		
Jul		0.3	0.0	0.0		
Aug*		-0.3	0.1	0.4		
Sep		0.9	0.1	0.1		
Oct		0.1	0.0	0.0		
Nov		0.1	0.0	0.0		
Dec		0.0	0.0	0.0		
Total		1.6	0.3	0.5		
* Negative value caused by Dark Canyon flow at end of month, see note in appendix						
Summary of flood inflows, Carlsbad to State Line, TAF						
Red Bluff - Carlsbad + Dark C						2.2
Delaware River						0.3
Total Flood Inflow, Carlsbad to State Line						2.4

Table 5. Depletions Due to Irrigation Above Sumner Dam (C.1.a)								
Water Year	2024							
5/3/2025								
	APR	MAY	JUN	JUL	AUG	SEPT	OCT	TOTAL
Precip Las Vegas FAA AP	0.04	1.45	5.68	2.47	2.50	2.51	4.22	18.87
Eff prec Las Veg FAA AP	0.04	1.37	4.00	2.20	2.22	2.23	3.44	15.50
Precip Pecos Natl Monument	0.01	0.00	1.86	4.75	3.71	0.66	3.04	14.03
Eff Precip Pecos RS	0.01	0.00	1.71	3.71	3.10	0.64	2.62	11.79
Precip Santa Rosa	0.21	2.67	3.66	4.81	2.34	1.41	2.13	17.23
Eff Precip Santa Ro	0.21	2.34	3.06	3.74	2.09	1.33	1.93	14.70
Average eff precip, ft	0.01	0.10	0.24	0.27	0.21	0.12	0.22	1.17
Consumptive use, ft	0.19	0.36	0.36	0.30	0.27	0.18	0.11	1.77
Unit depletion rate (CU less eff precip), ft	0.18	0.26	0.12	0.03	0.06	0.06	0.00	0.72
Acres (most recent inventory)	11529							
Streamflow depletion (actual use), AF	8249.6							
1947 depletion, AF	10804							
Difference (actual use - 1947 depletion), TAF	-2.6							
Adjustment to Gaged Flow, Pecos River below Sumner Dam, TAF =						-2.6		

Table 7. Carlsbad Springs New Water [B.4.c.(2)]					
Water Year	2024				
5/3/2025					
		TAF	AF/day	cfs	Totals
Pecos R bel DC		15.7	42.9	21.6	21.6
Dark Canyon		0.5	1.4	0.7	0.7
Pecos R bel Lake Avalon		0.0	0.0	0.0	0.0
Depletion, cfs					2.0
CID lag seep, cfs (from Table 8)					6.1
Return flow, cfs					1.0
Lake Av lagged seep, cfs (from Table 9)					20.6
PR seepage, cfs					3.0
Carls new water, cfs					-7.82
Carls new wat, TAF					-5.7
Carls new wat monthly, TAF					-0.5

Table 8. Carlsbad Main Canal Seepage Lagged [B.4.c.(2)(e)]													
Water Year	2024												
5/3/2025													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	TOTAL
WY 2024													
CID, TAF	0.0	0.0	0.1	11.7	9.2	8.7	6.9	7.4	6.9	12.2	0.1	0.0	63.1
days/mo	31	29	31	30	31	30	31	31	30	31	30	31	366
cfs	0	0	1.3	197.2	149.3	147.0	111.6	120.3	115.6	198.0	1.2	0.0	86.8
cfs, qtr avg			0.4			164.3			115.8			67.1	
WY 2023		1Q	2Q	3Q	4Q								
FLows, cfs				168.1	54.3								
SEVEN %				11.8	3.8								
WY 2024 lagged		1Q	2Q	3Q	4Q								
FLows, cfs		0.4	164.3	115.8	67.1								
SEVEN %		0.0	11.5	8.1	4.7								
LAG		3.2	6.4	7.9	7.0	Avg =	6.1	cfs					

Table 9. Lake Avalon Leakage Lagged [B.4.c.(2)(g)]													
Water Year	2024												
5/3/2025													
WY 2024	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	TOT
Elev NM rept	74.39	74.72	74.91	73.71	73.31	73.46	74.62	75.06	75.15	75.02	74.85	75.06	
ga ht, avg*	17.39	17.72	17.91	16.71	16.31	16.46	17.62	18.06	18.15	18.02	17.85	18.06	
cfs	21.1	22.7	23.6	17.9	16.0	16.7	22.2	24.3	24.7	24.1	23.3	24.3	
days	31	29	31	30	31	30	31	31	30	31	30	31	366
cfs avg	22.7			16.8			23.8			23.9			21.8
WY 2023		1Q	2Q	3Q	4Q								
cfs				16.7	16.5								
WY 2024 lagged		1Q	2Q	3Q	4Q								
cfs		22.7	16.8	23.8	23.9								
lag cfs		19.7	18.8	21.3	22.7	Avg =	20.6	cfs					
* Computed as WS elev by NM Report minus Gage datum at 3157.0 (USBR datum)													

Table 10. Evaporation Loss at Lake Avalon [B.4.d.(1)]														
Water Year	2024													
5/3/2025														
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOT	
Av WS NM Rept	74.39	74.72	74.91	73.71	73.31	73.46	74.62	75.06	75.15	75.02	74.85	75.06		
Avalon ga ht, avg, ft*	17.39	17.72	17.91	16.71	16.31	16.46	17.62	18.06	18.15	18.02	17.85	18.06		
Avg area Avalon, ac**	730	766	787	654	607	625	755	799	803	798	780	799		
Panevap Brantley, in.	4.65	5.60	8.59	11.78	15.99	14.98	13.38	14.06	8.52	8.91	4.80	4.34	115.60	
Lakeevap Brantley, in.	3.58	4.31	6.61	9.07	12.31	11.53	10.30	10.83	6.56	6.86	3.70	3.34	89.01	
Precip Brantley, in.	0.05	0.28	0.17	0.10	0.09	1.08	1.28	0.53	2.17	0.11	0.96	0.00	6.82	
Netevap, inches	3.53	4.03	6.44	8.97	12.22	10.45	9.02	10.30	4.39	6.75	2.74	3.34	82.19	
Evaploss Av, TAF	0.21	0.26	0.42	0.49	0.62	0.54	0.57	0.69	0.29	0.45	0.18	0.22	4.94	
* Computed as WS elev by NM Report minus Gage datum at 3157.0 (USBR datum)														
** Based on 2006 USBR Area and Capacity Table														

[illegible]

APPENDIX

RESPONSE TO STATES'
OBJECTIONS

Response to states' objections for Accounting Year 2025

New Mexico's objections

Table 3. Determination of Flood Inflows, Artesia to Carlsbad (B.4)

New Mexico found an error in Table 3 where Dark Canyon inflows were double counted for the two months when they occurred. After correcting this error, New Mexico computed a revised Flood Inflow for Art-CB of 9.8 TAF. This objection is accepted.

Table 6. Depletions Due to Santa Rosa Reservoir Operations (C.1.b)

New Mexico found errors in calculations of Santa Rosa evaporation values for November and December. After correcting these errors, New Mexico computed a final total adjustment of 2.5 TAF. This objection is accepted.

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

New Mexico provided a revised Table 1 that showed an annual departure of -22.3 TAF for Water Year 2024.

Texas's objections

Table 3. Determination of Flood Inflows, Artesia to Carlsbad (B.4)

Texas found the same error as New Mexico in Table 3 and computed a revised Flood Inflow for Art-CB of 9.7 TAF. This objection is accepted.

Table 6. Depletions Due to Santa Rosa Reservoir Operations (C.1.b)

Texas found the same error as New Mexico in calculations of Santa Rosa evaporation values for November and December. After correcting these errors, Texas Mexico computed a final total adjustment of 2.5 TAF, the same as New Mexico. This objection is accepted.

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

Texas entered its Table 3 and Table 6 results into Table 1 and computed a value of -22.2 TAF for the Annual Departure for Water Year 2024.

Results after considering states' objections

Table 1 was modified to include the corrections shown above. The final departure for WY 2024 computed by the River Master is -22.2 TAF. This is the same as Texas and the de minimis difference compared to New Mexico's value seems due to rounding.