Arizona Lower Basin Drought Contingency Plan
Steering Committee Meeting #4
September 13, 2018

Presentation Materials Available at:
ADWR’s website – new.azwater.gov/lbdcp
CAWCD’s website – www.cap-az.com/AZDCP
Arizona LBDPC Steering Committee Meeting #4 Agenda

• Welcome, Introductions, and Recap from Meeting #3
• Status at the Halfway Mark
• Report from the Ag Mitigation Work Group
• Report from the Tribal ICS Work Group
• Delegates’ Comments
• Preparation for Steering Committee Meeting #5 Sept 27th
• Call to the Public
Recap from Meeting #3

• The delegates received presentations on:
  – BOR’s August 24 Month Study and near-term risks in the Colorado River system
  – Updates on Ag Mitigation Work Group efforts including mitigation concepts
  – Outline of Arizona ICS Framework concept to accommodate Tribal and Non-Tribal ICS

• The delegates asked the Ag Mitigation Work Group to continue its work, and

• The delegates supported the creation of a Tribal ICS Work Group, and delegates volunteered to participate in the 2 meetings scheduled for the Work Group
Steering Committee Schedule

• Five remaining Steering Committee Meetings:
  – September 27th CAP,¹ 1:00 to 4:00 pm
  – October 10th 1:00 to 4:00 pm
  – October 25th 1:00 to 4:00 pm
  – November 8th 1:00 to 4:00 pm
  – November 29th 1:00 to 4:00 pm

¹ Remaining meetings will be at CAP HQ, 23636 N. 7th Street
Status at the Halfway Mark

Steering Committee has remained focused on its Mission and Objectives, and is adhering to the Sideboards

Mission - *Discuss and recommend how to adopt and implement the LBDCP in a way that is acceptable to Arizona water users*

Objectives:

- Seek broad commitment and support for the implementation of LBDCP in Arizona
- Recommend appropriate and sustainable processes and tools to implement LBDCP in AZ
- **Obtain approval by the Arizona Legislature of a joint resolution authorizing the Director of ADWR to agree to the LBDCP**
Status at the Halfway Mark

• Steering Committee has established 2 Work Groups to address 2 out 4 Essential Elements for LBDCP
  – Ag Mitigation
  – Tribal ICS (now Arizona ICS Framework)

• The Work Groups are targeting providing recommendations to the Steering Committee at the next 2 Steering Committee Meetings:
  – Mitigation Plan/Package by Sept. 27th
  – Arizona ICS Framework (Tribal ICS) by Oct. 10th
Remaining Essential Elements

• CAP Excess Water
  – Some issues related to CAP Excess Water are being discussed in the CAP Ag Mitigation Work Group and Tribal ICS (Arizona ICS Framework) Work Group
    • Lake Pleasant Water
    • Annual coordination of ICS release/delivery
  – Some issues may be further refined in those settings
    • Approach to CAP “turnback” water

• Arizona Compensated System Conservation Plan
  – Some issues related to Compensated System Conservation are being discussed in the Ag Mitigation Work Group and Tribal ICS (Arizona ICS Framework) Work Group
    • Estimated volume for mitigation and trade-offs
    • Approach for additional contributions from system conservation
  – Additional issues may be refined in those settings
    • Water and funding commitments and process

• At present, these issues are being addressed in the existing Work Group processes
• The Work Group met on September 5th. The group identified “firm” and “potential” mitigation tools

• The Work Group reviewed approaches to preparing a mitigation package based on existing CAP supply and demand assumptions

• The Work Group examined full mitigation volumes for all CAP Ag Districts and for Pinal CAP Ag Districts

• The Work Group outlined remaining decisions for an Ag Mitigation framework

• The Work Group expressed support to explore broader mitigation for impacts to the NIA priorities and to CAGRD/Developers

• The Work Group set a goal of bringing its findings forward to the Steering Committee at the Sept 27th Meeting

• **Next Ag Mitigation Work Group Meeting September 19th at ADWR RM 3175 at 1:00pm**
Fixed & Annual Full Mitigation Schedules

- Fixed Schedule for Ag Mitigation provided during T 1& 2 shortages
- Annual Schedule for Ag Mitigation based on T1 or T2 condition

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<td>3 AMA wt. Vol.</td>
<td>150</td>
<td>110.53</td>
<td>99.47</td>
<td>110.53</td>
<td>102.4</td>
<td>100.2</td>
<td>105</td>
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<td>Pinal wt. Vol.</td>
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<td>79.25</td>
<td>71.75</td>
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<td>73.71</td>
<td>72.22</td>
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<td>150</td>
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<td>150</td>
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<td>T2 Shortage</td>
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<td>106</td>
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<tr>
<td>T2 Shortage</td>
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Refined Estimate of Mitigation Tools

- Estimated Firm Tools ~ 820 kaf, or 117 kaf/yr, available during T1/T2
- Potential resources TBD

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<thead>
<tr>
<th>Tools</th>
<th>Annual Vol. (KAF/yr)</th>
<th>Total Vol (KAF)</th>
<th>Creation Cost ($M/yr)</th>
<th>Creation Cost ($M)</th>
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<tbody>
<tr>
<td>Lake Pleasant</td>
<td>7.14</td>
<td>50</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>CAP ICS*</td>
<td>60</td>
<td>420</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Comp. Sys. Con (Mitigation)**</td>
<td>50</td>
<td>350</td>
<td>$ 8.25 - $10</td>
<td>$ 57.75-$70</td>
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<td><strong>Total Firm Supplies</strong></td>
<td><strong>117.14</strong></td>
<td><strong>820</strong></td>
<td><strong>Up to $10M/yr</strong></td>
<td><strong>Up to ~$70M</strong></td>
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<tr>
<td>New ICS***</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td>USF to GSF</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
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<td>GW Dev./Infrastructure</td>
<td>TBD</td>
<td>TBD</td>
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<td><strong>Total Potential Supplies</strong></td>
<td><strong>TBD</strong></td>
<td><strong>TBD</strong></td>
<td><strong>TBD</strong></td>
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* CAP ICS includes current, pending and anticipated through 2019
** Cost range reflects historic average and the anticipated higher future costs
*** Tribal and Non-tribal efforts
Fixed Mitigation Schedule Based on Aug '18 Probabilities

Potential for Non-Ag Mitigation

Year

Mitigation Vol. KAF

Firm Supplies  Potential Supplies  Full 3 AMA Ag Mitigation  Full Pinal Ag Mitigation
Annual Mitigation Schedule Ex.2 (T1,T2 for Period)

Potential for Non-Ag Mitigation

Mitigation Vol. KAF

Firm Supplies
Potential Supplies
Full 3 AMA Ag Mitigation
Full Pinal Ag Mitigation
Ag Mitigation Package - Decision Tree

Mitigation Approaches

Annual Schedule – Tier Based
- 3 AMA
  - Full
  - Partial
- Pinal
  - Full
  - Partial

Fixed Schedule – Probability Based
- 3 AMA
  - Full
  - Partial
- Pinal
  - Partial
  - Full
Mitigation Issues Remaining

1. Annual vs. Fixed?
2. 3 AMA vs Pinal Mitigation?
3. Full Mitigation vs Partial?
   - Alternatives to full mitigation volumes?
4. Explore potential for Broader Mitigation to NIA and CAGRD/Developer impacts
5. Water and funding commitments
   - Certainty and enforceability

- The Work Group will provide a recommendation to the Steering Committee by Sept. 27th
Report from Tribal ICS Work Group Meetings #1&2

• The Work Group met on August 31\textsuperscript{st} and September 10\textsuperscript{th}.
• The Work Group reviewed an outline of an Arizona ICS Framework (ADWR, BOR, CAWCD) Agreement which includes paths for Tribal and Non-Tribal ICS
• The Work Group reviewed ICS as described in the ‘07 Guidelines and the LBDCP
• The Work Group examined the potential uses and trade-offs for ICS within the Arizona implementation framework
• The \textbf{Work Group reached consensus on moving forward with drafting an Arizona ICS Framework Agreement} and set a goal of bringing its recommendations forward to the Steering Committee for the October 10\textsuperscript{th} Meeting
Arizona ICS Framework

- Two agreements are needed:
  - Framework Agreement for Arizona ICS Program
    - Secretary of the Interior
    - ADWR
    - CAWCD
  - Tribal ICS Delivery/Implementation Agreements
    - Secretary of the Interior
    - Each individual Tribal Contractor
Arizona ICS Framework: Guiding Principles

- ICS is a meaningful water management tool for Arizona water users
- Arizona Tribes have expressed interest in participating in ICS programs
- ICS capacity has been utilized to date based on “first come, first served” approach
  - CAP has developed and is continuing ICS programs
- ICS capacity (annual creation, annual delivery, and total accumulation) should be a shared opportunity between Tribal* and Non-Tribal (On-River water users and CAP)
- The available ICS capacity (annual creation, annual delivery, total accumulation) should be fully utilized to the extent practicable

*Tribal users include CAP Settlement Tribes and On-River Tribes
Annual Creation Capacity

Creation Capacity
100 kaf/yr

Tribal
50 kaf/yr

Non-Tribal
50 kaf/yr

- Temporary access between Tribal and Non-Tribal capacity is encouraged so that the capacity is fully used
- Annual coordination among Arizona Tribal participants will be conducted by Reclamation
- Annual coordination among ADWR, BOR, CAWCD to facilitate Arizona ICS Program.
- Limits on ICS creation below Mead elevation 1025’ needs further discussion
Annual Delivery Capacity

**Delivery Capacity**
- 300 kaf/yr

**Tribal**
- 150 kaf/yr

**Non-Tribal**
- 150 kaf/yr

- Temporary access between Tribal and Non-Tribal capacity is available
- Subject to Annual Coordination among Arizona ICS participants, ADWR and CAWCD to assess impacts of delivery on Lake Mead elevation
- Annual coordination among Arizona Tribal participants will be conducted by Reclamation
- Conversion to DCP ICS counts against delivery capacity if Mead < 1045’, and no delivery if Mead < 1025’
Total Accumulation Capacity

Accumulation Capacity

500 kaf/yr

Guiding Principle

Tribal

250 kaf/yr

Non-Tribal

250 kaf/yr

- Temporary access between Tribal and Non-Tribal capacity – not permanent
- Goal to fill up as much capacity as possible prior to first shortage (2020?)
- CAP is prepared to reduce its ICS creation volume in 2019, in an amount equal to the volume of ICS created by an Arizona tribe in 2019
- CAP is prepared to evacuate capacity to make up to 250 kaf available, in a year when Tribal ICS projects are implemented, and additional capacity is needed for accrual of ICS
- CAP’s method of evacuating capacity will consider mitigation actions and needs
Comparison of CAP ICS to ‘07 Guidelines and LBDCP Total Accumulation

System Efficiency 103

- 24 Existing BICS
- 175 Pending EC-ICS
- 120 Anticipated ICS
- 181 Unused LBDCP Capacity (EOY 2019)

‘07 Guidelines Limit ~ 70 kaf

- Existing BICS
- Pending EC-ICS
- Anticipated ICS
- Unused LBDCP Capacity (EOY 2019)
ICS Linkage to Mitigation/Comp. Sys. Con.

- Tools can be used either to mitigate impacts of LBDCP reductions or to provide additional contributions to Lake Mead in excess of reduction volumes

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<thead>
<tr>
<th>Tool (examples)</th>
<th>Mitigate Reductions</th>
<th>Additional Contributions</th>
<th>Estimated Volume</th>
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<tbody>
<tr>
<td>Lake Pleasant</td>
<td>Y</td>
<td>NA</td>
<td>50 – 70 kaf</td>
</tr>
<tr>
<td>Existing CAP ICS*</td>
<td>Y</td>
<td>NA</td>
<td>~ 420 kaf</td>
</tr>
<tr>
<td>Comp. System Con. (Mitigation)</td>
<td>Y</td>
<td>NA</td>
<td>350 kaf</td>
</tr>
<tr>
<td>Comp. System Con. (Add. Water)</td>
<td>NA</td>
<td>Y</td>
<td>TBD</td>
</tr>
<tr>
<td>Tribal ICS (EC-ICS) Creation</td>
<td>NA</td>
<td>Y</td>
<td>TBD</td>
</tr>
<tr>
<td>Tribal ICS (EC-ICS) Delivery</td>
<td>Y</td>
<td>NA</td>
<td>TBD</td>
</tr>
<tr>
<td>Tribal ICS (DCP-ICS) Conversion</td>
<td>Y</td>
<td>NA</td>
<td>TBD</td>
</tr>
<tr>
<td>On-River ICS**</td>
<td>**</td>
<td>**</td>
<td>TBD</td>
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<tr>
<td>USF-GSF</td>
<td>Y</td>
<td>NA</td>
<td>TBD</td>
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<tr>
<td>GW Development/Infrastructure</td>
<td>Y</td>
<td>NA</td>
<td>TBD</td>
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</table>

* Existing CAP ICS includes current, pending and anticipated volumes through 2019
** On-River ICS operates similar to the 3 Tribal ICS options
Arizona ICS Issues Remaining

- Draft Arizona ICS Framework Term Sheet to refine the framework and paths for Tribal and Non-Tribal On-River participation
  - ADWR, BOR, CAWCD with input from key parties
  - Develop ICS delivery contract template and identify remaining issues
- Further explore interest in ICS participation by Tribal and Non-Tribal On-River water users
- Develop exhibits that include projects and plans for new ICS for inclusion in LBDCP approval
- The Work Group will provide a recommendation to the Steering Committee by Oct. 10th
Outline of Next Steering Committee Meetings

- September 27 - Review Recommendation from the CAP Ag Settlement Pool Mitigation WG on Mitigation Plan/Package
- October 10th – Review Recommendation from the Tribal ICS WG on an Arizona ICS Framework
- October 25th – Excess Water and Arizona Conservation Plan
- November 9th – Review Arizona LBDCP implementation package and framework
- November 29th – Finalization of Arizona LBDCP implementation package
Arizona LBDCP Implementation Plan

Mitigation Package

AZ ICS Framework

CAP Excess Water

AZ Conservation Plan
DELEGATES’ COMMENTS
Next Steps

• Next Steering Committee Meeting – September 27  CAP 23636 N. 7th Street 1 – 4 pm

• Ag Mitigation Work Group Meeting (Meeting #4 September 19th ADWR at 1:00 pm)

• Tribal ICS (Arizona ICS Framework) Work Group Meeting (Meeting #3 September 24th ADWR at 1:00 pm)

• Update on draft LBDCP documents

• At the next meeting:
  – Review recommendation from Ag Mitigation Work Group
  – Progress report from Tribal ICS Work Group on Arizona ICS Framework
CALL TO THE PUBLIC
With additional questions contact:

ADWR at sslee@azwater.gov
CAWCD at cthompson@cap-az.com

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