

Pecos Basin Water Issues:

The Compact, the Amended Decree, the 2003 Settlement Agreement, and the Intrepid Potash Protests

A Presentation to the Interim Water and Natural Resources Committee of the New Mexico State Legislature

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NM Interstate Stream Commission

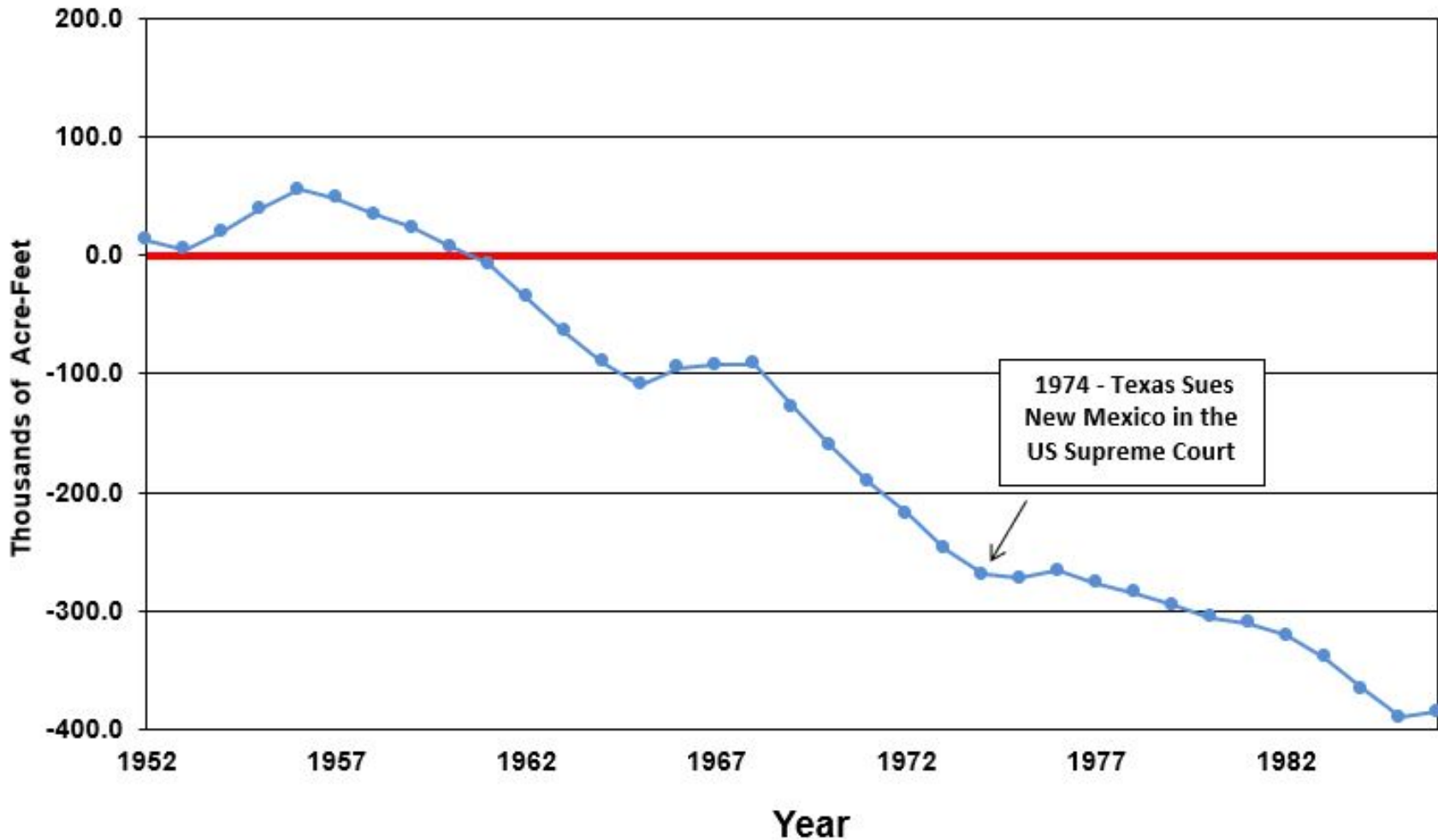
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1948 Pecos River Compact

- Article III(a): “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.”
- 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.”

1974 Texas Sues New Mexico in the US Supreme Court

Pecos River Compact Cumulative Departures - 1952 to 1986



Texas v. New Mexico, No. 65 Original

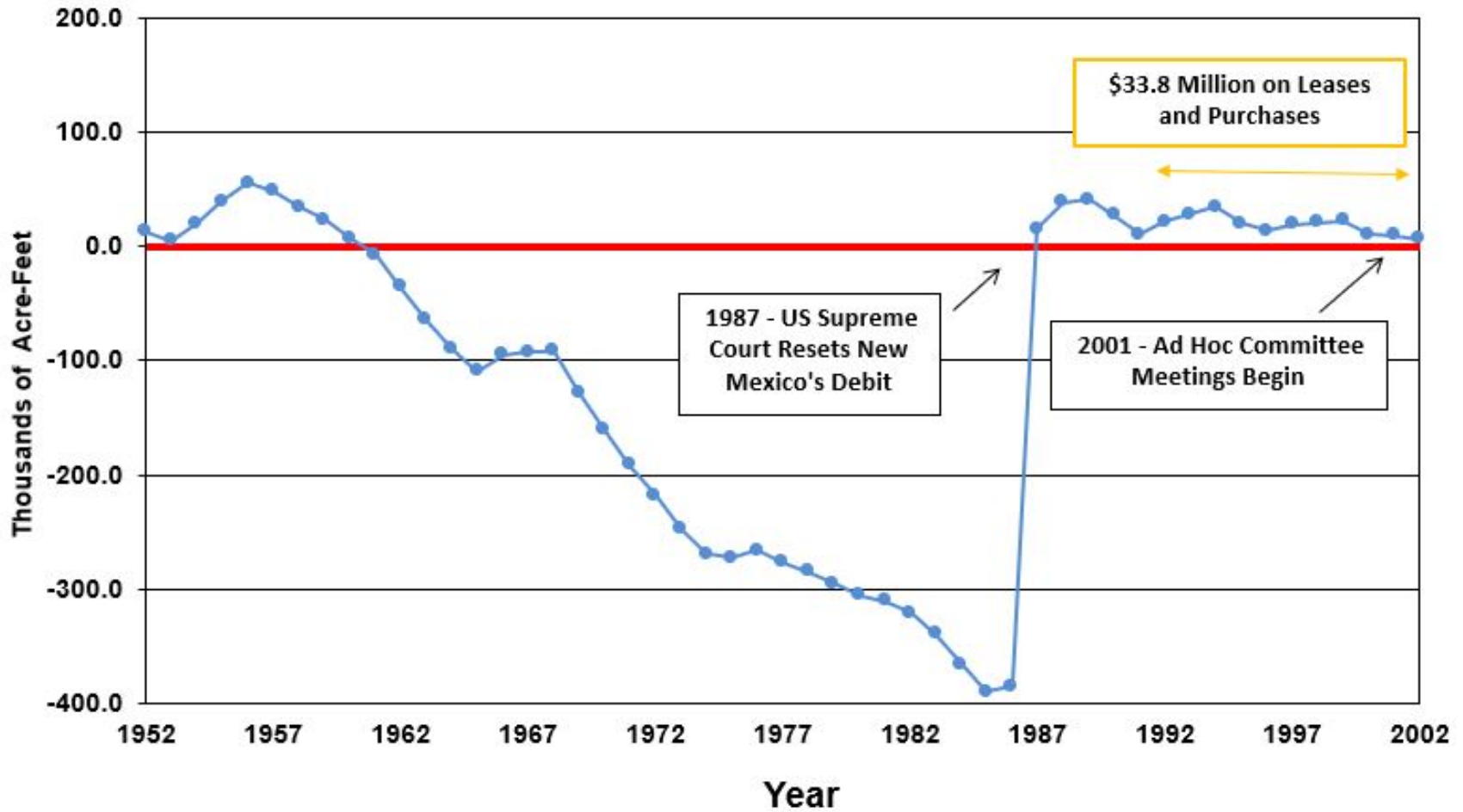
- 14 years of costly litigation
- 1987 - US Supreme Court rules in Texas's favor
 - NM pays Texas \$14 million
- 1988 - Court Issues Amended Decree
 - Established a River Master to determine annual accounting
 - No debt allowed. Any under-delivery to be paid in wet water within 9 months

Post-Amended Decree Compliance

- Purchases and Leases of Water Rights Along the Pecos River to Increase Flows: 1991-2001
 - \$33 Million in purchases and leases of a cumulative total of nearly 180,000 acre-feet of water
 - Most significant lessors were Carlsbad Irrigation District and City of Carlsbad

Post-Amended Decree Compliance

Pecos River Compact Cumulative Departures - 1952 to 2002



Ad Hoc Committee and the Consensus Plan

- 2001 - State brings major water users together to find a permanent solution
 - Over 2 years of meetings
 - Hundreds of stakeholders
- Resulted in 2003 Pecos Settlement Agreement
 - Signing parties include:
 - State of New Mexico (NMISC and NMOSE)
 - Pecos Valley Artesian Conservancy District (PVACD)
 - Carlsbad Irrigation District (CID)
 - US Bureau of Reclamation (USBR)

2003 Pecos Settlement Agreement

Objectives:

1. Permanent compliance with the 1988 Amended Decree
2. Increased and more stable water supply for CID
3. Reduced likelihood of a priority call
4. Decrease overall consumptive use to improve hydrologic balance in the basin



How Does the Settlement Work?

1. Water Rights Purchases

- 4,500-6,000 acres in CID
 - Water rights available for state-line delivery
- 7,500-11,000 acres in the Roswell Artesian Basin (RAB)
 - Artesian water rights available in augmentation well fields

2. Augmentation Well Fields

- 15,750 AF/year capacity
- Purposes:
 - State-line delivery
 - Increased supply for CID



Pecos River near Lake Arthur

Use of State-Purchased CID Water Rights for State-Line Delivery

Cumulative Compact Credit	CID Supply	Delivery Outcome
<i>< 50,000 acre-feet</i>	$\leq 50,000$	No Delivery Required CID can re-allocate State-purchased water rights.
	$> 50,000$	Delivery Required
<i>$\geq 50,000$ acre-feet $< 115,000$ acre-feet</i>	$\leq 90,000$	No Delivery Required CID can re-allocate State-purchased water rights.
	$> 90,000$	Delivery Required
<i>$\geq 115,000$ acre-feet</i>	--	No Delivery Required CID can re-allocate State-purchased water rights.

Use of State-Purchased RAB Water Rights for Augmentation of CID Supply



Target Date	Target Supply (AF)
March 1	50,000
May 1	60,000
June 1	65,000
July 15	75,000
September 1	90,000

Implementation Actions 2003 - 2009

Water Rights Purchases Completed

~ 4,500 acres in CID

~ 7,500 acres in RAB

*Minimums required

Full implementation would add:

~ 1,500 acres in CID

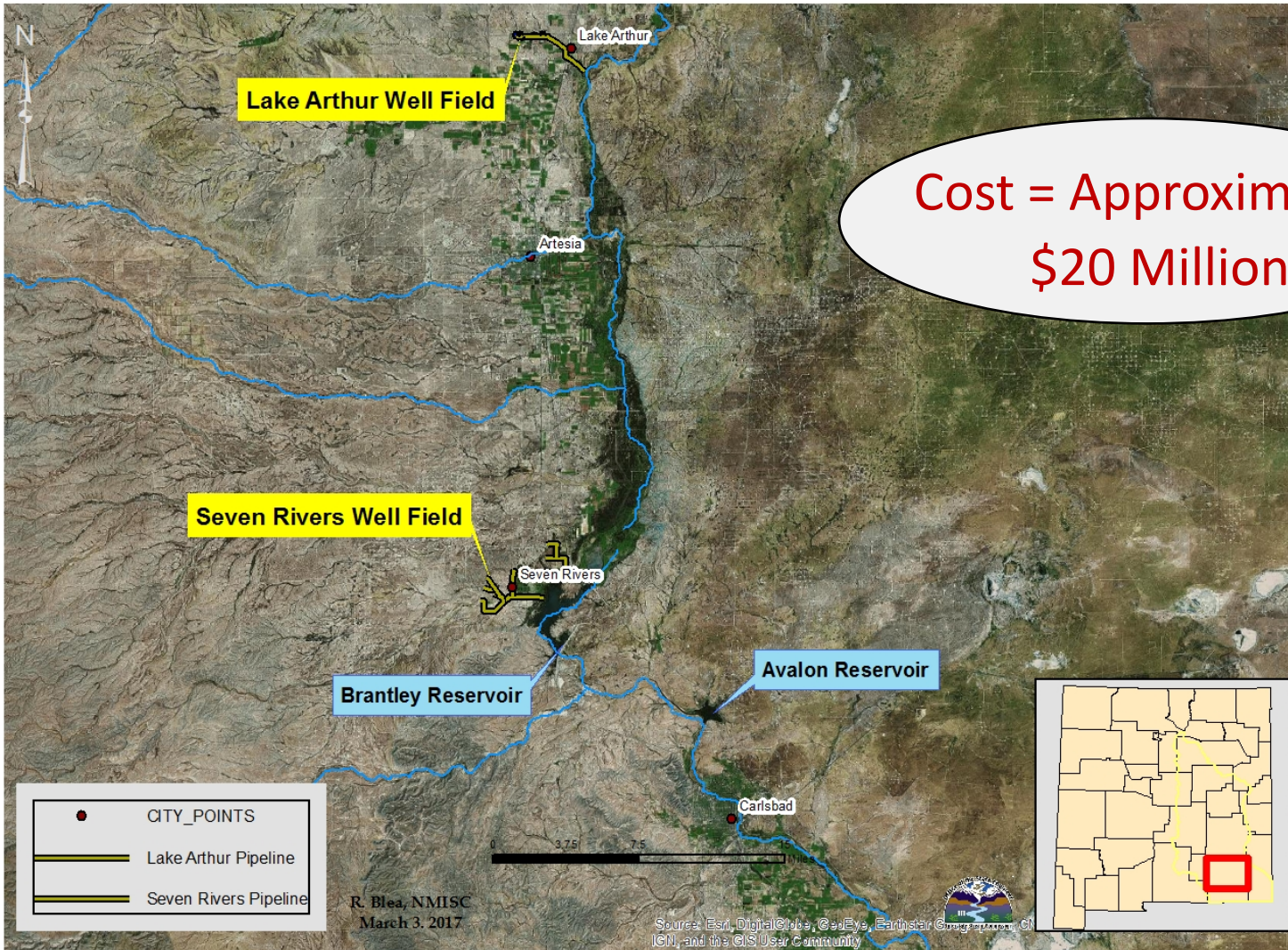
~ 3,500 acres in RAB



Cost = Approximately
\$55 Million

Implementation Actions 2003 - 2009

Lake Arthur and Seven Rivers Augmentation Well Field Pipeline
New Mexico Interstate Stream Commission

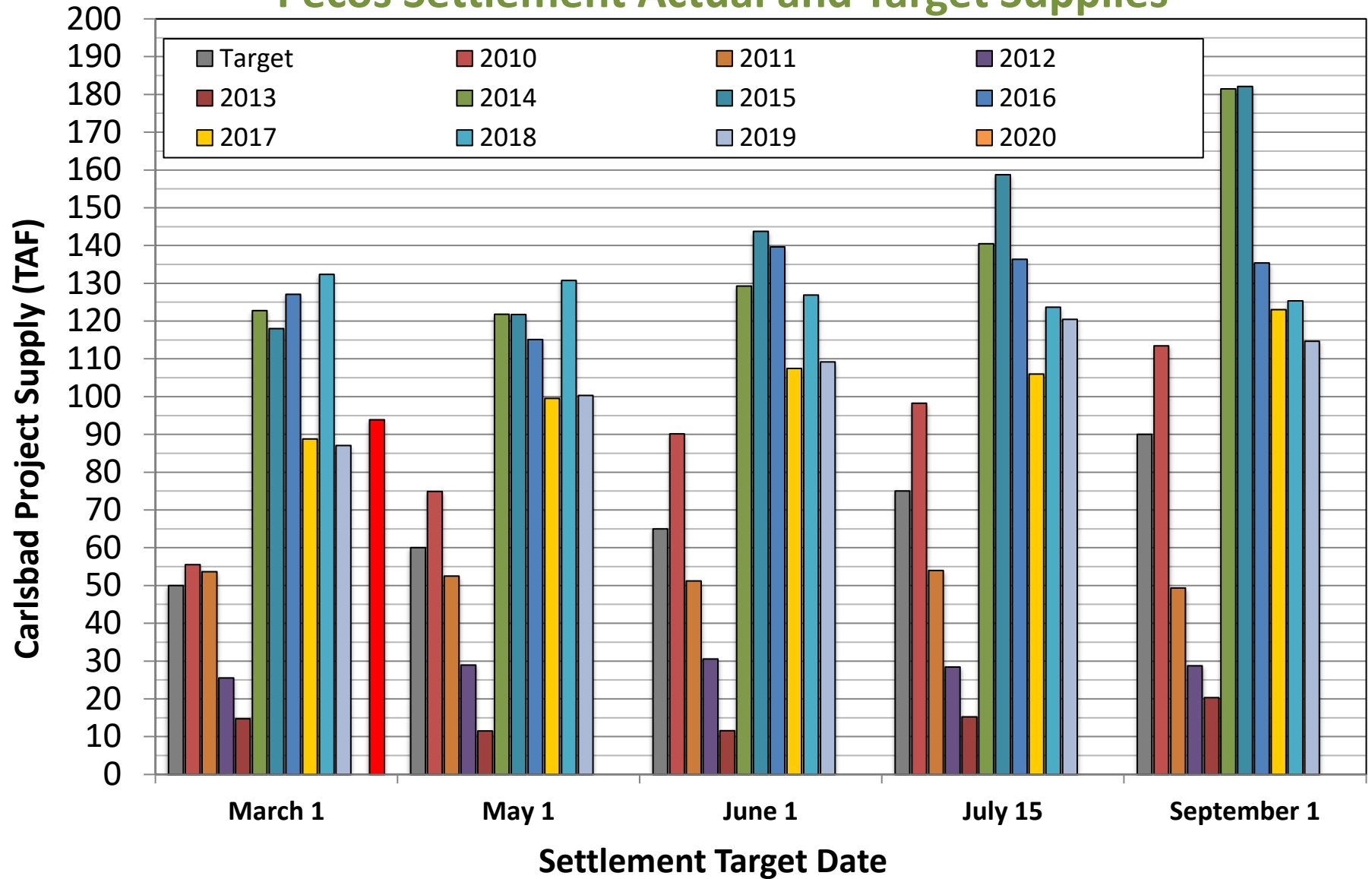


Cost = Approximately
\$20 Million

2009 – Conditions Precedent Met

1. Implementation of the Consensus Plan
 - Minimum Water Rights Purchases
 - Augmentation Well Fields with Minimum Pumping Capacity
2. Entry of a Partial Final Decree in the CID Adjudication
3. Federal Contracts and Environmental Compliance in Place

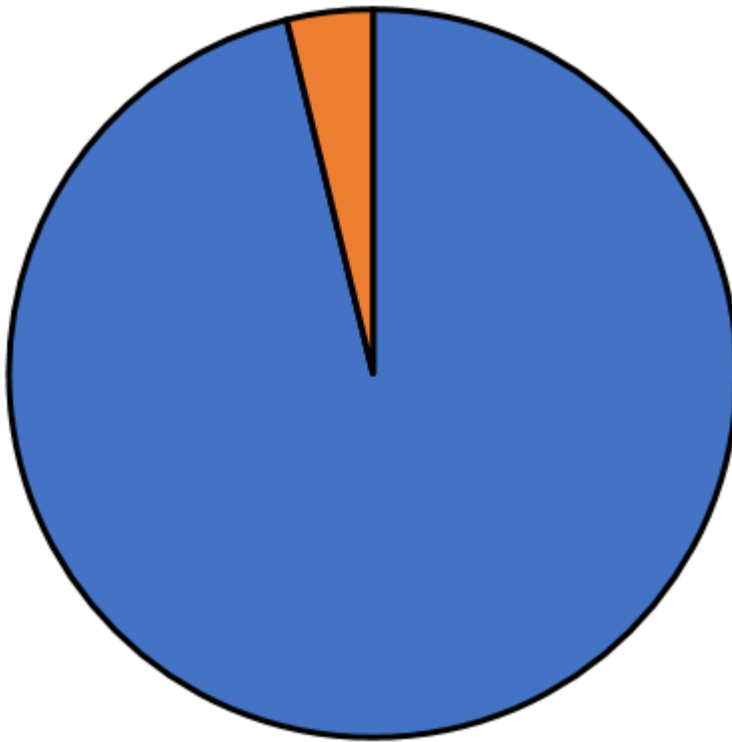
Pecos Settlement Actual and Target Supplies



Water Pumped for CID

YEAR	ACRE-FEET
2010	0
2011	12,798
2012	18,884
2013	12,243
2014	0
2015	0
2016	0
2017	0
2018	0
TOTAL	43,925

Augmentation Pumping was 4% of Total Basin Diversions in 2011-2013



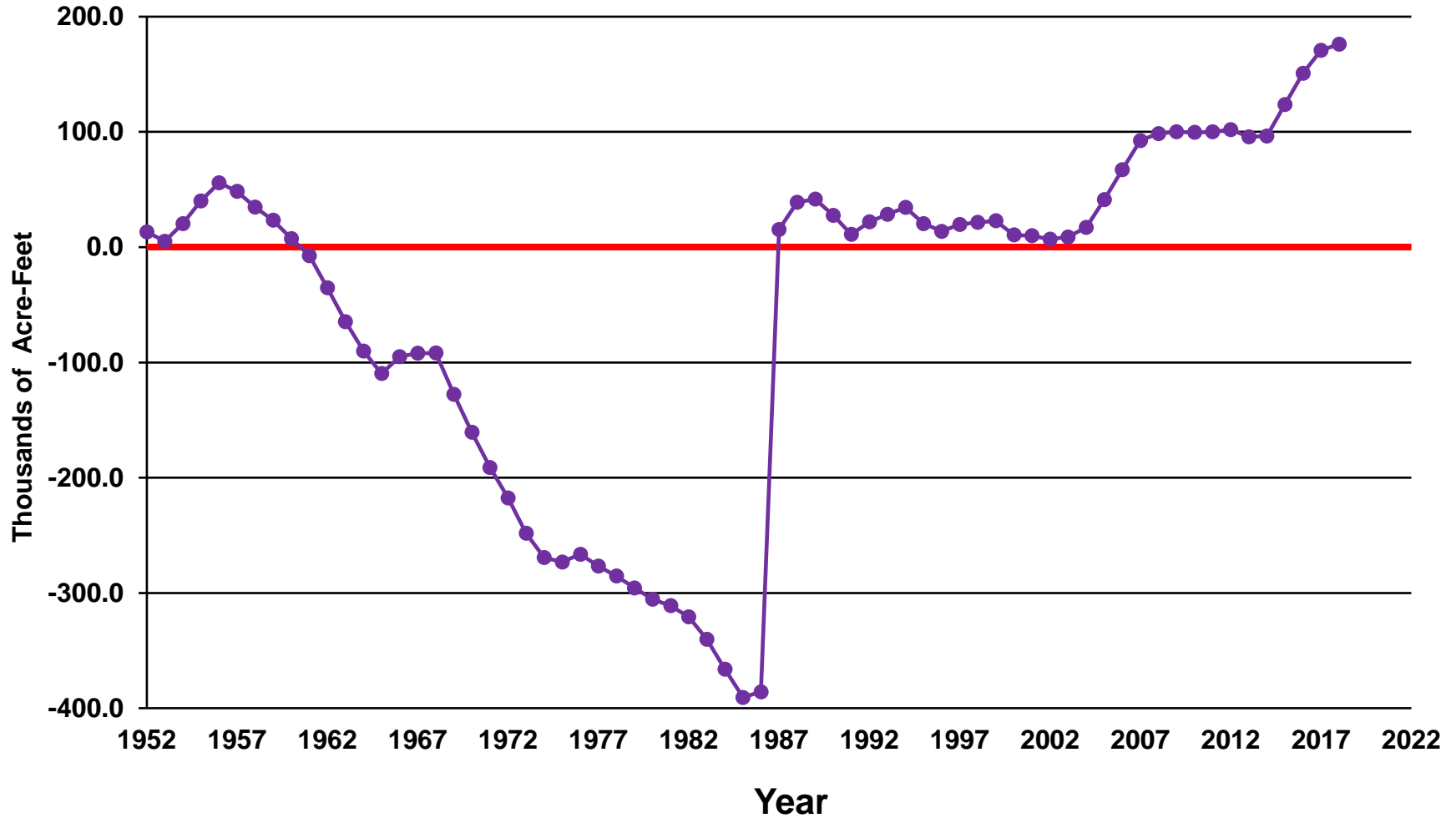
1,107,855 acre-feet
pumped from RAB in 2011,
2012, and 2013

43,925 acre-feet
pumped for Settlement in
same period

Water Delivered to the State-Line

YEAR	CID Annual Allotment <i>(acre-feet per acre)</i>	Allotment for State-Purchased Acreage <i>(acre-feet)</i>	Water Released to State-Line <i>(acre-feet)</i>
2010	3.2	14,394	17,680
2011	1.4	6,297	0
2012	0.8	3,598	0
2013	2.0	8,996	15,922
2014	3.697	16,629	17,895
2015	3.697	16,629	23,230
2016	3.697	16,629	0
2017	3.697	16,629	0
2018	3.697	16,629	0
		TOTAL	74,727

Pecos River Compact Cumulative Departures 1952 to 2018



Issues With Settlement

- Not sufficient to ensure CID supply in sustained drought (like 2011-2013).
- Did not anticipate surge in demand for surface water from oil and gas.
- Did not explicitly address non-CID water rights (like Intrepid's).
- Modeling of effects looked at 30-year period before settlement (so did not look at dormant rights, like Intrepid's).

Summary of Intrepid/Mississippi/ US Potash Rights

- US Potash began mining potash in Eddy County in 1931 and built a refinery near the Pecos River near Loving.
- In the 1930s and 1940s, US Potash acquired and applied for a cumulative total of over 34,000 acre-feet per year of surface water rights. They had a return flow requirement of approximately 15,000 acre-feet per year, for a total right of withdrawal of **19,800 acre-feet per year.**

Summary of Intrepid/Mississippi/ US Potash Rights

- US Potash received licenses for all of these rights, despite not proving beneficial use of the full amount.
- Diversions were not measured until 1956. Between 1956 and refinery's closure in 1973, the average diversion was ~5,000 af/y, and the maximum diversion was 5,800 af/y.
- Supply in the Pecos River was above the diversion amount every year prior to 1965.

Summary of Intrepid/Mississippi/ US Potash Rights

- In the late 1970s, Intrepid's predecessors constructed a new refinery away from the Pecos River that depends on separate groundwater rights.
- Between 1978 and 2017, rights were unused except for a small portion exercised for salt processing.
- Between 1995 and 2001, Mississippi Potash entered into a Cooperative Conservation Agreement with the NMISC.

Intrepid Applications and Protests

- In 2017 and 2018, Intrepid filed eight applications for temporary transfers of place and purpose of use for oil and gas/commercial sales.
- Total amount under lease is 5,700 acre-feet per year.
- Applications received preliminary approval from OSE, and will begin to expire at the end of 2020.

Intrepid Applications and Protests

- Applications/Approvals have been protested by NM Interstate Stream Commission, Carlsbad Irrigation District, Pecos Valley Artesian Conservancy District, and Otis Mutual Domestic Water Consumers & Sewage Works Association.
- Parties have agreed to adjudicate Intrepid's rights in the Adjudication Court in August 2020, and then return to the OSE Hearings Unit for other challenges to the applications (i.e., detrimental to public welfare, contrary to conservation of water in NM).
- Parties have agreed to have State Engineer attempt to facilitate/mediate a settlement.