

# **COLORADO RIVER COMPACT AND LAW OF THE COLORADO RIVER**

Interbasin Compact Committee  
December 4, 2013

John H. McClow  
Colorado Commissioner, Upper Colorado River Commission



# The Colorado River Basin



# Colorado River Salinity Control Act (1974)

Supplemental *California v. Arizona*  
Supreme Court Decrees (1968, 1979,  
1983, 1984, 2000, 2006)

▼ Colorado River Compact (1922)

▼ United States-Mexico Treaty (1944)

▼ Upper Colorado River Basin Compact (1948)

California Colorado River Water Agreement (2003)

Boulder Canyon Project Act (1928)

Colorado River Storage Project Act (1956)

*Arizona v. California* (1963)

Colorado River Basin Project Act (1968)

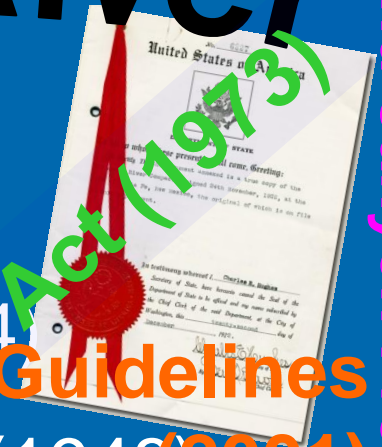
La Plata River Compact (1922)

California Seven Party Agreement (1931)

Reservoir Operations (2007)

Interim Surplus Guidelines

(2001)



Interim Guidelines for Lower Basin

Shortages and Coordinated

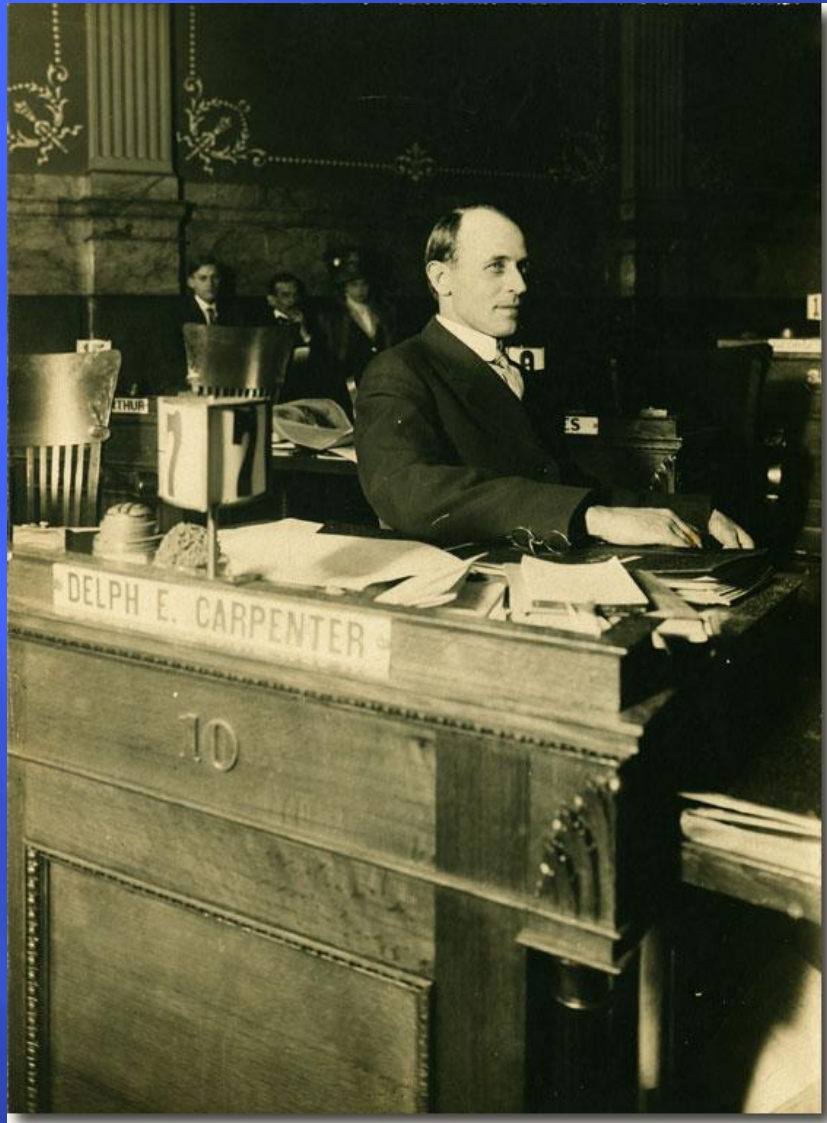
Colorado Ute  
Settlement Act

(2000)

Endangered Fish  
Recovery Program  
(1988)

Grand Canyon Protection Act (1992)

Lower Colo River  
Multi-Species  
Conservation  
Program (2005)



Delphus Emory Carpenter



# Colorado River Compact



- Interstate Compact
- Contract among states
- Authorized by U. S. Constitution
- Ratified by
  - State Legislatures
  - U. S. Congress
- State Law
- Law of United States

# Key Provisions of the Colorado River Compact

- **Article III(a)**

Apportions to Upper Basin and Lower Basin 7.5 million acre-feet per year in perpetuity

- **Article III(c)**

Defines obligations of Upper and Lower Basins for deliveries to Mexico

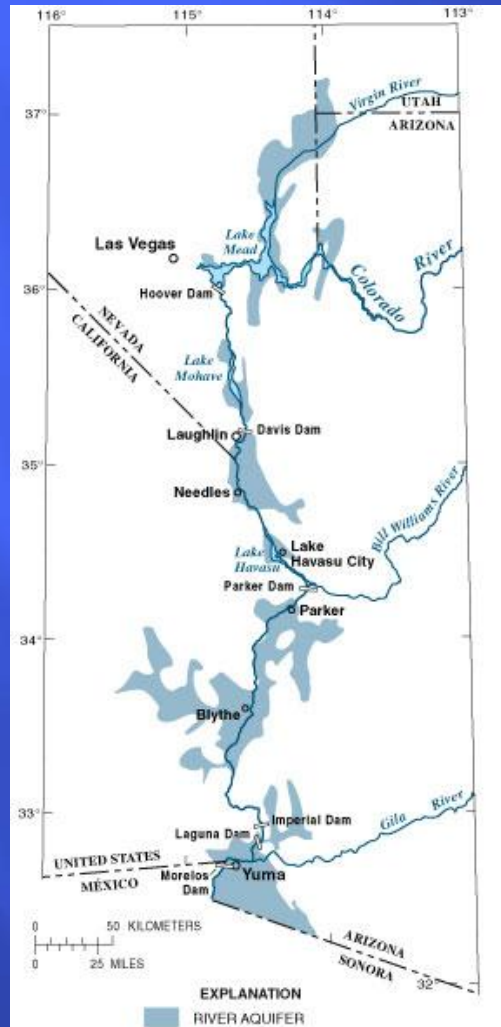
- **Article III(d)**

Upper Division will not deplete flows at Lee Ferry below an aggregate of 75 million acre-feet over any period of ten consecutive years

- **Article VIII**

Present perfected rights are unimpaired

# Lower Basin Operations



Nevada – 300,000 acre-feet  
(Las Vegas intakes – Lake Mead)

Arizona – 2.8 million acre-feet  
(Central Arizona Project)

California \* – 4.4 million acre-feet  
(Direct diversion – PVID; Colorado River Aqueduct – MWD; All-American Canal – IID)

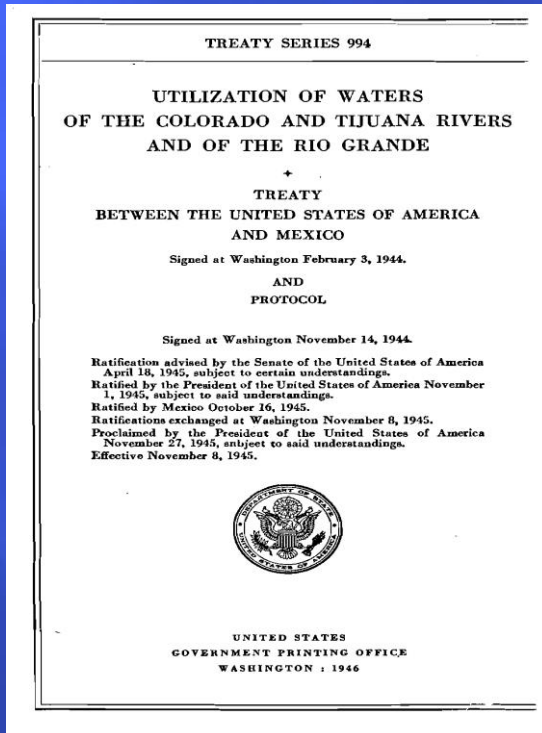
\* Senior priority



# Mexican Water Treaty



Signing of 1944 Treaty



- Article 1  
International Boundary and Water Commission
- Article 10(a)  
1.5 maf “guaranteed” to Mexico annually
- Article 10(b)  
“surplus of waters”  
and  
“extraordinary drought”  
provisions

# Upper Colorado River Basin Compact

## Article I

“equitable division and apportionment of the use of waters”

## Article III(a)

- Arizona 50,000 af
- **Colorado 51.75%**
- Utah 23.00%
- Wyoming 14.00%
- New Mexico 1.25%

## Article III(b)

- Apportionment of any and all man-made depletions
- Beneficial use is the basis, measure, and limit

## Article IV

- In the event of curtailment Commission determines quantities
- Penalty for over use by any state

# Upper Division States' Colorado River Compact Compliance

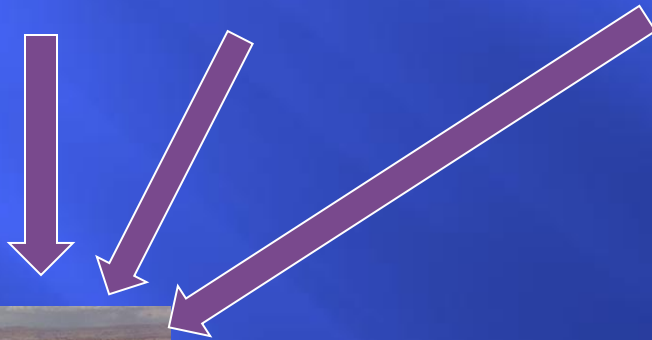
Navajo Reservoir



Flaming Gorge Reservoir



Blue Mesa Reservoir



Lake Powell

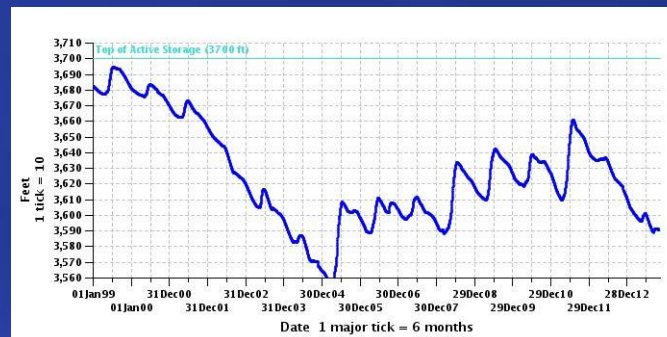
Historic  
Annual Release:  
8.23 million  
acre-feet

2014 Release:  
7.48 maf

## Inflows to Lake Powell

Percentage of 30-year average (12.04 maf)

- 2000 - 62%
- 2001 - 59%
- 2002 - 25%
- 2003 - 51%
- 2004 - 49%
- 2005 - 105%
- 2006 - 71%
- 2007 - 68%
- 2008 - 102%
- 2009 - 92%
- 2010 - 73%
- 2011 - 142%
- 2012 - 29%
- 2013 - 47%



# Upper Division States' Colorado River Compact Compliance

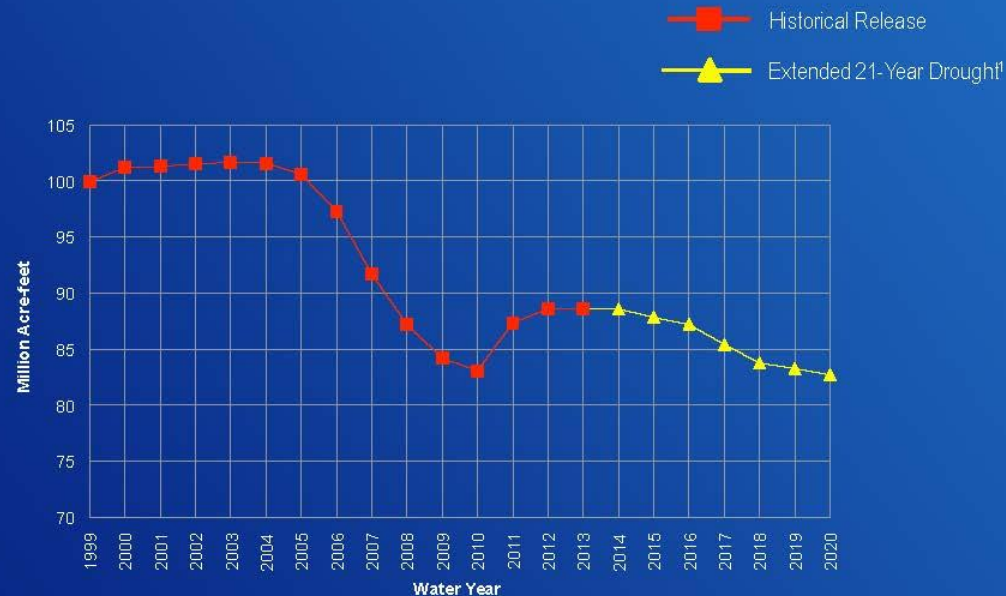
## Historic Flow at Lee Ferry

2000	9,530	101,754
2001	8,361	101,983
2002	8,348	102,308
2003	8,372	102,543
2004	8,348	102,585
2005	8,395	101,738
2006	8,508	98,716
2007	8,422	93,265
2008	9,180	89,004
2009	8,406	85,870
2010	8,436	84,777
2011	13,227	89,643
2012	9,534	90,829



# Upper Division States' Colorado River Compact Compliance

## Lake Powell 10-Year Cumulative Water Year Release



<sup>1</sup>May 2013 CRSS trace 96. 2014-2020 uses 2001-2007 hydrology

RECLAMATION



# Upper Division States' Colorado River Compact Compliance



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STATE OF COLORADO  
DEPARTMENT OF LAW

Natural Resources and  
Environment Section

November 21, 2013

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Denver, Colorado 80203  
Phone (720) 508-6000

MEMORANDUM

**TO:** John McClow, Colorado Commissioner  
Upper Colorado River Commission

**FROM:** Karen Kwon, First Assistant Attorney General

**RE:** Issues related to Compact Compliance/Curtailment Implementation

Per your request, the following is a subset of questions related to curtailment that will have to be answered or litigated to successfully implement compact compliance:

**NOTE:** This is a subset of curtailment issues that have been identified, and should not be considered exhaustive under any circumstances.

1. How will the Amount of Each Upper Division State's Curtailment be Determined?
  - a. What is the basis for calculating the amount of water at Lee Ferry?
  - b. What should each Upper Division State's allocation calculated assuming its percentage of 7.5 MAF/yr or is each allocation calculated using a safe yield of some smaller volume?
  - c. What accounting system will the Commission use to monitor consumptive water use that has been curtailed for compact purposes?
  - d. Has there been any overdraft by an Upper Division State?
  - e. Where should each Upper Division State's share of curtailment be measured?
  - f. Can an Upper Division State effectively account for and protect water that results from curtailment? What prohibits a downstream state of

# **ADAPTING THE LAW OF THE RIVER**

## **CONTINGENCY PLANNING**

# Adapting the Law of the River

## 2007 Interim Shortage Guidelines

Lake Powell Operational Tiers (subject to April adjustments or mid-year review modifications)		
Lake Powell Elevation (feet)	Lake Powell Operational Tier	Lake Powell Active Storage (maf)
3,700		24.32
3,636 – 3,666 (see table below)	<b>Equalization Tier</b> equalize, avoid spills or release 8.23 maf	15.54 – 19.29 (2008 – 2026)
	<b>Upper Elevation Balancing Tier</b> release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf	
3,575		9.52
3,525	<b>Mid-Elevation Release Tier</b> release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	5.93
	<b>Lower Elevation Balancing Tier</b> balance contents with a min/max release of 7.0 and 9.5 maf	
3,370		0



THE SECRETARY OF THE INTERIOR  
WASHINGTON

### Record of Decision

Colorado River Interim Guidelines for Lower Basin Shortages and the  
Coordinated Operations for Lake Powell and Lake Mead

December 2007

Recommending Official:

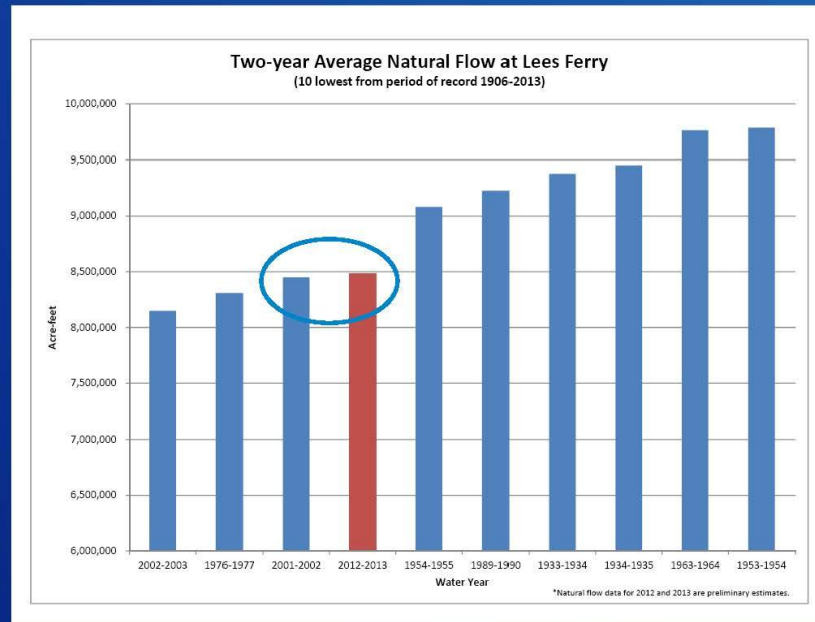
*Robert Johnson* December 13, 2007  
ROBERT JOHNSON Date  
Commissioner, Bureau of Reclamation

Approved:

*Dirk Kempthorne* December 13, 2007  
DIRK KEMPTHORNE Date  
Secretary of the Department of the Interior

# Contingency Planning

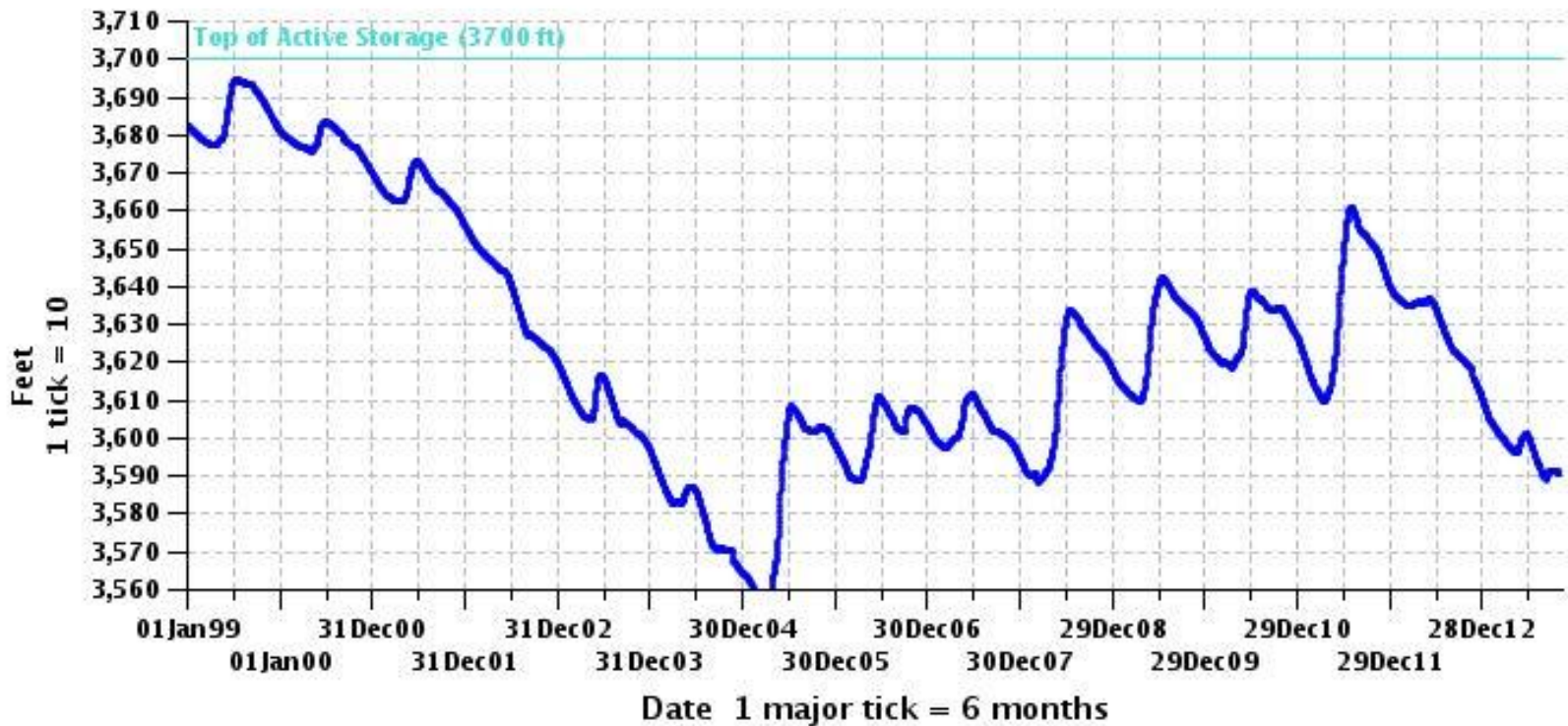
## Comparison of Two-year Periods Historical Record



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# Contingency Planning

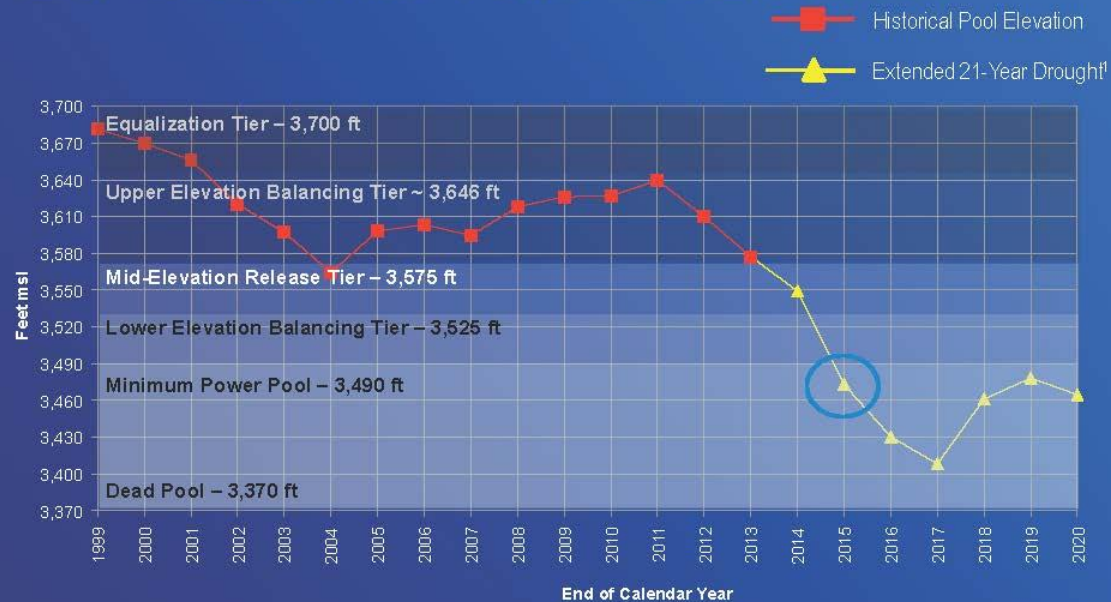
## Lake Powell Elevation 1999-2012





# Contingency Planning

## Lake Powell End of Calendar Year Pool Elevation

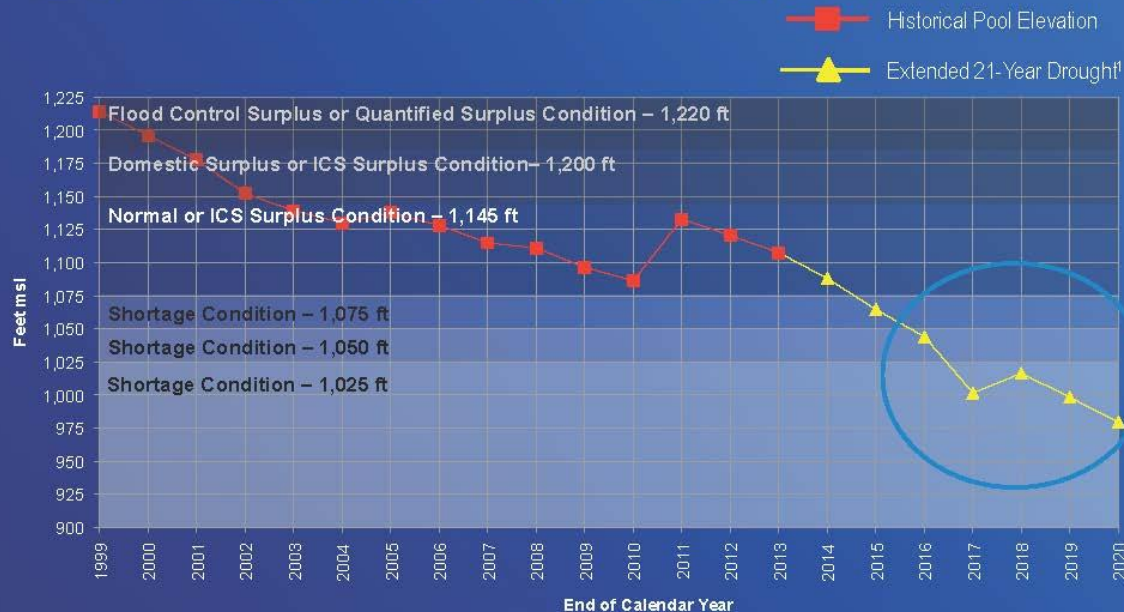


†May 2013 CRSS trace 96; 2014-2020 uses 2001-2007 hydrology

RECLAMATION

# Contingency Planning

## Lake Mead End of Calendar Year Pool Elevation



<sup>1</sup>May 2013 CRSS trace 96: 2014-2020 uses 2001-2007 hydrology

RECLAMATION