RECLAMATION

Managing Water in the West

Drought Response on the Colorado River

June 19, 2014

U.S. Department of the Interior
Bureau of Reclamation

Basin Hydrology

- 16.5 million acre-feet (maf) allocated annually
- 13 to 14.5 maf of consumptive use annually
- 60 maf of storage
- 15.0 maf average annual “natural” inflow into Lake Powell over past 100 years
- Inflows are highly variable year-to-year

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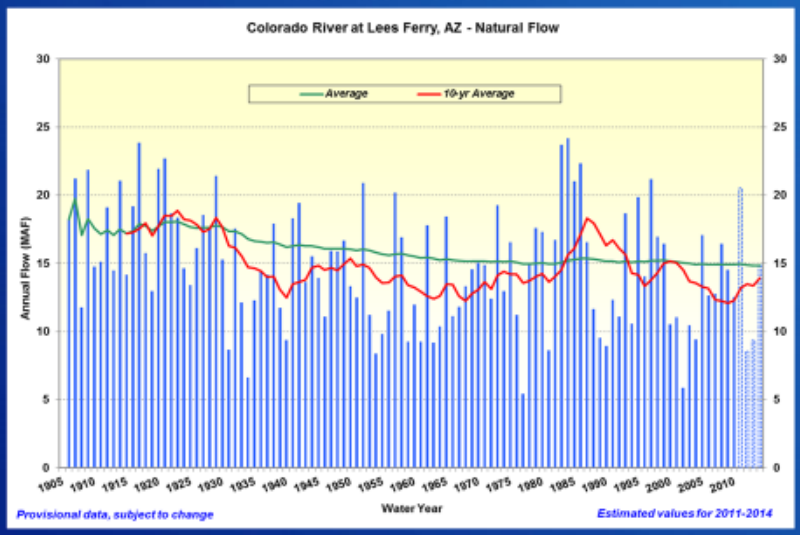
Historical Annual Natural Flow at Lees Ferry, Arizona
Water Year 1906 to 2014



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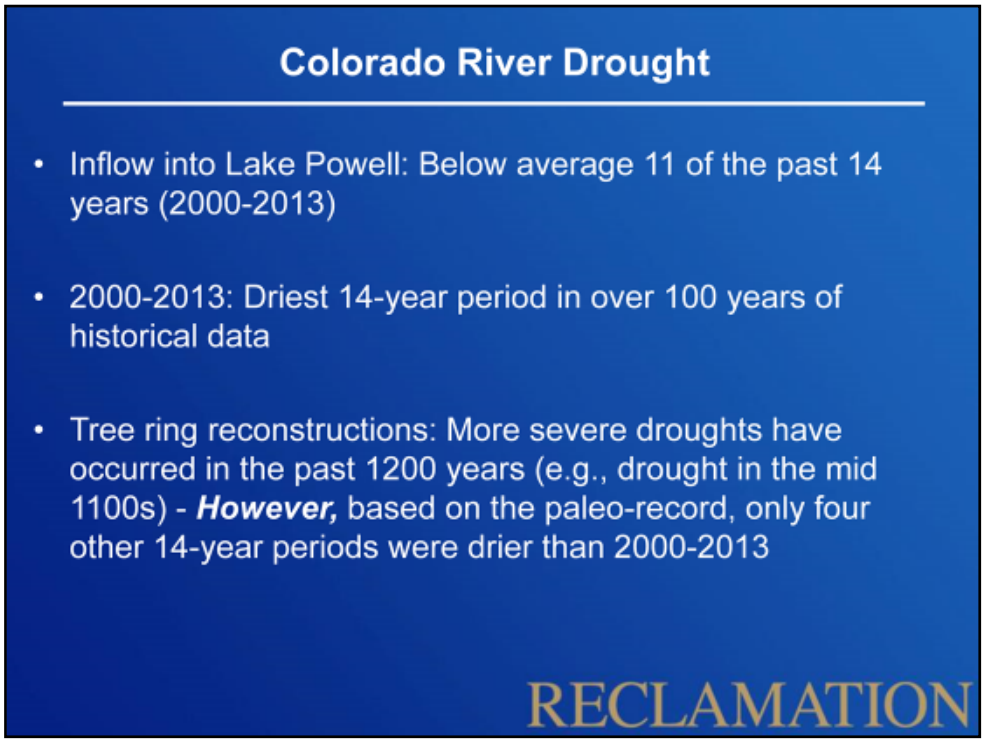

In an extraordinary drought

Has persisted in 2000

We were fortunate that our reservoirs were about 95% full when the drought began. This allowed us to continue water deliveries.

Colorado River Basin Storage
(as of June 15, 2014)

Current Storage	Percent Full	MAF	Elevation (Feet)
Lake Powell	50%	12.05	3,603
Lake Mead	40%	10.44	1,085
Total System Storage*	51%	30,23	NA

*Total system storage was 38.36 maf or 65% this time last year

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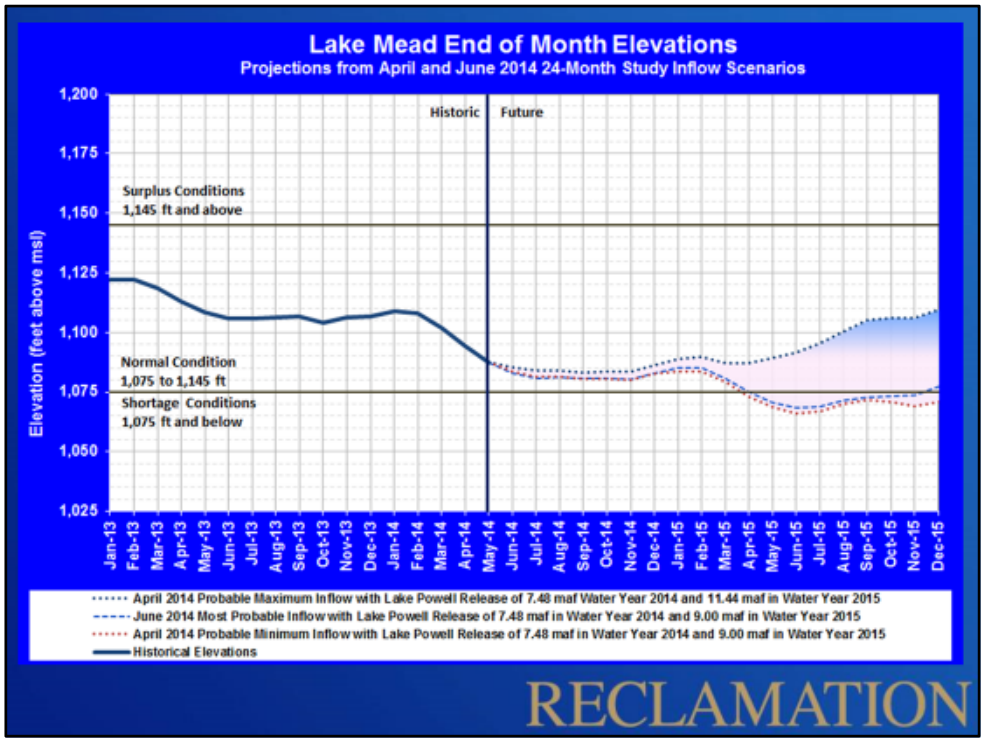
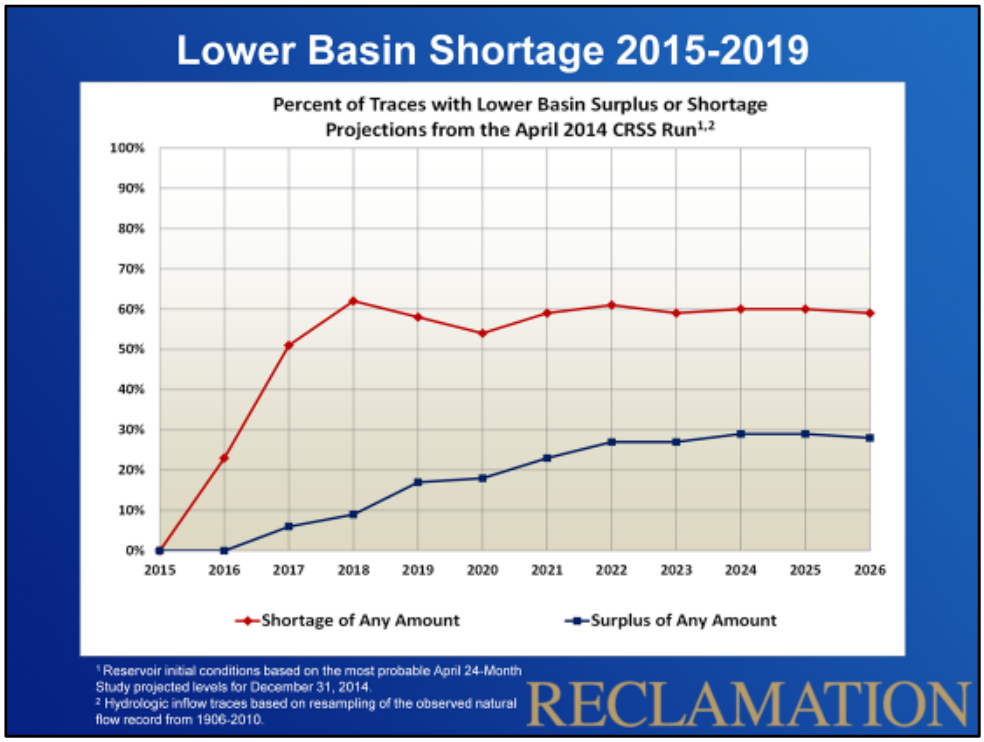


Elevation of Lake Mead expected to drop 22 feet in calendar year 2014.

Based on April CRSS results, there is a 0 percent chance of shortage in 2015.

However, in 2016, chance of shortage is about 23%, and exceeds 50% in 2017 and beyond.



Key Points:

Percent of Traces with Lower Basin Shortage, 2015-2019, based on the April 2014 CRSS run

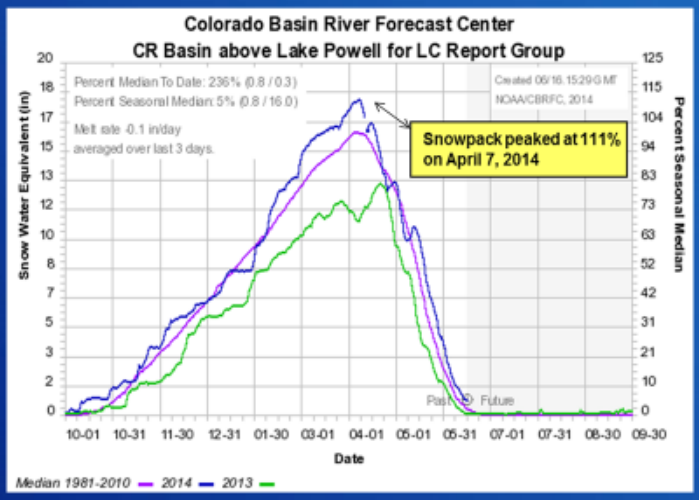
The probability of shortage for the next 5 years

- 0 percent chance in 2015; chance increases to 23 percent in 2016, and 51 to 62 percent in 2017 to 2019
- To date, there has never been shortage in the Lower Basin

Current Snowpack and Precipitation
as of June 9, 2014

Colorado River Basin above Lake Powell

Water Year 2014 Precipitation (year-to-date) 98%



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Protect the interim guidelines

Revisit the System Conservation Program

Year	Expected Colorado River Water Conserved in Acre-Feet	Entity	Price per acre-foot	Amount Paid
2006	3,000	MWD	$170	$ 510,000
2007	7,000	MWD	170	1,190,000
2008	3,138	YMIDD	120	376,572
2009	3,662	YMIDD	120	439,471
2010	3,705	YMIDD	90	333,450
Total	20,505			$2,849,493

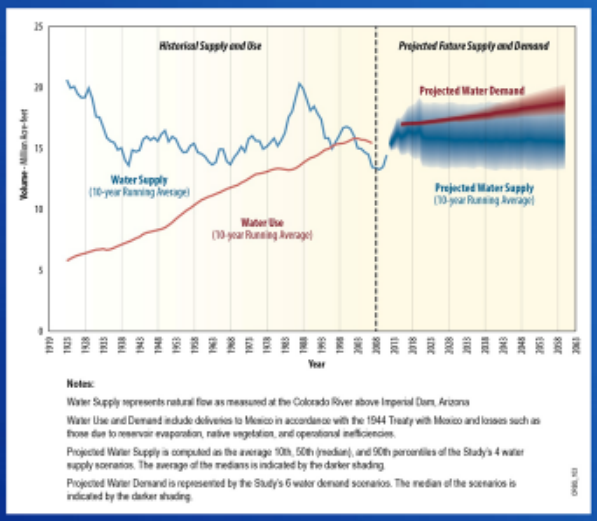
Incentivize Intentionally Created Surplus

Expand on Minute 319:

- Deferred delivery
- Sharing shortage
- ICMA – ICS exchange
- Conservation projects in Mexico
- Water Smart

Projected Future Colorado River Basin Water Supply and Demand

Average supply-demand imbalances by 2060 are approximately 3.2 MAF



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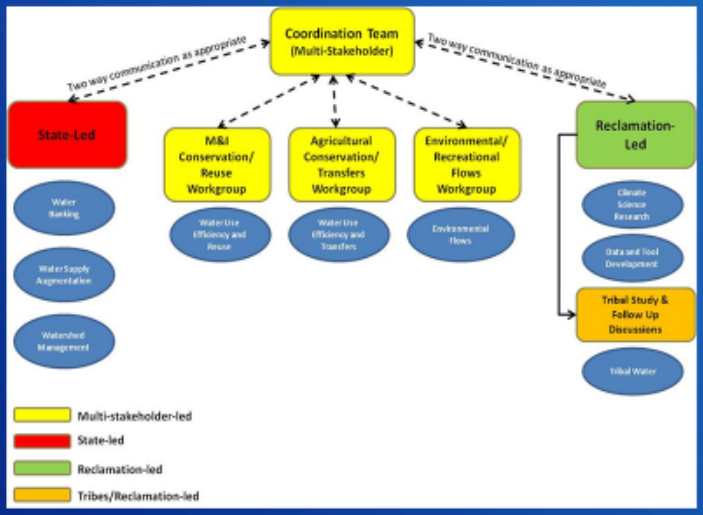
Basin Study
Long Term Planning Teams

- Addressing future imbalances will require diligent planning and collaboration at all levels
- Phase I underway and anticipated to be completed by Summer 2014



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