Update on the Drought Contingency Plan
Tucson GUAC

May 14, 2019

Vineetha Kartha
Arizona Department of Water Resources
Lower Basin Drought Contingency Plan

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 DCP Water Use Reductions

<table>
<thead>
<tr>
<th>Lake Mead Elevation</th>
<th>AZ 2007</th>
<th>AZ DCP</th>
<th>AZ TOTAL</th>
<th>NV 2007</th>
<th>NV DCP</th>
<th>NV TOTAL</th>
<th>CA 2007</th>
<th>CA DCP</th>
<th>CA TOTAL</th>
<th>BOR DCP</th>
<th>MX Min 323</th>
<th>MX BWSCP</th>
<th>MX Total</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤1090 &gt;1075</td>
<td>0</td>
<td>192K</td>
<td>192K</td>
<td>0</td>
<td>8K</td>
<td>8K</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100k</td>
<td>0</td>
<td>41k</td>
<td>41k</td>
<td>341k</td>
</tr>
<tr>
<td>≤1075&gt;1050</td>
<td>320K</td>
<td>192K</td>
<td>512K</td>
<td>13K</td>
<td>8K</td>
<td>21K</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100k</td>
<td>50k</td>
<td>30k</td>
<td>80k</td>
<td>713k</td>
</tr>
<tr>
<td>≤1050&gt;1045</td>
<td>400K</td>
<td>192K</td>
<td>592K</td>
<td>17K</td>
<td>8K</td>
<td>25K</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100k</td>
<td>70k</td>
<td>34k</td>
<td>104k</td>
<td>821k</td>
</tr>
<tr>
<td>≤1045&gt;1040</td>
<td>400K</td>
<td>240K</td>
<td>640K</td>
<td>17K</td>
<td>10K</td>
<td>27K</td>
<td>0</td>
<td>200K</td>
<td>200K</td>
<td>100k</td>
<td>70k</td>
<td>76k</td>
<td>146k</td>
<td>1,113k</td>
</tr>
<tr>
<td>≤1040&gt;1035</td>
<td>400K</td>
<td>240K</td>
<td>640K</td>
<td>17K</td>
<td>10K</td>
<td>27K</td>
<td>0</td>
<td>250K</td>
<td>250K</td>
<td>100k</td>
<td>70k</td>
<td>84k</td>
<td>154k</td>
<td>1,171k</td>
</tr>
<tr>
<td>≤1035&gt;1030</td>
<td>400K</td>
<td>240K</td>
<td>640K</td>
<td>17K</td>
<td>10K</td>
<td>27K</td>
<td>0</td>
<td>300K</td>
<td>300K</td>
<td>100k</td>
<td>70k</td>
<td>92k</td>
<td>162k</td>
<td>1,229k</td>
</tr>
<tr>
<td>≤1030&gt;1025</td>
<td>400K</td>
<td>240K</td>
<td>640K</td>
<td>17K</td>
<td>10K</td>
<td>27K</td>
<td>0</td>
<td>350K</td>
<td>350K</td>
<td>100k</td>
<td>70k</td>
<td>101k</td>
<td>171k</td>
<td>1,288k</td>
</tr>
<tr>
<td>≤1025</td>
<td>480K</td>
<td>240K</td>
<td>720K</td>
<td>20K</td>
<td>10K</td>
<td>30K</td>
<td>0</td>
<td>350K</td>
<td>350K</td>
<td>100k</td>
<td>125k</td>
<td>150k</td>
<td>275k</td>
<td>1,475k</td>
</tr>
</tbody>
</table>
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
Approximately 40 members of Arizona water community comprised the Steering Committee as delegates. Each delegate also had an alternate.

ADWR and CAWCD jointly hosted nine Steering Committee meetings between July 26, 2018 to February 19, 2019. The meetings were co-Chaired by the ADWR Director and CAWCD General Manager.

Steering Committee meetings were open to the public. Each meeting concluded with a call for public comment.
LBDCP Implementation Plan – 2 Components

• Mitigation Component
  • Wet water CAP deliveries for mitigation
  • Payment for reductions (compensated mitigation) when wet water mitigation is insufficient
  • Money for new groundwater infrastructure for CAP Ag

• Offset Component
  • System conservation and ICS creation to replace CAP ICS that is used for mitigation
  • Pre-firming concept to address NIA firming obligations from Indian water settlements
Mitigation Component - Key Terms

- 2020 – 2022
  - 100% mitigation for NIA Pool (annual determination of vol.)
  - Fixed volume for CAP AG, dependent on annual tier determination

- 2023 – 2025
  - No CAP Ag Mitigation (except groundwater infrastructure)
  - M&I and Indian priority fully mitigated first
  - NIA volume based on actual orders/operating conditions
  - NIA 75% under T1 and T2a (until no supplies)
  - NIA 50% under T2b (until no supplies)

- 2026
  - Zero mitigation

- No mitigation for any water user in T3 or 2026, whichever occurs first
### AZ LBDCP Mitigation Program Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>Ag Pool</th>
<th>NIA Pool</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>105 KAF Tier 1</td>
<td>100% Tier 1/2a/2b</td>
<td>CAWCD ICS ~400 KAF (includes 50 KAF SRP Exchange)</td>
</tr>
<tr>
<td>2021</td>
<td>105 KAF Tier 1</td>
<td>100% Tier 1/2a/2b</td>
<td>CAWCD Lake Pleasant ~50 KAF</td>
</tr>
<tr>
<td>2022</td>
<td>70 KAF Tier 2a/2b</td>
<td>100% Tier 1/2a/2b</td>
<td>CAWCD Operational Supplies ~30 KAF</td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td>75%* Tier 1/2a</td>
<td>CAWCD $60 Million for Compensated Mitigation or acquisition of additional wet water mitigation supplies</td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td>75%* Tier 1/2a</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td>50%* Tier 2b</td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td></td>
<td>NO Mitigation</td>
<td></td>
</tr>
</tbody>
</table>

** Tier 2a/2b only
* Until no supplies

- CAWCD Operational Supplies ~30 KAF
- CAWCD $60 Million for Compensated Mitigation or acquisition of additional wet water mitigation supplies
- CAWCD ICS ~400 KAF (includes 50 KAF SRP Exchange)
- CAWCD Lake Pleasant ~50 KAF
- Tucson AMA GSF 35 KAF/Yr
- Phoenix AMA USF-GSF ~46.5 KAF/Yr

** Tier 1 or Tier 2a only

- Groundwater Infrastructure Program 70 KAF / Yr

- No CAP Wet Water Mitigation

* Tier 1 or Tier 2a only

* Tier 2a/2b only

* Tier 1/2a/2b only

* Tier 3 or Tier 2b only
• Conserve 400 kaf to offset use of CAP ICS
• Offsets provided through:
  – 100 kaf US-Gila River Indian Community ICS
    ▪ Pre-firming for US Tribal firming obligation
  – 50 kaf AWBA-GRIC ICS
    ▪ Pre-firming for Arizona’s AWBA firming obligation
  – 150 kaf System Conservation
  – 50 kaf Additional Tribal ICS
  – 50 kaf - CAP-SRP Exchange payback
  – May increase Lake Mead elevation
Arizona Came Together and Got It Done
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.
Key Elements of SB 1227

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
# Actions Necessary for AZ to Execute the Lower Basin Drought Contingency Plan Agreements

<table>
<thead>
<tr>
<th>#</th>
<th>Action</th>
<th>Parties</th>
<th>Status</th>
</tr>
</thead>
</table>
| 1 | State legislation authorizing ADWR, on behalf of the State of Arizona, to execute the LBDCP Agreements | Arizona legislature                          | • Passed 1/31/19  
• Signed by Gov. Ducey 1/31/19  
• Immediately effective                                                                 |
| 2 | Agreement Regarding Lower Basin Drought Contingency Plan Obligations    | CAWCD and the United States                  | • Final Agreement  
• Approved by CAWCD Board on 1/31/19  
• To be executed by the U.S. with all DCP Agreements                                 |
| 3 | Arizona ICS Framework Agreement                                        | United States, CAWCD and ADWR                | • Final Agreement  
• Approved by CAWCD Board on 3/7/19  
• Awaiting execution by ADWR and the United States                                    |
| 4 | Exchange of Letters between CAWCD and ADWR                             | CAWCD and ADWR                               | • Completed  
• Letters executed and exchanged on 1/30/19  
• Final Agreement  
• Approved by CAWCD Board (5/2/19) and AWBA (5/10/19)                                 |
| 5 | Overarching Implementation Agreement                                   | CAWCD, ADWR, U.S., GRIC, CRIT, SRP           |                                                                                           |

Means Agreement Complete
<table>
<thead>
<tr>
<th>#</th>
<th>Agreement Name</th>
<th>Parties</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>CAP Ag Mitigation Agreement</td>
<td>CAWCD and CAP Agricultural Districts</td>
<td>• Final Agreement&lt;br&gt;• Approved by CAWCD Board (&lt;span class=&quot;date&quot;&gt;5/2/19&lt;/span&gt;)</td>
</tr>
<tr>
<td>7</td>
<td>CAP NIA Mitigation Agreement</td>
<td>CAWCD and CAP NIA water users</td>
<td>• Final Agreement&lt;br&gt;• Approved by CAWCD Board (&lt;span class=&quot;date&quot;&gt;5/2/19&lt;/span&gt;)</td>
</tr>
<tr>
<td>8</td>
<td>CAWCD – SRP Exchange Agreement</td>
<td>CAWCD and Salt River Project</td>
<td>• Final Agreement&lt;br&gt;• Fully executed by parties</td>
</tr>
<tr>
<td>9</td>
<td>CRIT System Conservation Agreement</td>
<td>ADWR, United States, CRIT and CAWCD</td>
<td>• Agreement in draft form</td>
</tr>
<tr>
<td>10</td>
<td>GRIC Pre-Firming Agreement</td>
<td>AWBA and GRIC</td>
<td>• Final Agreement</td>
</tr>
<tr>
<td>11</td>
<td>GRIC Firming Agreement</td>
<td>United States and GRIC</td>
<td>• Final Agreement</td>
</tr>
<tr>
<td>12</td>
<td>GSF Storage Agreements LTSC Exchange Agreement</td>
<td>1. Pinal CAP AG districts, cities and others&lt;br&gt;2. AWBA and cities</td>
<td>• AWBA approved credit exchange&lt;br&gt;• Agreement in draft form</td>
</tr>
<tr>
<td>13</td>
<td>AWBA Recovery Agreements</td>
<td>AWBA and recovery partners</td>
<td>• Draft Concept</td>
</tr>
<tr>
<td>14</td>
<td>GRIC/CAGRD Water Supply Acquisition Agreements</td>
<td>CAWCD, GRIC and GRWS (Gila River Water Storage LLC)</td>
<td>• Final Agreement&lt;br&gt;• Fully executed by parties&lt;br&gt;• U.S. approval pending</td>
</tr>
</tbody>
</table>
* 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.
* Commissioner Burman and state governor’s representatives from Arizona, Nevada and Wyoming testified before the Senate Committee on Energy & Natural Resources Subcommittee on Water and Power, chaired by Arizona Senator Martha McSally, March 27.


To direct the Secretary of the Interior to execute and carry out agreements concerning Colorado River Drought Contingency Management and Operations, and for other purposes. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, SECTION 1. SHORT TITLE. This Act may be cited as the “Colorado River Drought Contingency Plan Authorization Act”. SEC. 2. COLORADO RIVER BASIN DROUGHT CONTINGENCY PLANS. (a) IN GENERAL.—Notwithstanding any other provision of law expressly addressing the operation of the applicable Colorado River System reservoirs, immediately upon execution of the March 19, 2019, versions of the Agreement Concerning Colorado River Drought Contingency Management and Operations and the agreements attached thereto as Attachments A1, A2, and B, by all of the non-Federal parties thereto, the Secretary of the Interior shall, without delay, execute such agreements, and is directed and authorized to carry out the provisions of such agreements and operate applicable Colorado River System reservoirs accordingly. (b) EFFECT.—Nothing in this section shall— (1) be construed or interpreted as precedent for the litigation of, or as altering, affecting, or being deemed as a congressional determination regarding, the water rights of the United States, any Indian Tribe, band, or community, any State or political subdivision or district of a State, or any person; or (2) exempt the implementation of such agreements and the operation of applicable Colorado River System reservoirs from any requirements of applicable Federal environmental laws.
Federal Action

* President Donald Trump signed the Colorado River Drought Contingency Plan Authorization Act April 16.
* The federal legislation opens the door for the Secretary of the Interior to sign the vital drought plan along with the governor’s representatives of the Seven Basin States.
* A signing ceremony is expected soon.
The Imperial Irrigation District in California notified the Seven Basin States on April 15 that it is suing the Metropolitan Water District under the California Environmental Quality Act.

As part of its case, IID challenges the approval of the LBDCP by the Board of Directors of Metropolitan Water District.

IID’s suit would direct Metropolitan to desist from implementing the LBDCP.
Questions?

Vineetha Kartha
602.771.8552
vkartha@azwater.gov