GUAC-PCWAA Water Forum
Update on DCP

March 04, 2019

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Arizona Department of Water Resources
ADWR’s Role

- A.R.S 45-105 The Director of the Arizona Department of Water Resources is generally responsible for the management of an for formulating plans and programs for the development, conservation and use of surface and groundwater throughout the state.

- A.R.S 45-107 The Director serves as the State’s representative in matters relating to the State’s interest in Colorado River. Specifically the Director is authorized on behalf of the State of Arizona to consult, advise and cooperate with the Secretary of Interior of the United States.
Colorado River Allocations

1922 Colorado River Compact established Upper and Lower Basin States’ allocations

**UPPER BASIN STATES - 7.5 MAF**
1948 Upper Colorado Basin Compact established the Upper Basin States’ apportionment

**LOWER BASIN STATES - 7.5 MAF**
California – 4.4 MAF
Arizona – 2.8 MAF
Nevada – 0.3 MAF
1928 Boulder Canyon Project Act established the Lower Basin States’ apportionment

**MEXICO - 1.5 MAF**
1944 Treaty with Mexico established Mexico’s treaty deliveries

Map showing the Colorado River Basin with allocations for Wyoming, Utah, Colorado, New Mexico, and Arizona Upper Basin. Lee Ferry and Arizona Upper Basin are labeled with respective allocations.
Arizona Water Use By Source (2017)

- 38% Colorado River
- 18% In-State Rivers
- 41% Groundwater
- 3% Reclaimed Water

Source: ADWR, 2017
Arizona's annual apportionment of 2.8 million acre-feet
• Mainstem Consumptive use – 1.2 MAF
• CAP average annual delivery – 1.6 MAF
Natural Flow
Colorado River at Lees Ferry Gaging Station, AZ
Water Year 1906-2019

Long Term Average = 14.8 maf
1988 – 2018 Average = 13.1 maf
10-Year Moving Average = 12.9 maf

Provisional data, subject to change
Estimated values for 2017-2019
# Probabilities of Shortage on the Colorado River

## January 2019

<table>
<thead>
<tr>
<th>Probability of any level of shortage (Mead ≤ 1,075 ft.)</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st level shortage (Mead ≤ 1,075 and ≥ 1,050 ft.)</td>
<td>0</td>
<td>69</td>
<td>50</td>
<td>33</td>
<td>26</td>
</tr>
<tr>
<td>2nd level shortage (Mead &lt; 1,050 and ≥ 1,025 ft.)</td>
<td>0</td>
<td>0</td>
<td>31</td>
<td>39</td>
<td>31</td>
</tr>
<tr>
<td>3rd level shortage (Mead &lt; 1,025 ft.)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>21</td>
</tr>
</tbody>
</table>

The probability for shortage in 2020 has increased from 57% in the August 2018 model to 69% in the January 2019 model.

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*Based on Bureau of Reclamation CRSS Model Run – January 2019*
The Need:
Risks of Lake Mead falling below 1025’ has doubled between development of 2007 Interim Guidelines and 2013

The Goal:
Reduce the probability of reaching critical elevations that would cause draconian reductions in water deliveries

The Strategy:
• Avoid and protect against the potential for Lake Mead to decline to elevations below 1,020 feet by collectively taking additional actions
• Includes a commitment by the U.S. to work to create or conserve Colorado River system water
• Recovery of additional reduction volumes would be allowed under certain conditions
Lower Basin Drought Contingency Plan

The Need:
Risks of Lake Mead falling below 1025’ doubled between development of 2007 Interim Guidelines and 2013

The Goal:
Reduce the probability of reaching critical elevations that would cause draconian reductions in water deliveries

The Strategy:
• Agreement between Arizona, California, Nevada & Reclamation

• ADWR Director needs Arizona Legislature authority to sign (Pursuant to A.R.S. § 45-106)

• Will seek Congressional authorization of Lower Basin & Upper Basin DCP
<table>
<thead>
<tr>
<th>Lower Basin DCP Water Use Reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lake Mead Elevation</strong></td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>≤1090 &gt;1075</td>
</tr>
<tr>
<td>≤1075&gt;1050</td>
</tr>
<tr>
<td>≤1050&gt;1045</td>
</tr>
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<td>≤1045&gt;1040</td>
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<td>≤1040&gt;1035</td>
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<tr>
<td>≤1035&gt;1030</td>
</tr>
<tr>
<td>≤1030&gt;1025</td>
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<td>≤1025</td>
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</tbody>
</table>
A.R.S. § 45-106 requires a resolution by the Legislature approving any agreement entered into by the Director and the U.S. or another state or government involving a sovereign right or claim of the State of Arizona.
On January 31, 2019 Governor Ducey signed historic legislation ratifying the DCP. These include:

* A joint Resolution (SJR1001) authorizing ADWR Director to sign interstate DCP Agreements on behalf of the State of Arizona.

* Legislation necessary for the Intrastate DCP to be implemented was adopted (SB 1227).

Governor Ducey also issued an Executive order creating the Water Augmentation, Innovation, and Conservation Council.
1. Establishes Arizona System Conservation Fund
   * Appropriates $30 m to the System Conservation Fund from the GF
   * ADWR authority to act as the fiscal agent for NGO contributions for system conservation ($8 million)

2. Authorization for Arizona Water Banking Authority to exchange some of its existing credits between AMAs
3. Temporary Groundwater and Irrigation Efficiency Projects Fund (Fund)

* Appropriates a total of $9 million from the State GF
  * $7 million in new GF appropriation
  * $2 million repurposed from the ADWR appropriation to conserve water in Lake Mead

* Requires monies collected from the groundwater withdrawal fee to be deposited into the Fund (not more than $2.50 per AF in the Pinal AMA)

* Repurposes the $2 million appropriation from ADWR to the GUAC’s Augmentation and Conservation Fund in FY 2020
4. Limited repeal of “WaterBUD” – Allows up to 15,000 AF of water per year that is stored in a GSF in Pinal County to be used to earn LTSCs

5. Increase accrual of LTSCs for managed recharge from 50% to 95%, allowing those credits to be applied to assured water supply determinations, and extending ability to accrue LTSC for effluent beyond 2025

6. Requires the Director of ADWR to make various updates to the Legislature and Governor regarding intrastate DCP Agreements
* The LBDCP will allow the delivery of ICS, or surplus water, during shortages, and may allow the apportionment of more than 4.4 maf to California during shortages, both of which are inconsistent with the Decree in Arizona v. California.

* The UBDCP will allow the Upper Division States to develop a Demand Management Storage Program, which will allow water users in the Upper Basin to conserve water that would otherwise be consumptively used and store it in the Upper Basin reservoirs. Contrary to the 1922 Compact, Section 602(a) of the Basin Project Act, and the 2007 Guidelines, this stored water will not be subject to release to the Lower Basin.
Each of the changes in the previous slide will require federal legislation, which will authorize and direct the Secretary of the Interior to sign and implement the agreements associated with both the LBDCP and the UBDCP.

Federal legislation would require the Secretary of the Interior to implement the terms of the LBDCP and UBDCP.
Questions?

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PROTECTING ARIZONA’S WATER SUPPLIES for CURRENT & FUTURE GENERATIONS