Arizona Contributions

to Address Lake Mead’s Structural Deficit

AZ WRAN “Talking Water” Series | July 20, 2016

Amy McCoy, Director
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Lower Basin Allocations from Lake Mead

California 4.4 maf
+ Arizona 2.8 maf
+ Mexico 1.4 maf
+ Nevada 0.3 maf

Lower Basin ~9.0 maf

Map Source: www.newyorker.com/magazine/2015/05/25/the-disappearing-river
Lake Mead Structural Deficit

9.0 MAF Annual inflows to Lake Mead from Lake Powell and side channels

0.6 MAF Evaporation

9.6 MAF Annual Lower Basin diversions

Dead Pool

Account Balance

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow</td>
<td>9.0</td>
</tr>
<tr>
<td>Outflow</td>
<td>-(9.6)</td>
</tr>
<tr>
<td>Evaporation</td>
<td>-(0.6)</td>
</tr>
</tbody>
</table>

1.2 MAF “Structural Deficit”
~12 Feet of elevation loss/yr
Response to Structural Deficit

2007
Shortage Sharing Agreement
Priority-based and volunteer curtailments at specified elevations

2012-2013
Broad recognition that 2007 Agreement insufficient to address water risks

2013
System Conservation Actions to reduce water shortage risks

2015-2016
BoR and Lower Basin States lead effort to “slow or arrest” Lake Mead decline

Declining Lake Mead Levels
Proposed Lower Basin Drought Contingency Plan

*Potential Shortage Sharing Among All Users*

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**Figure Source:** CAP Board Meeting, May 8, 2016
Implications for Arizona
Greatest volume of curtailments

Figure Source: CAP Board Meeting, May 8, 2016
2015 CAP Entitlements

- **Tribal Contracts**
  - 555 KAF
- **Non-Tribal M&I Contracts**
  - 621 MAF

**High Priority**: 1,600,000
- 40% of CAP Entitlements
  - 640,000 AF/year

**Low Priority**: 1,400,000
- 44% of CAP Entitlements
  - 616,000 AF/year
- 16% of CAP Entitlements
  - 224,000 AF/year

- **Non-Contracted Water**
  - 165 MAF
- **Additional Contracted Water**
  - 73 MAF

- **2015 CAP Entitlements**
  - 1,415,000 AF/year
2015 CAP Deliveries

1,415,000 AF/year

Other Contracted Project Water (NIA Priority)
73 MAF

Other Un-contracted Project Water (NIA Priority & Apache Settlement Water)
165 MAF

2015 CAP Deliveries
Tribal Priority
318 KAF

M&I Priority
431 KAF

Priority 3 - 68 KAF

1,526,000 AF/year
2007 Agreement +
Drought Contingency Plan

Lake Mead

Shortage Declaration Tier 1

Tier 2

895’ Dead Pool (2.0 maf storage)

CAP Curtailments

2007 Agreement

Drought Plan

Other Excess 132 KAF

Ag Settlement Pool 400 KAF

NIA Priority 177 KAF

Tribal Priority 318 KAF

M&I Priority 431 KAF

Priority 3 - 68 KAF
2007 Agreement +
Drought Contingency Plan

Tier 1 Curtailments

Shortage Declaration
Tier 1

Tier 2

895’ Dead Pool
(2.0 maf storage)

CAP Curtailments

2007 Agreement

Drought Plan

Tier 1
300,000 AF Curtailment

Tier 1
512,000 Curtailment

2007 Agreement +
Drought Contingency Plan

Tier 1 Curtailments

Shortage Declaration
Tier 1

Tier 2

895’ Dead Pool
(2.0 maf storage)

CAP Curtailments

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Drought Plan

Tier 1
300,000 AF Curtailment

Tier 1
512,000 Curtailment

NIA Priority
177 KAF

Tribal Priority
318 KAF

M&I Priority
431 KAF

Priority 3 - 68 KAF
How Can Arizona Absorb the Curtailments Outlined under the Drought Contingency Plan?

“There are opportunities to lessen those effects and, more importantly, to spread the consequences more equitably among agriculture, municipalities and tribes. To that end, I have begun to reach out to water managers in Arizona to explore a collective and voluntary sharing of the impacts and benefits of this potential new agreement.”

Tom Buschatzke
Director of the Arizona Department of Water Resources,
April 22 2016 in the Arizona Republic
“Share the Burden”

2016
Current CO River Deliveries to All CAP Users in Arizona under Conditions of Lake Mead Decline

What can facilitate this shift?
An Integrated Perspective of the System Communications Outreach Policies

2017 and Beyond
Smaller Pool of Deliveries (full volume yet to be determined) Necessary to Stabilize Lake Mead
“Share the Remaining Water”

Increased Flexibility in Local Supplies

Excess "Producers"
- Tribes
- M&I

Excess "Consumers"
- Lake Mead ICS
- Ag Users
- Storage
- Exchanges

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"It's all a question of story. We are in trouble just now because we do not have a good story. We are in between stories. The old story, the account of how the system came to be and how we fit into it, is no longer effective. Yet we have not learned the new story."

~ Thomas Berry ~