## Getting Ahead of a Water Crisis

Binational Collaboration for Water Supply Reliability in the Colorado River Basin

Segundo Coloquio Internacional de Cuencas Sustentables

Mexico City

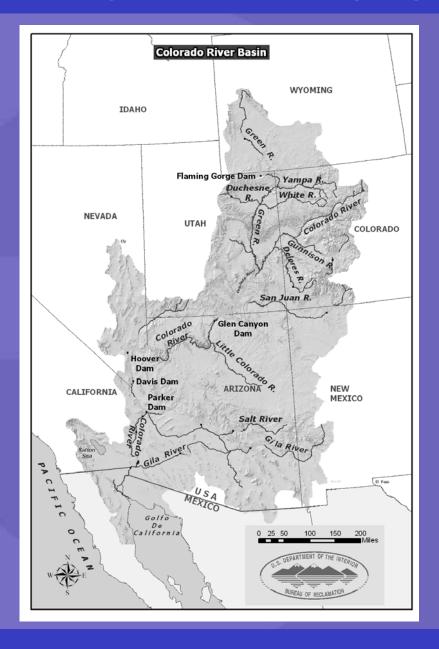
29 September, 2010

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**ENVIRONMENTAL DEFENSE FUND** 

finding the ways that work

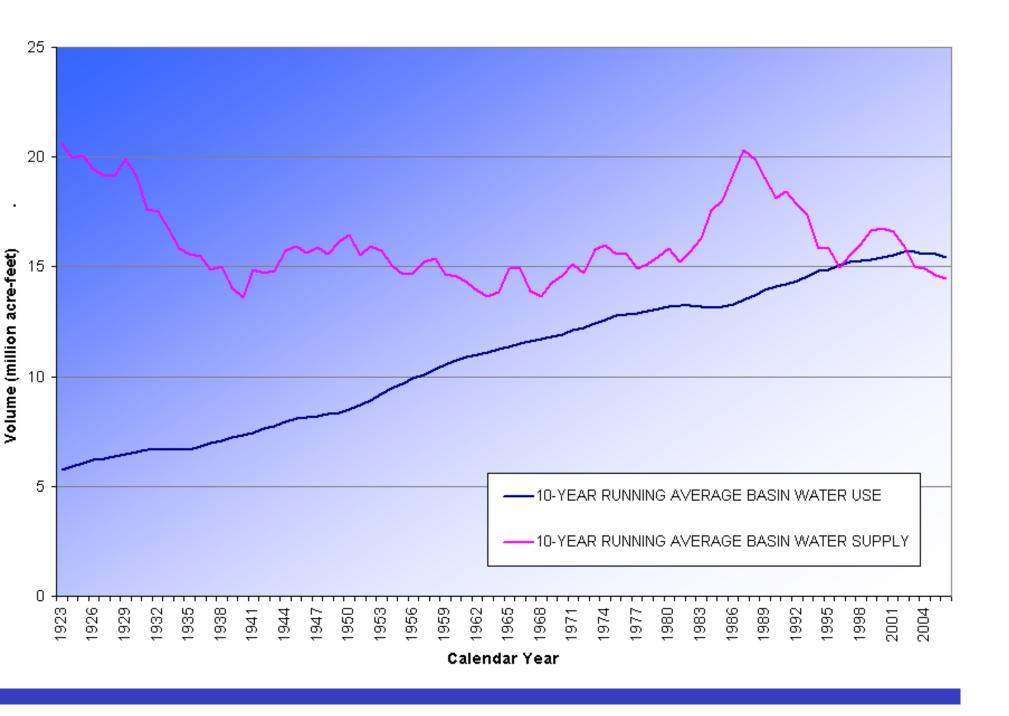
#### **ENVIRONMENTAL DEFENSE FUND**

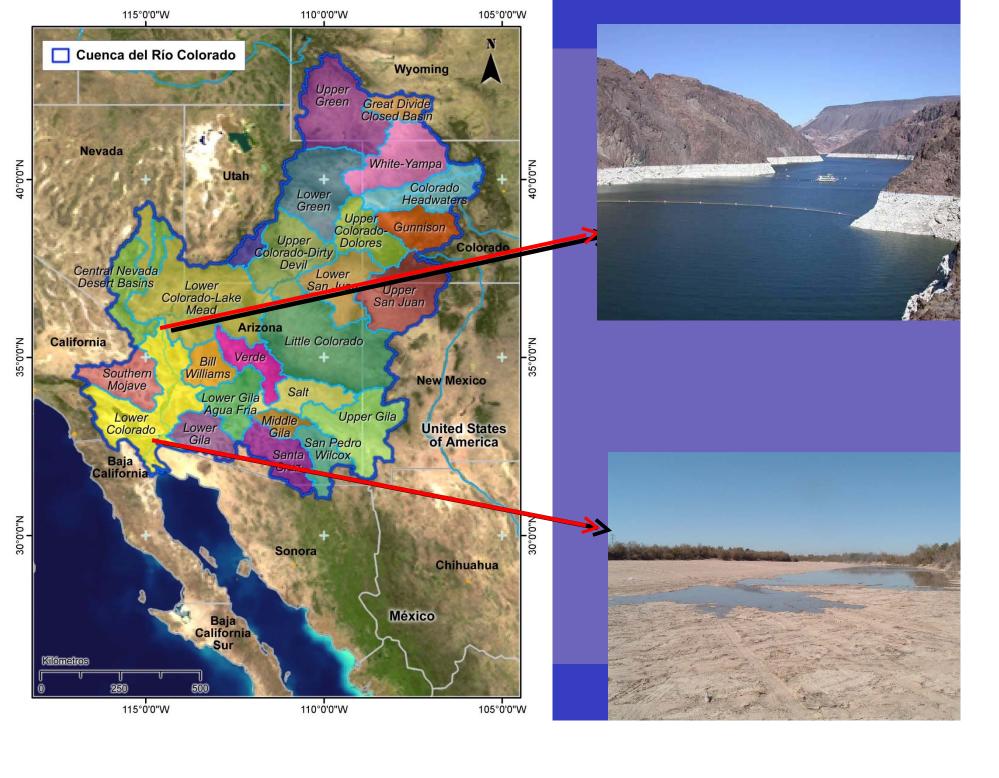


### Colorado River

- 630,000 km<sup>2</sup>
- 9 states
  - 2 in Mexico
  - 7 in USA
- 80% precip is snow
- Storage > 4x annual yield

Water Supply Reliability





# The New York Times

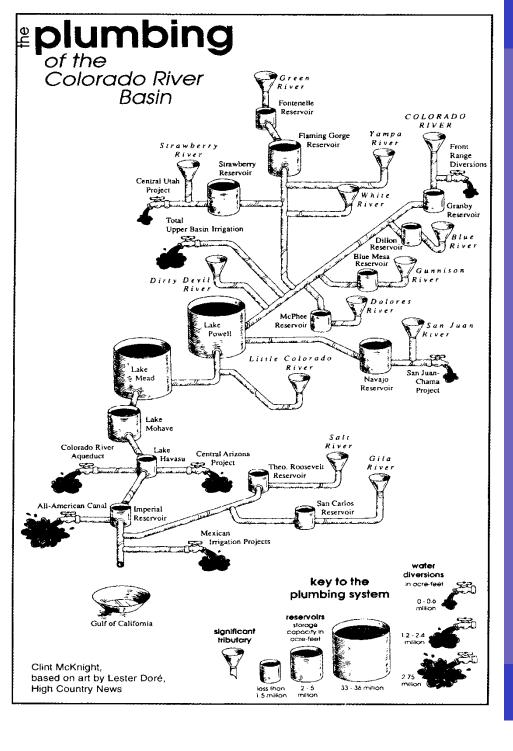
# September 27, 2010: Water Use in Southwest Heads for a Day of Reckoning

"LAKE MEAD NATIONAL RECREATION AREA, Nev. —
A once-unthinkable day is looming on the Colorado
River. Barring a sudden end to the Southwest's 11-year
drought, the distribution of the river's dwindling bounty is
likely to be reordered as early as next year because the
flow of water cannot keep pace with the region's
demands."

Water Supply Reliability

## Why are we running out of water?

- River is Over-allocated
- Population Growth
- Drought since 2001
  - ...is it caused by Global Warming?



 Colorado River legally overallocated

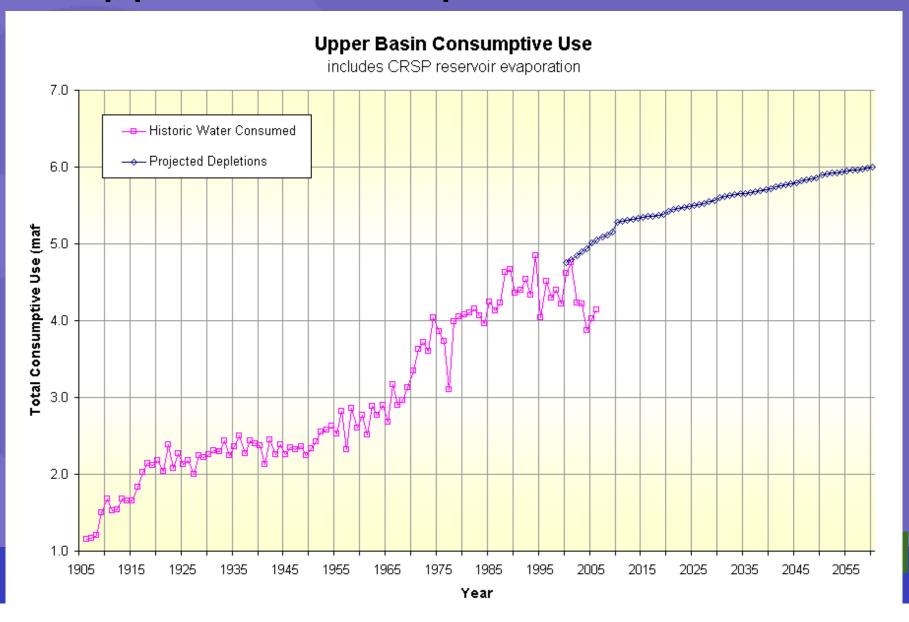
16.5 MAF accounted for in the Law of the River; +/- 13.5 MAF is reconstructed natural flow (or yield) at Lee Ferry based on tree ring studies

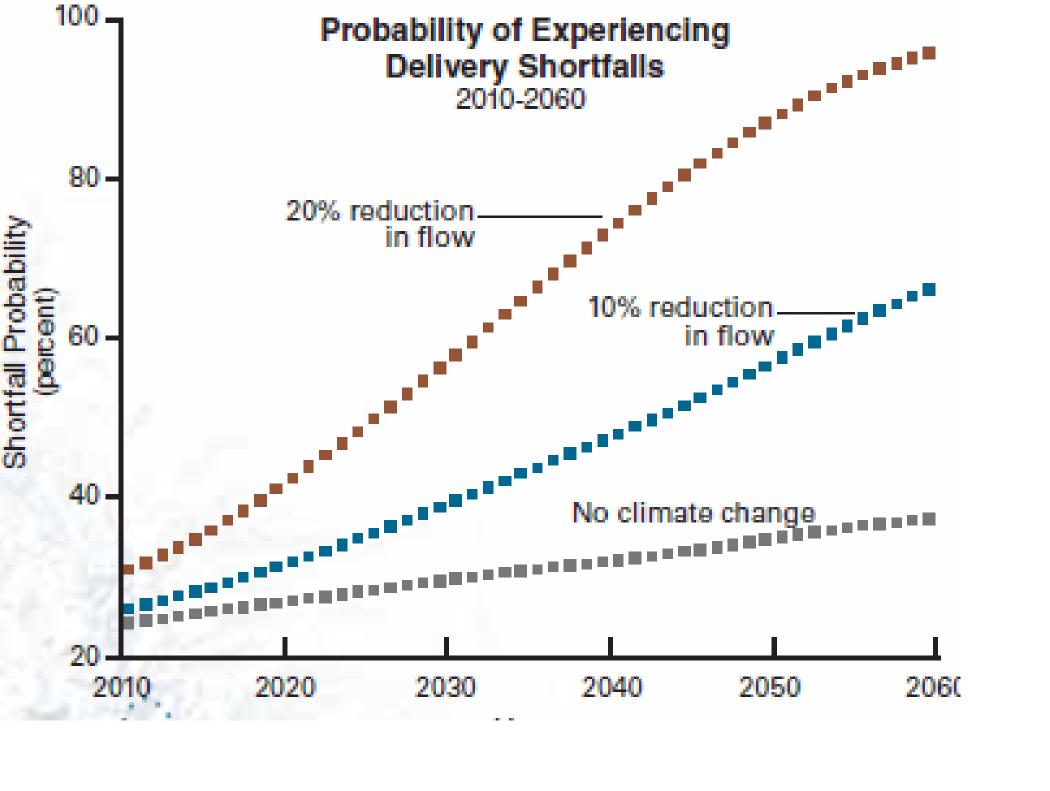
- Mexico: 1.5 MAF
- US: 15 MAF split between Upper and Lower Basins
  - Lower Basin uses full allocation
  - Upper Basin use not fully developed

Water Supply Reliability

#### **EFENSE FUND** Colorado River Basin WYOMING IDAHO Las Vegas Flaming Gorge Dam Yampa R. NEVADA UTAH COLORAL Denver San Juan R. Glen Canyon Dam ARIZONA P. Hoover Dam Los Angeles Davis Dam NEW MEXICO CALIFORNIA Parker Salt River Phoenix \_\_ W S A MEXICO Golfo De California 0 25 50 100 150 200 Miles <sup>⊥</sup> San Diego Mexicali

## Upper Basin Depletion Schedule





## Headed for a Crisis?

- "Law of the River" has been changed many times
  - Historically through court decisions
  - In recent past through consensus agreements
- Can we find flexibility?

### Crisis Avoidance

- 2007 US agreement
  - Reduce uses before we run out of water in storage
  - Balance reservoirs
  - Allow for water banking
- Potential to extend this kind of agreement to Mexico?

Water Supply Reliability

# **US-Mexico Negotiations**

- Supply management
- Water banking
- US investments in conservation and desalination in Mexico
- Environmental Flows

