

NOTES: Tipton Report 1965

River augmentation projects (imports) not yet identified will be enacted by Congress in the 1960s (CRBPA of 1968).

Supreme Court: Shortages to be shared by the states of the lower basin by determination of the Interior Secretary.

In a shortage, California has priority over the Central Arizona Project.

The hydrologic determination for the Upper Basin is 6.3 maf, of which evaporation would consume .7 maf.

8.25 maf (annual minimum) must flow past Paria River confluence (7.5 maf for LB and .75 maf for Mexico)

Studies indicate shortages of 1 maf near the end of 20th century.

LB total demand is 10.54 maf (LB + MX + evaporation)

Total water supply to LB is 9.345 maf (1.195 maf deficit)

Importing water into the basin and not adjusting the Compact is the preferred solution to this water budget deficit.

Hydropower cannot be protected in an extreme water shortage according to Compact.

Assumes lower basin states would reach maximum consumption by year 2000 with no consumption of surplus by CA.

For full utilization (17 maf @ Lee Ferry) the system would require 72 maf total storage (current storage is 62 maf);  
evaporation loss for UB would be 1.4 maf for a total of 6 maf for direct consumptive use.

Mean annual flow at Lee Ferry from 1896 to 1965 is 14.9 maf.

Total available for UB, including evaporation, is 6.3 maf;

5.6 maf available for actual consumption (2006 consumption avg. was 4.123 maf including evaporation).

**Lower River Requirements:**

1. Beneficial consumptive use by Arizona, California and Nevada	7.500 maf	
2. Mexican Treaty Deliveries	1.500	
3. Reservoir Evaporation	0.730	
4. Losses below Hoover Dam	0.810	
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<b>Total Requirements</b>		10.540 maf

**Water Supply for the Lower River:**

1. Delivery at Lee Ferry	8.250 maf	
2. Net Inflow Lee Ferry to Lake Mead	0.675	
3. Net Inflow from Bill Williams River	0.055	
4. Release from Lake Mead (drawdown to rated power head)	0.365	
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<b>Total Water Supply</b>		9.345
<b>Deficiency</b>		<hr/> 1.195 maf