

ISSUES RELATED TO COMPLIANCE WITH RIVER COMPACT WATER DELIVERIES

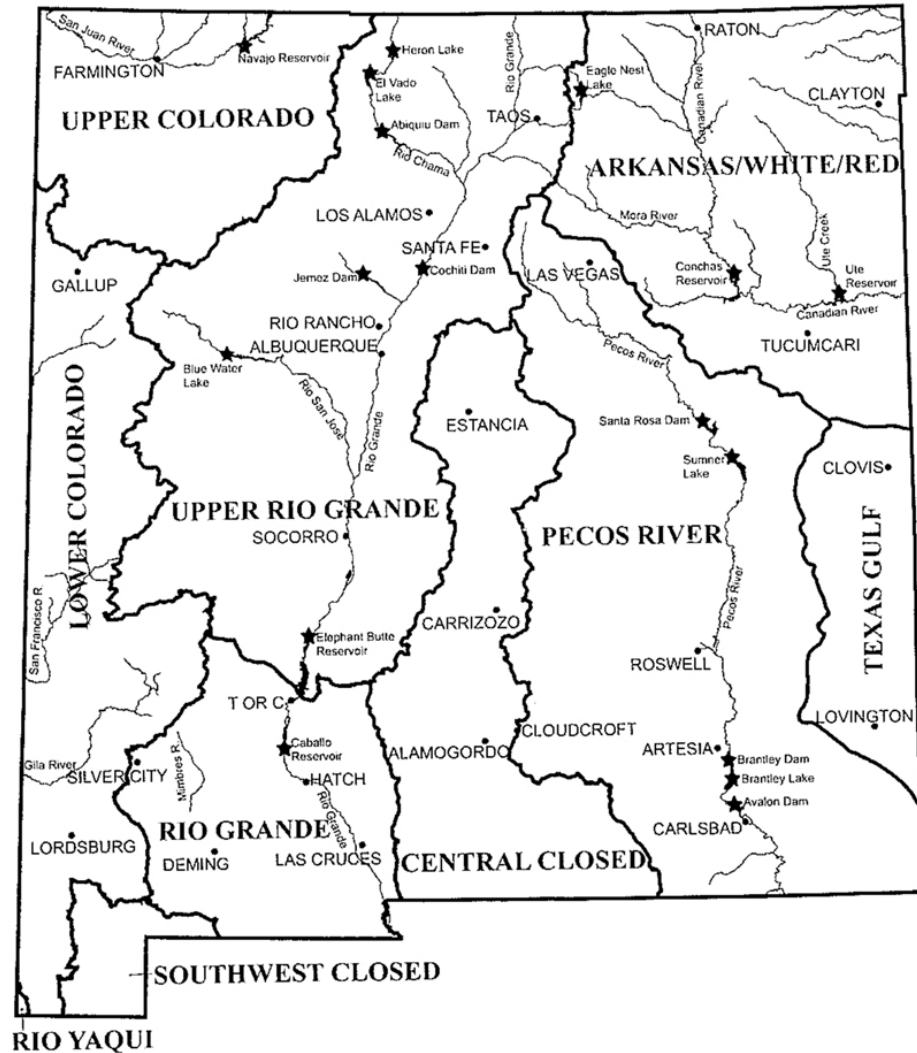
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Albuquerque, NM



INTRODUCTION

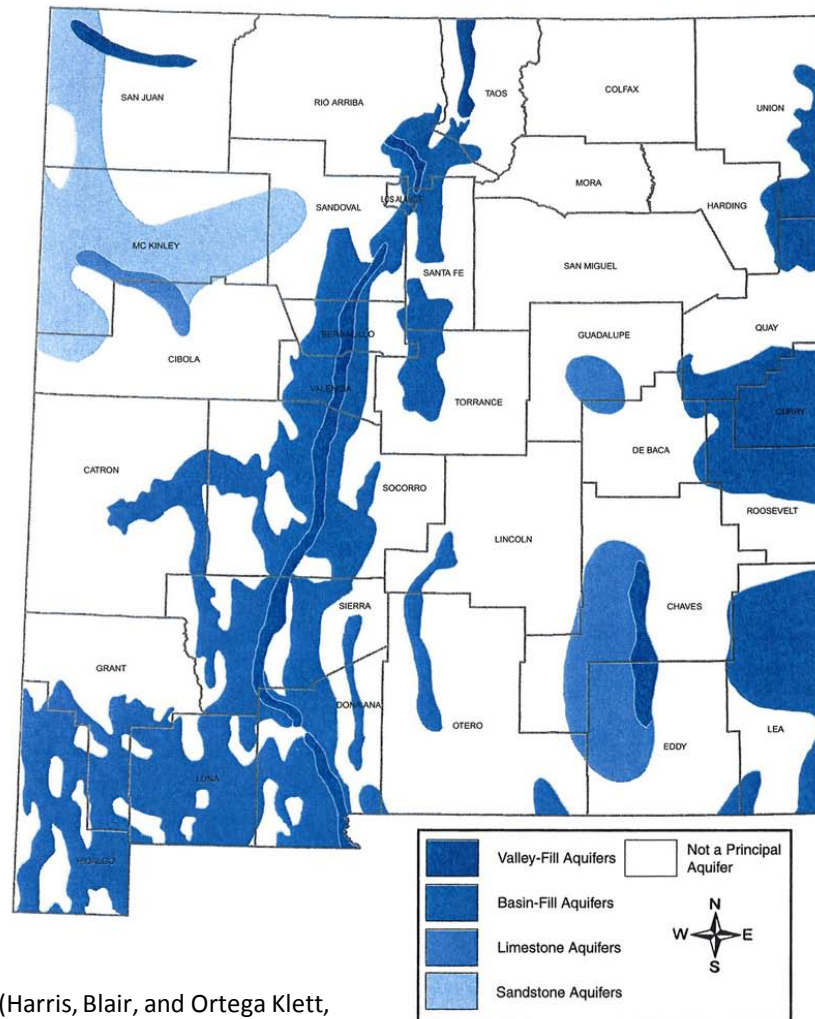
- New Mexico has a large rural population
- Extensive surface water irrigation along all perennial rivers
- Ownership and priority of Water Rights
- Transfer or leasing of Water Rights

New Mexico's River Basins



(Harris, Blair, and Ortega Klett,
New Mexico Water Rights, 2002)

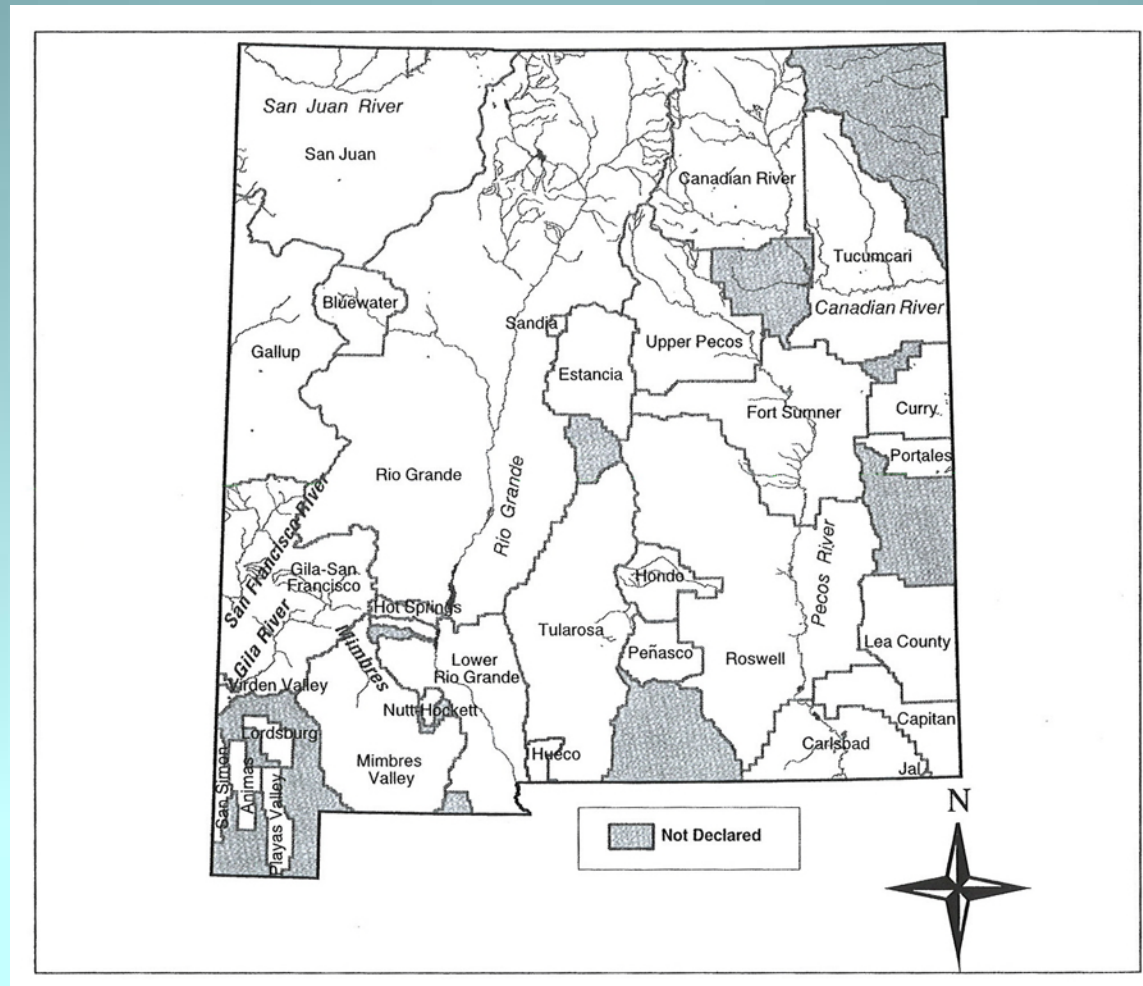
Major New Mexico Aquifers



(Harris, Blair, and Ortega Klett,
New Mexico Water Rights, 2002)

Adapted from the National Water Summary, USGS, 1984.

Declared Groundwater Basins – Office of the State Engineer



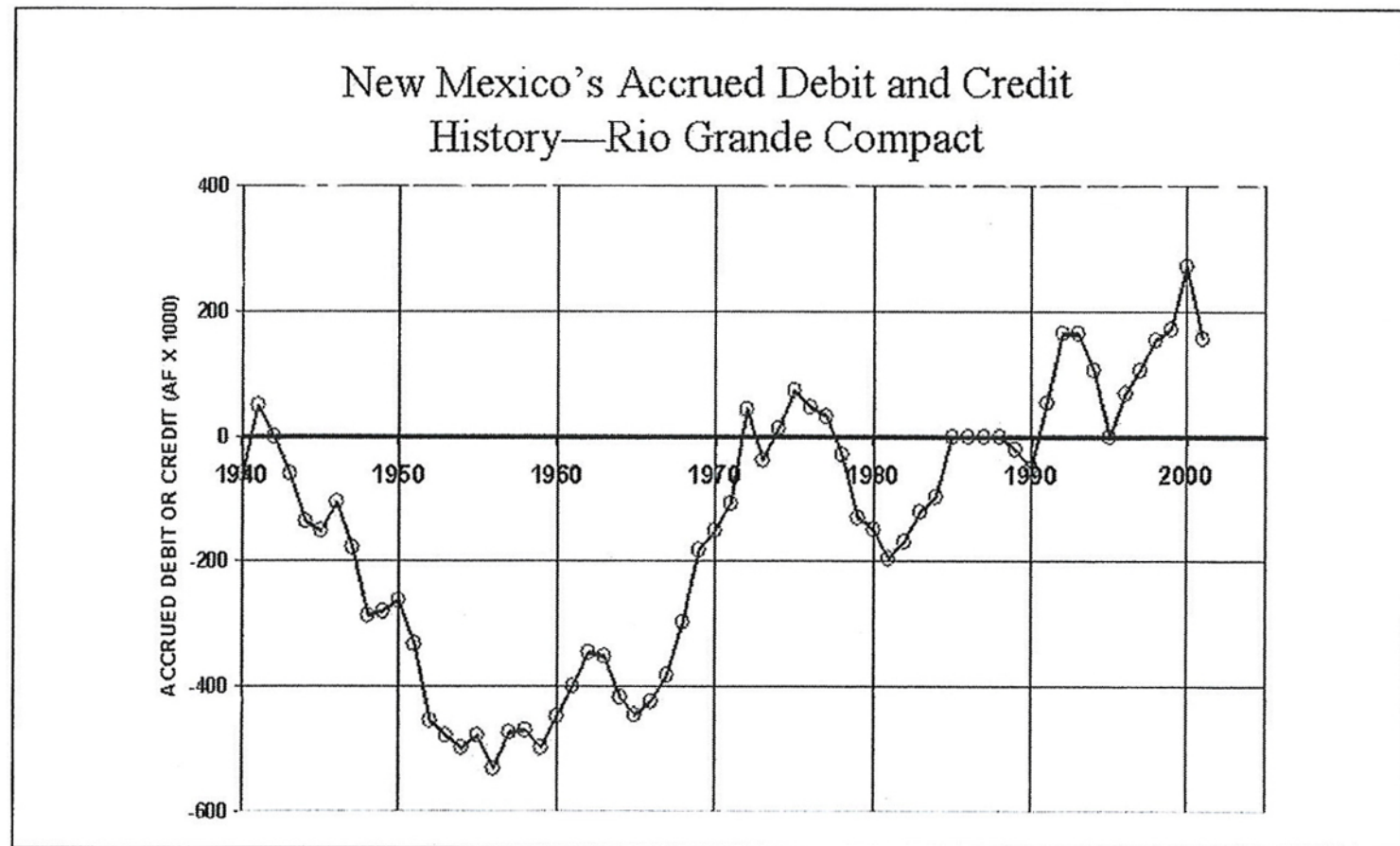
(Belin, Bokum, and Titus, Taking Charge of Our Water Destiny: A Water Management Policy Guide for New Mexico in the 21st Century, 2002)

New Mexico's Interstate Water Compacts

Compact	Parties to Compact	Date Signed
Colorado River Compact	Arizona, California, Colorado, Nevada, New Mexico, Utah, Wyoming	November 22, 1922
La Plata River Compact	Colorado, New Mexico	November 27, 1922
Upper Colorado River Basin Compact	Arizona, Colorado, New Mexico, Utah, Wyoming	October 11, 1948
Rio Grande Compact	Colorado, New Mexico, Texas	March 19, 1938
Costilla Creek Compact	Colorado, New Mexico	September 30, 1944
Pecos River Compact	New Mexico, Texas	December 3, 1948
Canadian River Compact	Oklahoma, New Mexico, Texas	December 6, 1950
Animas-La Plata Project Compact	Colorado, New Mexico	June 30, 1986

(Harris, Blair, and Ortega Klett, New Mexico Water Rights, 2002)

New Mexico's Rio Grande Compact Cumulative Delivery Departure Interstate Stream Commission



(Belin, Bokum, and Titus, Taking Charge of Our Water Destiny: A Water Management Policy Guide for New Mexico in the 21st Century, 2002)

WATER RIGHTS

- Vested in 1907 Water Code
- Senior vs. Junior Water Rights
- Federal Reserved Water Rights
- Indian Water Rights
- Pueblo Water Rights

ENFORCEMENT PROBLEMS

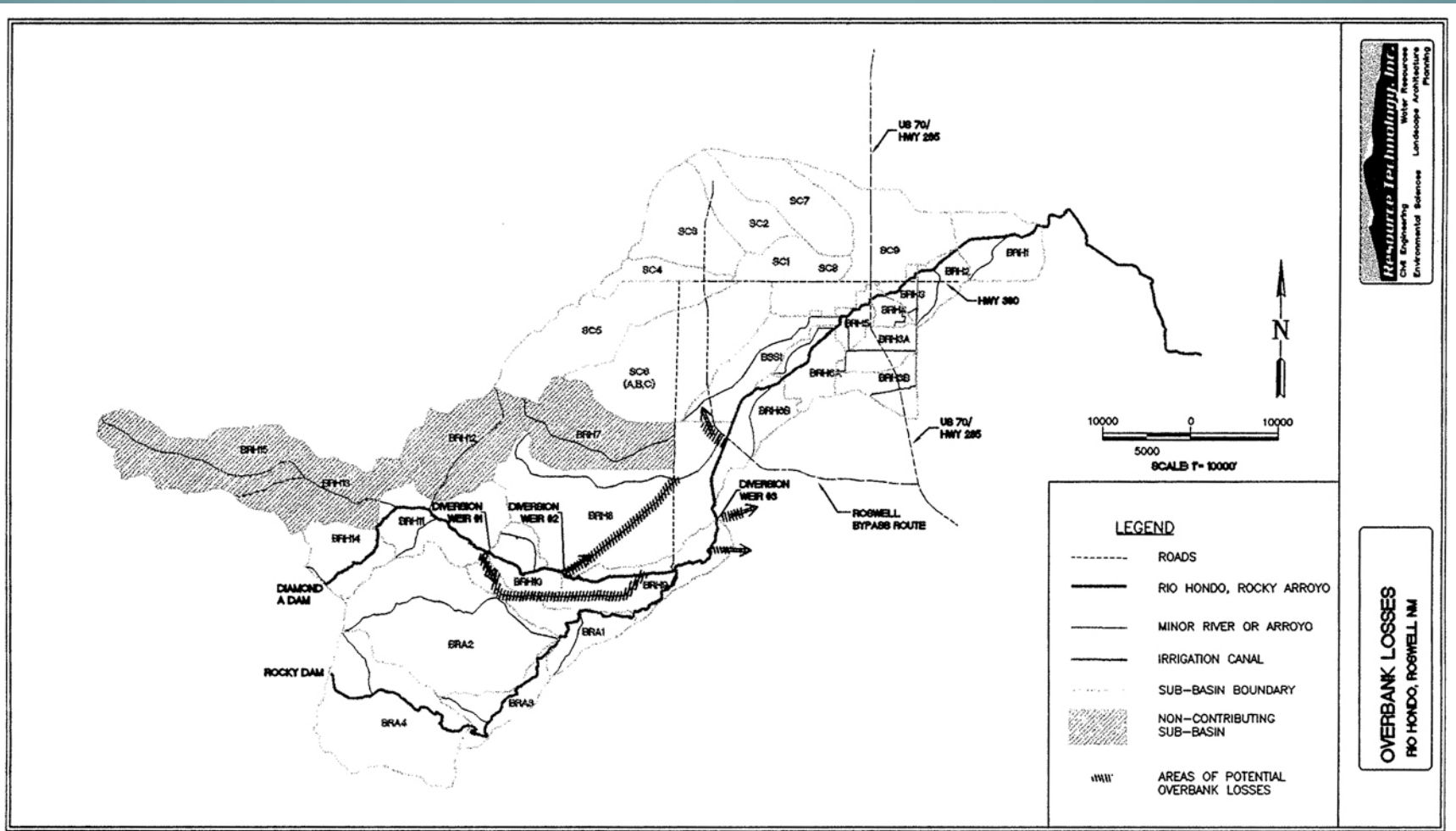
- Aquifers Connected to Surface Water
- Mining of Groundwater Sources
- Fully Appropriated Rivers
- Interstate Compact Impacts

PECOS RIVER COMPACT

- Signed in 1948
- Increasing Groundwater Withdrawals
- NM Falls Behind on Compact Deliveries
- Texas Sues NM
- Stipulated 1990 Judgment - Approved by U.S. Supreme Court
 - NM Pays \$14M for Past Water Debt
 - Increase Deliveries to Avoid Shortages
- More Than \$50M Spent to Buy and Lease Water Rights
- Construction of Two Rivers Dam Subject to Texas Water Deliveries; and Protects Roswell from Hondo River Flooding

MEMORANDUM OF UNDERSTANDING

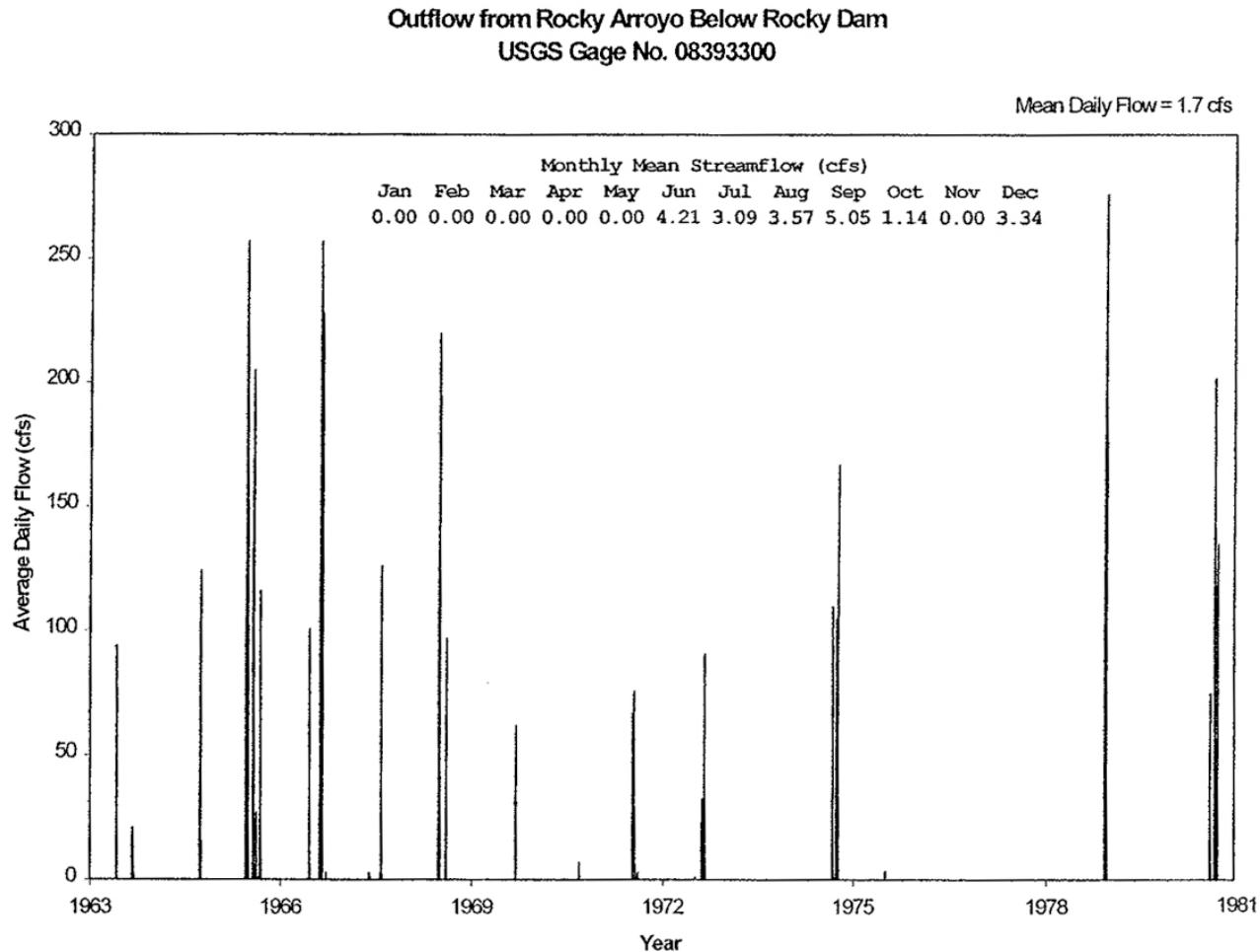
- Signed in 2001
- Parties to MOU – USACE, NM (ISC), and Roswell
- Water Stored in Two Rivers Would be Delivered to the Pecos River as Controlled Releases
- Roswell Would Build a 1,000 cfs Capacity Channel
- ISC Would Acquire Easements for the Channel
- Texas Would Monitor Progress of Compliance





Outflow from Rocky Dam

The maximum outflow from Rocky Dam is between 250 and 300 cfs.



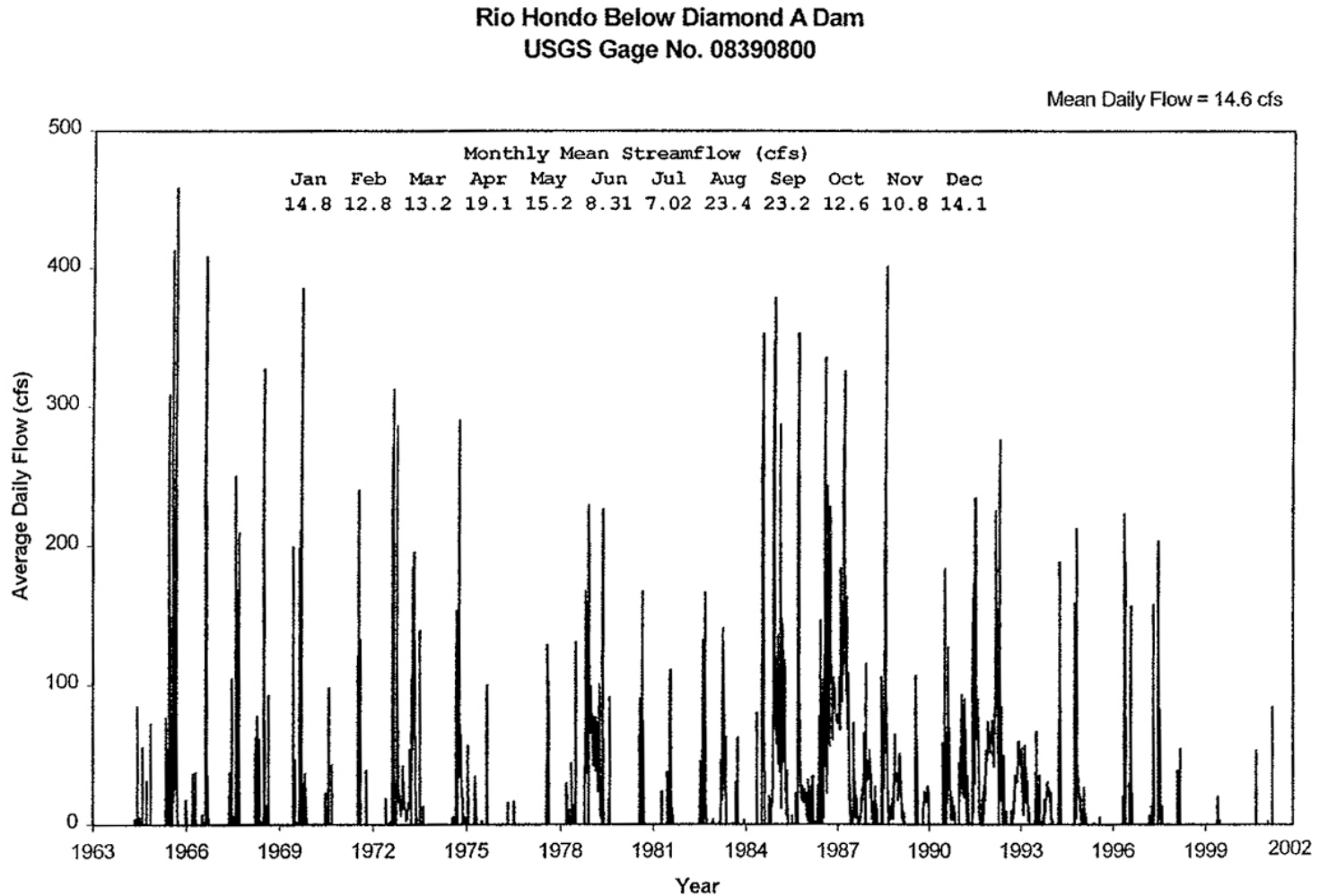




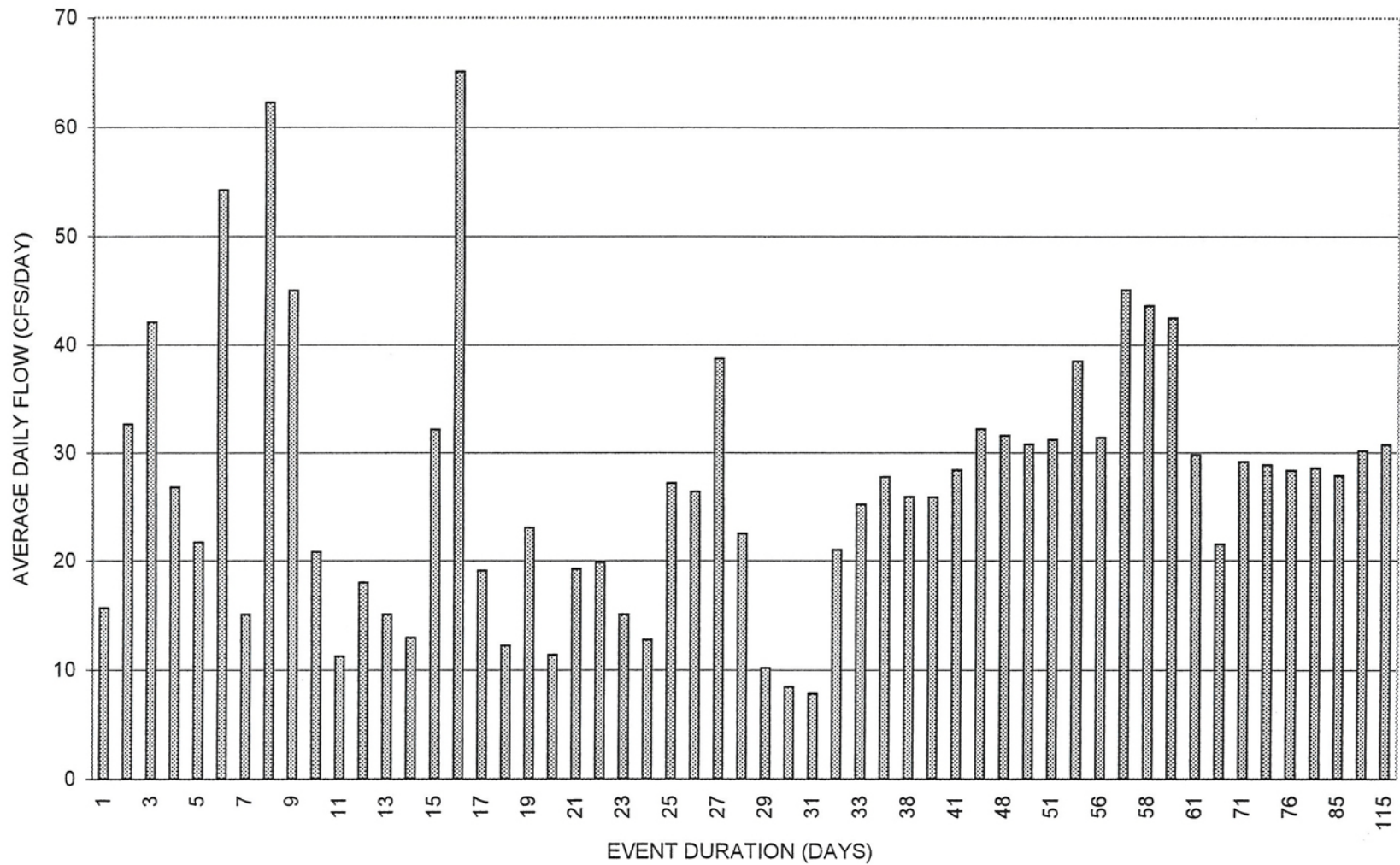


Outflow from Diamond A Dam

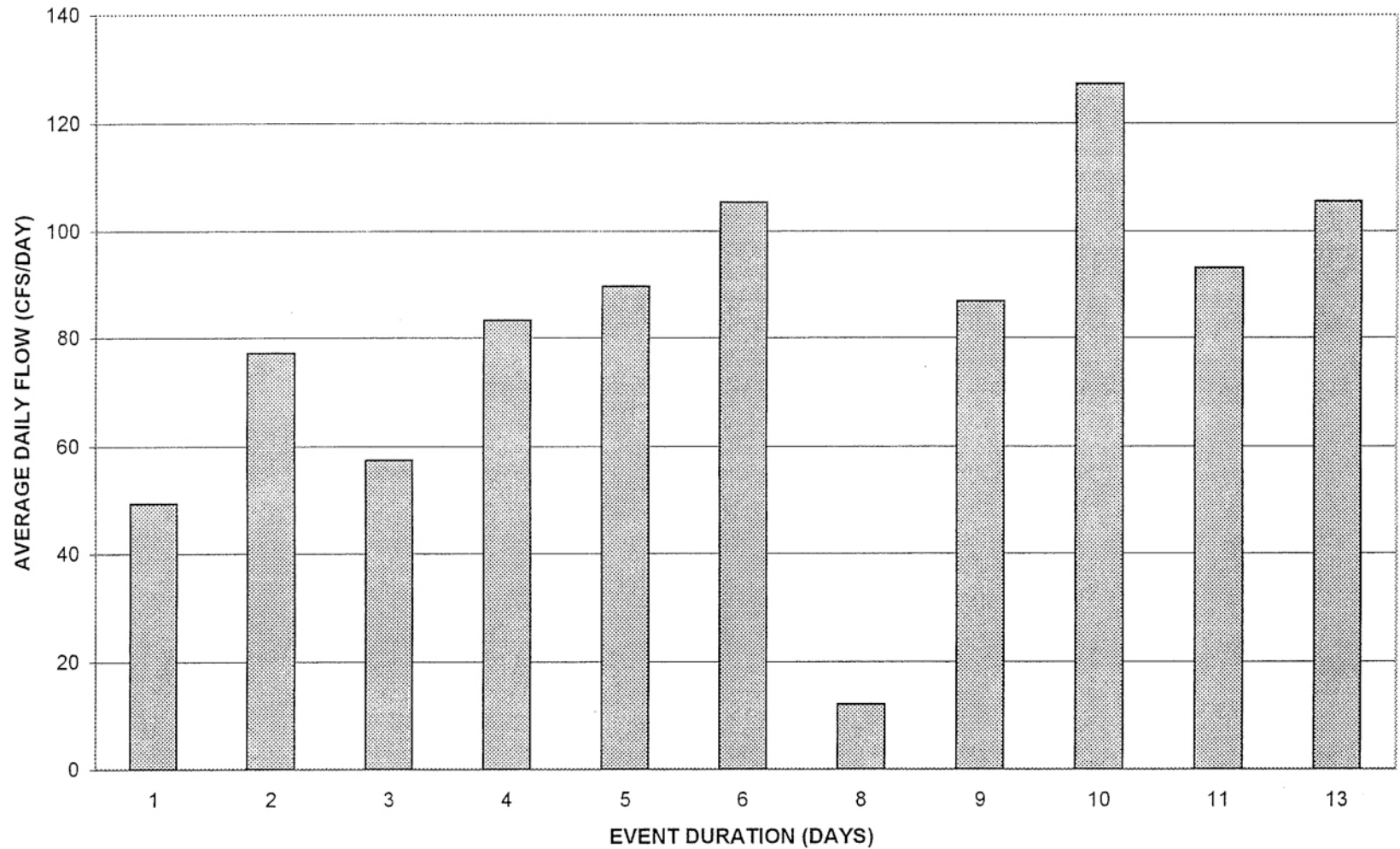
Maximum average daily outflow to date is 450 cfs.



RIO HONDO BELOW DIAMOND A DAM-AVERAGE DAILY FLOW
USGS NO. 08390800



ROCKY ARROYO BELOW ROCKY DAM- AVERAGE DAILY FLOW
USGS NO. 08393300





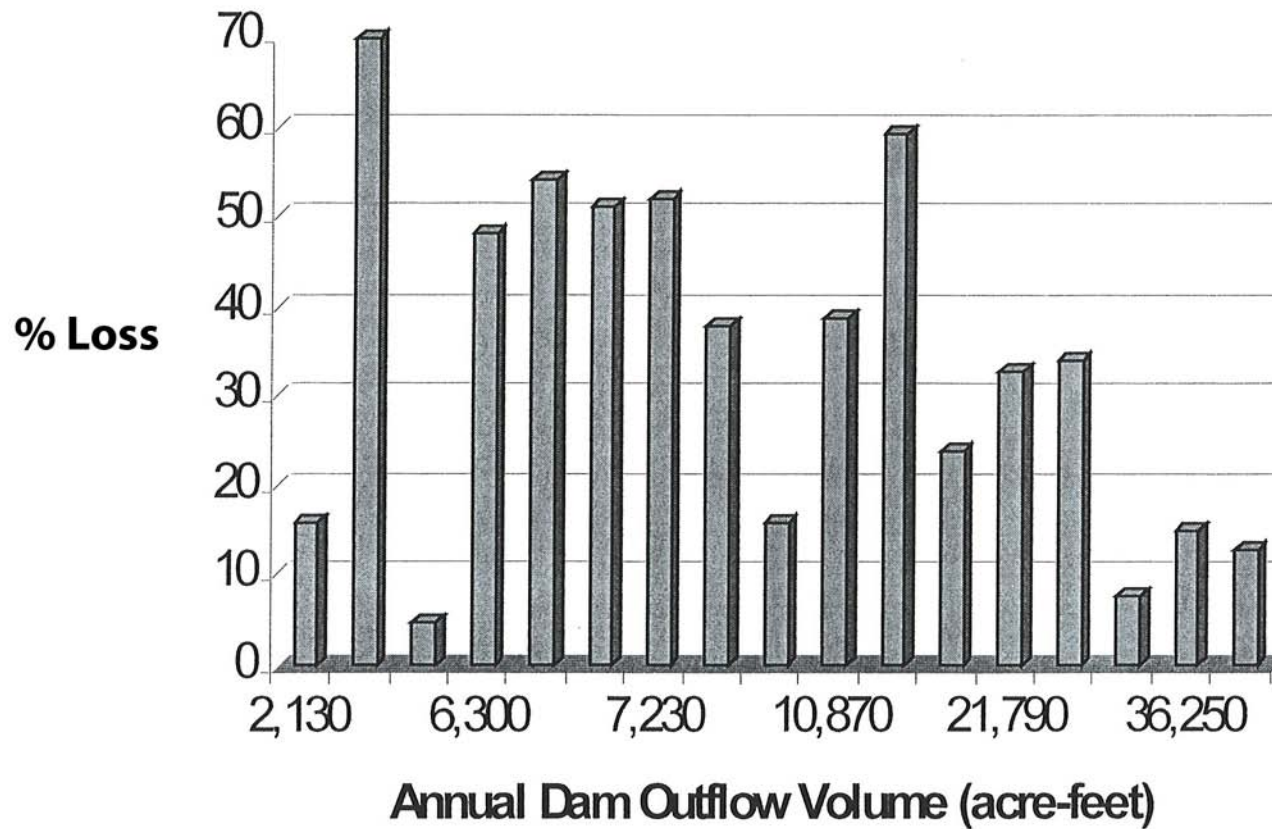




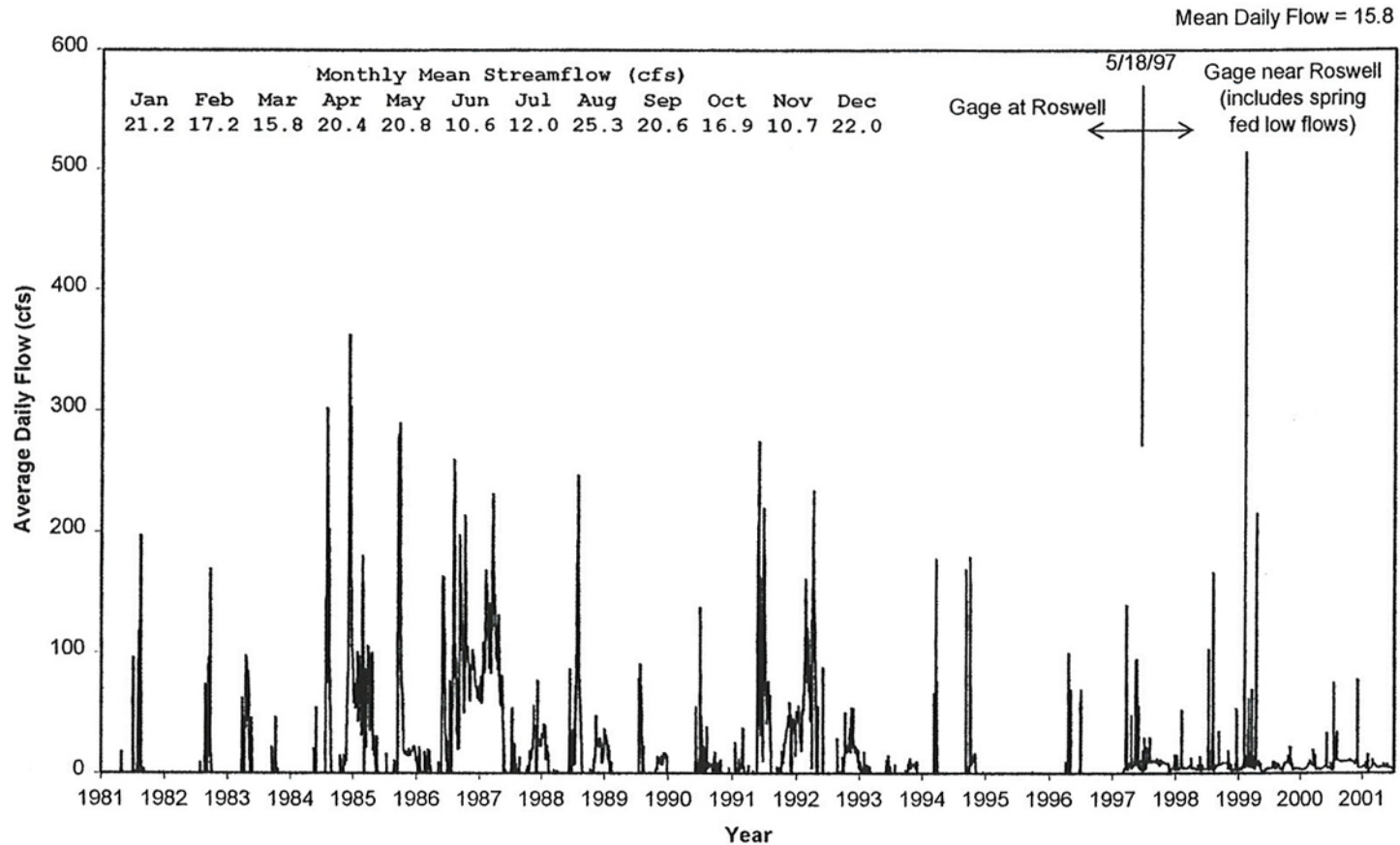


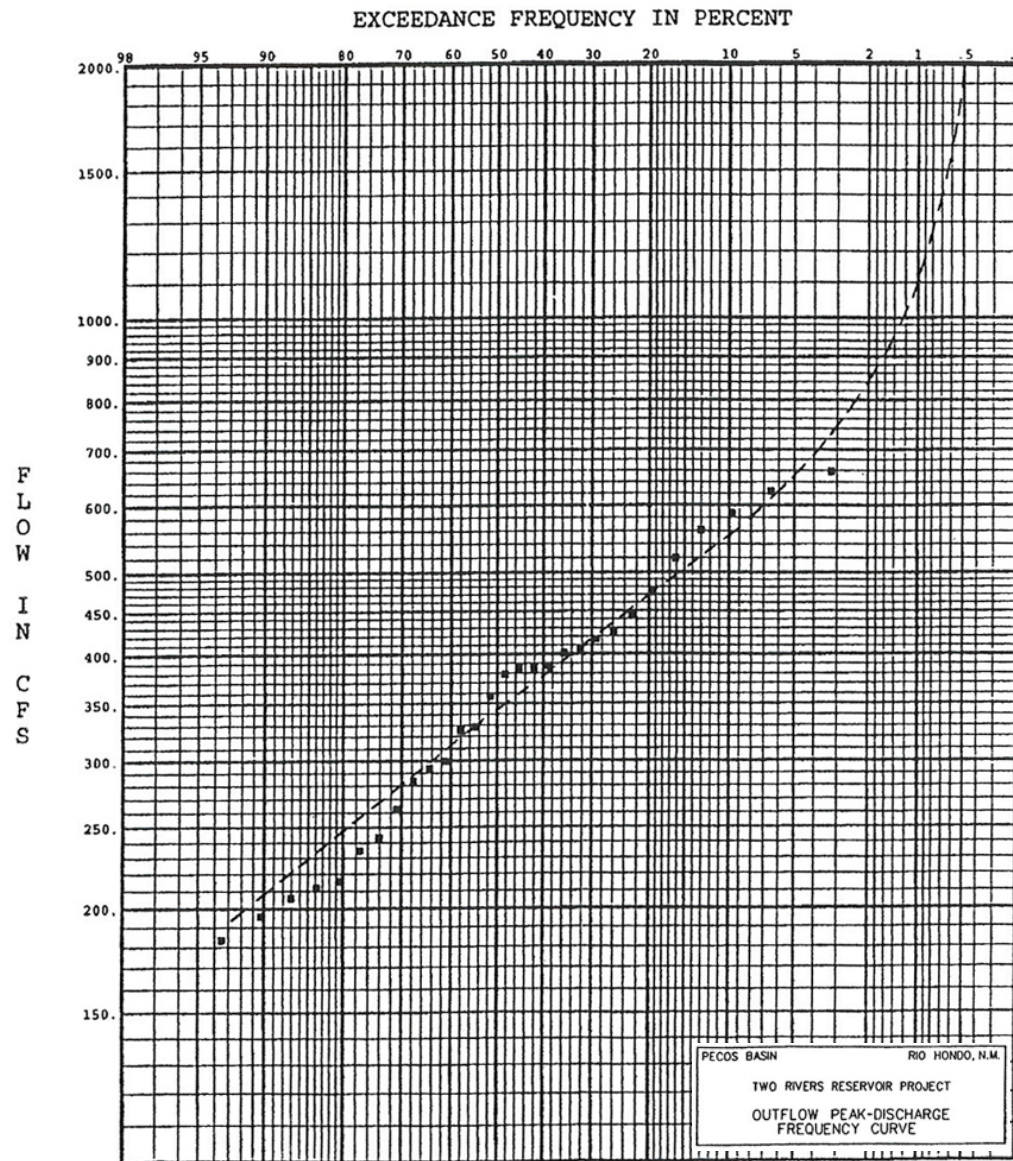


HONDO RIVER VOLUME vs. % LOSS



Flow at Roswell
Combined Gages (USGS Gage Nos. 08393500 & 08393610)





Instantaneous Peak Outflow Frequency

1,000 cfs outflow
peak occurs for 1%
frequency only.

SUMMARY

- Determine nature and priority of all Water Rights
- Proceed with Active River Management Program as fast as possible
- Develop sustainable ground water use policies for each aquifer within each basin
- Develop feasible stream eco-restoration plans for all surface waters
- Negotiate practical procedures to comply with river compact requirements