

# EMBRACING A WINNING STRATEGY: CREATING MUTUAL GAINS IN NATURAL RESOURCE MANAGEMENT NEGOTIATIONS

*DR. BRUNO VERDINI*

*PH.D. IN NEGOTIATION, COMMUNICATION, DIPLOMACY, AND LEADERSHIP - MIT*

Executive Director, **MIT-Harvard Mexico Negotiation Program**

Assistant Director, **MIT Science Impact Collaborative**

Lecturer, **Urban Planning and Negotiation**

*DEPARTMENT OF URBAN STUDIES AND PLANNING*

*MASSACHUSETTS INSTITUTE OF TECHNOLOGY*

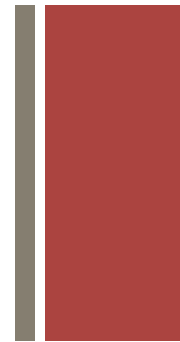
COP 22 – Climate Change, Governance and Law – Marrakech, Morocco  
Wednesday, November 9, 2016







# + The Protagonist





- The Colorado River Basin, extending for 250,000 miles, currently provides 5 trillion gallons of water to 40 million people in southwest U.S. and northwest Mexico, on an annual basis.



- More water is exported from the Colorado River Basin than from any other basin in the world, irrigating some of the most productive agricultural regions on the planet, including the Imperial Valley in California and the Mexicali Valley in Baja California.



- The river's flows are controlled by an extensive system of dams, reservoirs, and aqueducts built over the last 100 years, with a reservoir capacity of over 60 million acre-feet, up to four times the Colorado's annual flows.



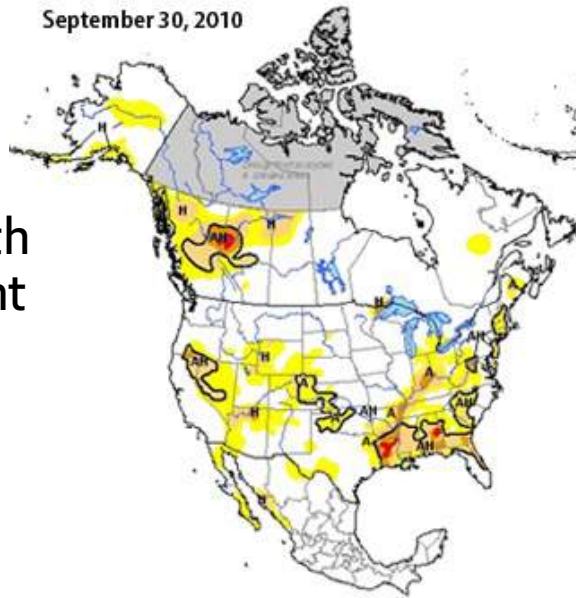
## + The Scenario



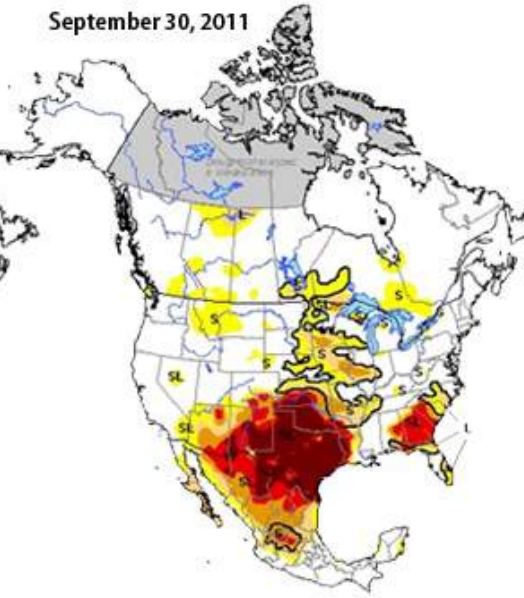


# Evolution of North American Drought Conditions (2010-2013)

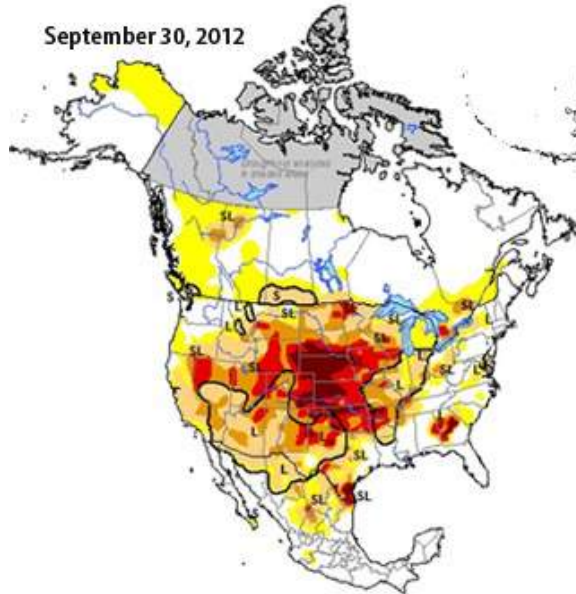
September 30, 2010



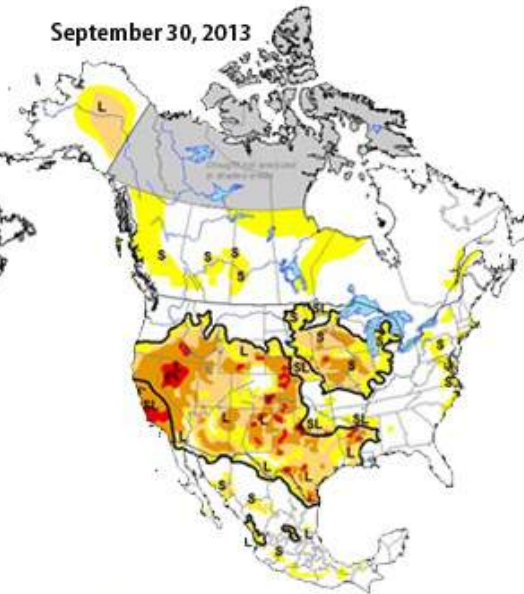
September 30, 2011








September 30, 2012




September 30, 2013



Intensity:

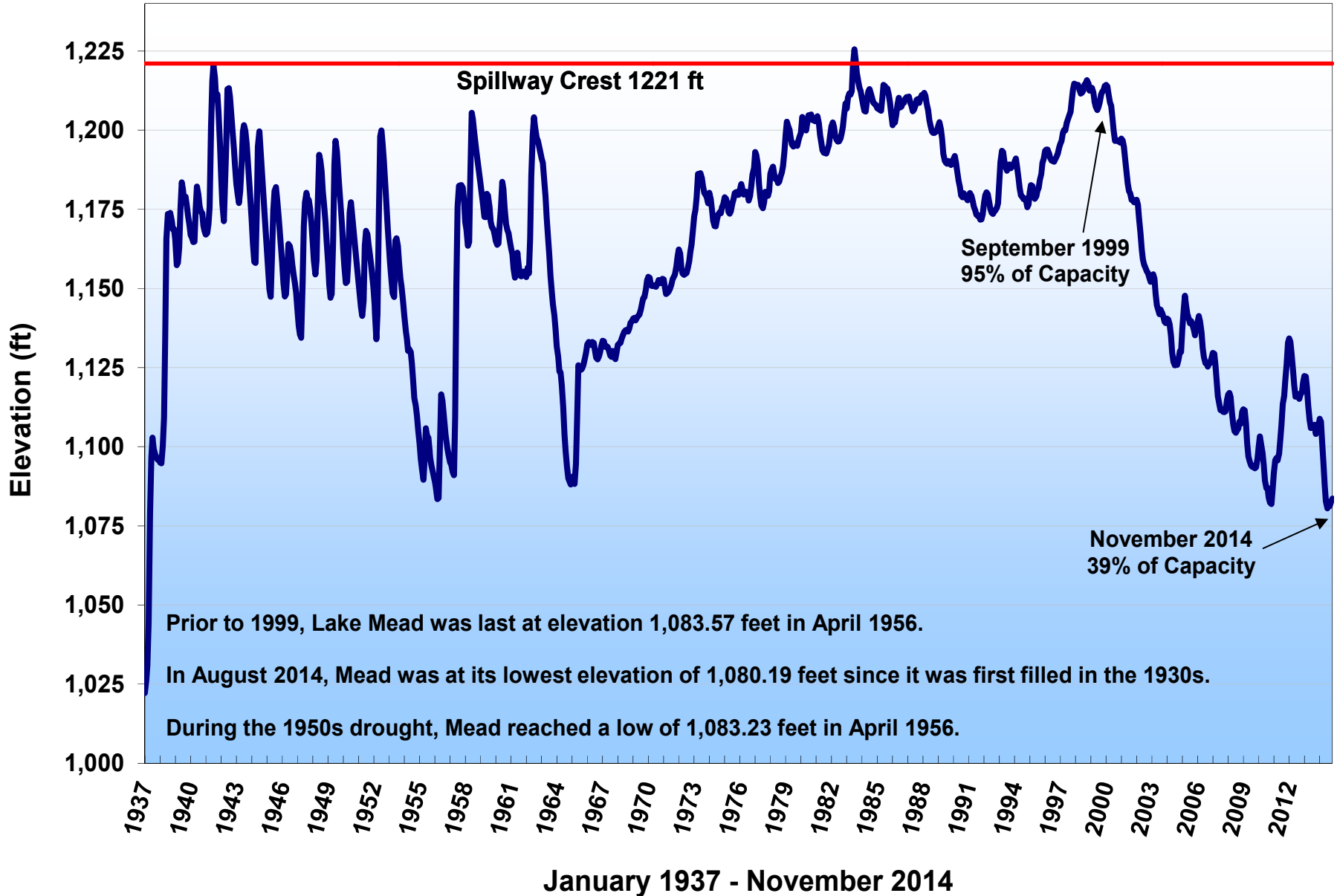
-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

Drought Impact Types:

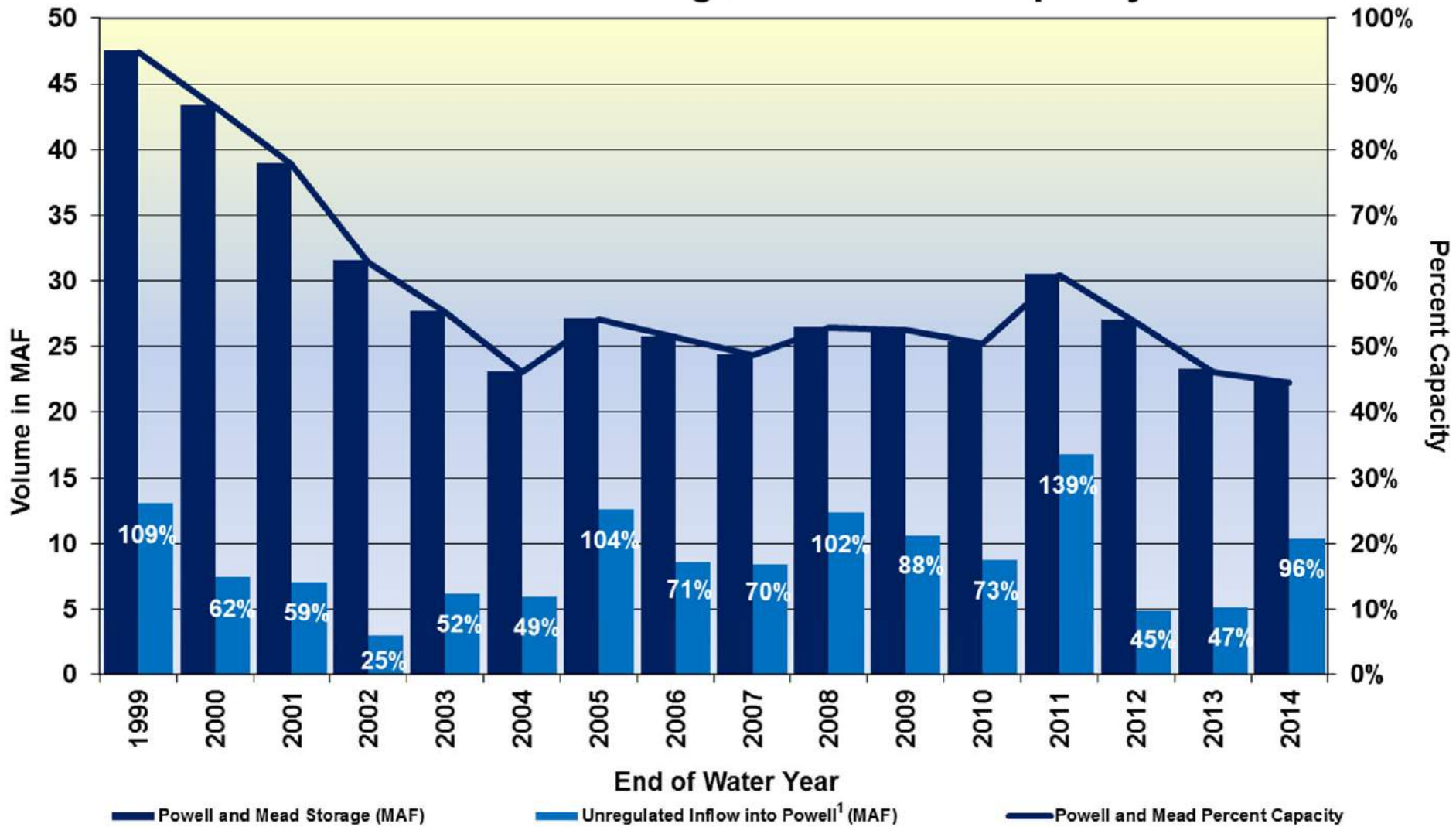
-  Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)
- A = Agriculture
- H = Hydrological (Water)



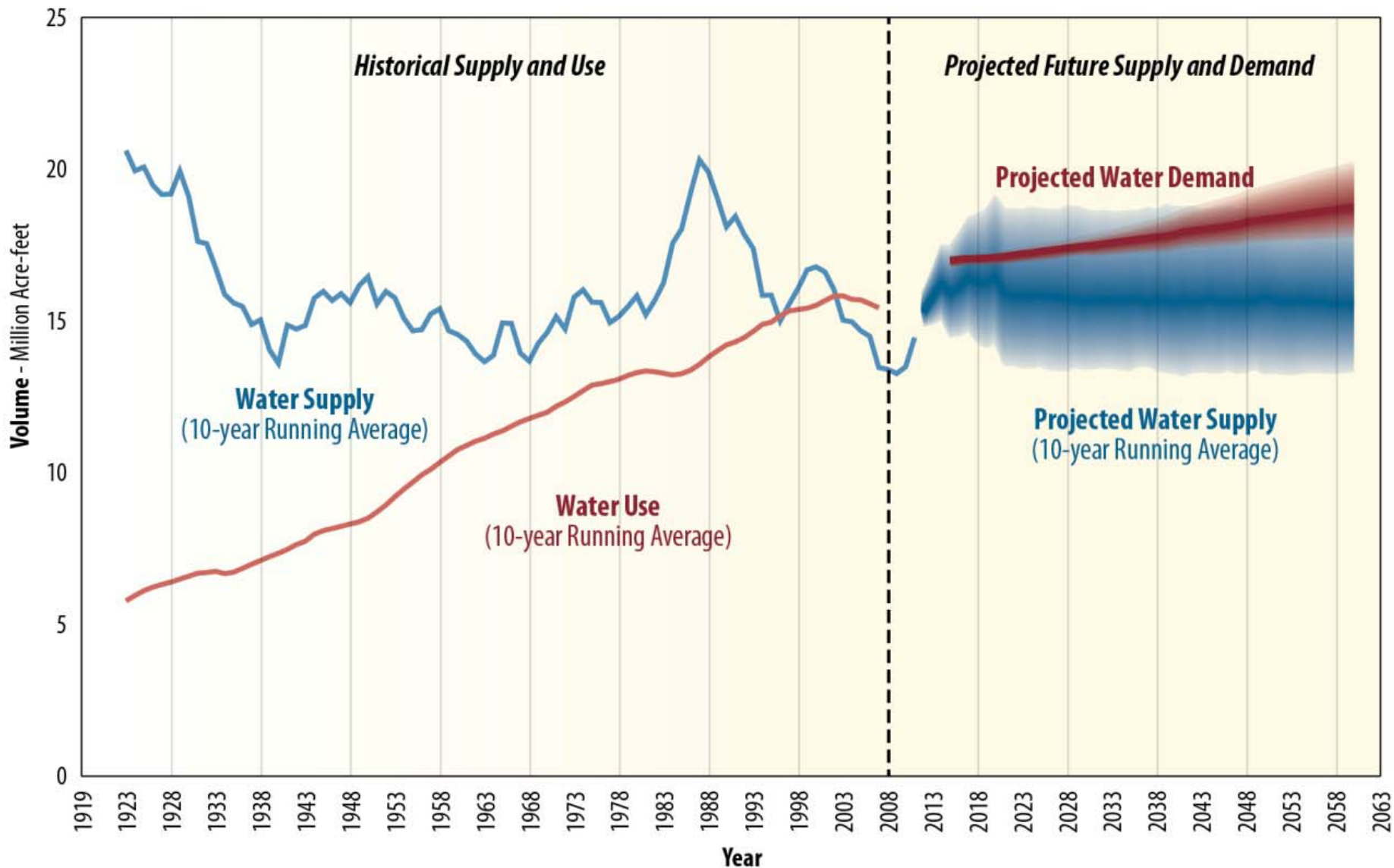
# Lake Mead – Elevation Water Levels



# Unregulated Inflow into Lake Powell Powell-Mead Storage and Percent Capacity



# Projected Future Colorado River Basin Water Supply and Demand





# + The Challenge



- **For over seventy years, pursuing unilateral development, the U.S. and Mexico alternated between deadlock and confrontation.**



- The 1944 Binational Water Treaty includes a provision that specifies the U.S.'s right, under conditions of 'extraordinary drought,' to unilaterally reduce the annual amount of Colorado River water to be delivered to Mexico.



The Treaty does not include, however, the following critical specifications:

- 1) The definition of ‘extraordinary drought,’
- 2) Which are the criteria that trigger shortage
- 3) The volume of the shortage, and
- 4) How the reduction will be implemented





+ The Shocker



- The two countries were able to reach a landmark agreement in 2012.
- For the first time, the two sides have established a binational framework through which to co-develop and jointly manage these transboundary natural resources, as partners.



## + The Research



- The research explores how the negotiators shaped these agreements, and in what ways they contributed to the resolution of these long-standing disputes.



- In-depth interviews with over 70 negotiators in the U.S. and Mexico, including every one of the chief negotiators who had decision-making authority at the negotiating table: Presidents, Ambassadors, Secretaries, General Managers, NGO Heads, etc.



- The aim is to explore in what ways the manner in which developed and developing countries conduct transboundary resource management negotiations can alter the prospects for finding agreement.



1. How they frame the dispute
2. Who they send as representatives
3. What preparatory work they do
4. What principles they use to structure the negotiation process
5. How they estimate their interests and those of the other side



6. What ground rules they follow at the table
7. How they respond to unpredictable circumstances
8. What criteria they rely on to create and distribute value
9. How they insulate agreement against spoilers
10. How they structure follow through





# + The Evidence

# + Public Dispute Resolution

- 1) Breeding Confrontation
- 2) Bringing More Issues to the Table
- 3) Embracing Flexibility



# + Adaptive Leadership



- 4) Detecting Judgment Hurdles
- 5) Breaking the Deadlock
- 6) Facilitating Renewed Perspectives

# + Collaborative Decision-Making



- 7) Working from a Shared Baseline
- 8) Trusting Each Other
- 9) Involving the Right People

# + Political Communication



- 10) Changing the Narrative
- 11) Guiding Decisions by Emotion
- 12) Focusing on the Benefits

# + Colorado River Agreement



- **Establish a mutual set of criteria**
  - Share in water shortages and surpluses
  - Adapt to present and future flows under conditions of drought
- **Defer water allocations/Enhance storage upstream**
  - Decrease salinity/Increase reservoir levels/Reduce upkeep costs
  - Repair infrastructure/Further investment

# + Colorado River Agreement



## ■ Restore riparian habitats

- Empower a broader set of stakeholders
- Test and improve conditions through pulse and base flows

## ■ Create new water

- Harmonize regulation/Share infrastructure
- Build joint seawater desalination plants/Facilitate water trades



+ Process Strategy





- Both sides were able to shift from solely allocating costs to also allocating benefits.
- The two countries reinterpreted the broader political and economic circumstances surrounding the shared water and energy resources, influenced in part by drastic natural disasters and resource shortages.



- These events, in turn, modified the countries' alternatives, drew stakeholders to the negotiations with revised mandates, fostered new back table coalitions, and led to a reframing of beneficial trades that had not been obvious earlier.
- Changes in political leadership, especially in regard to the interpretation and response to transboundary challenges, were additional enabling factors making this shift possible.



- Stakeholders can move beyond hard-bargaining tactics and avoid the ultimatums that accompany the presumption that there are not enough resources to go around, and that one side must win and the other must inevitably lose.



**Thank you for this  
opportunity & for the  
conversations here tonight!**