Drought Conservation Plan $421 mm Insurance
AZ grew 100% with same water use

ARIZONA’S WATER MANAGEMENT SUCCESS

ARIZONA WATER USE, POPULATION, AND ECONOMIC GROWTH (1957-2016)

CREATION OF ARIZONA DEPARTMENT OF WATER RESOURCES

SOURCE: ADWR, 2017
AZ LBDCP Mitigation Program Summary – Improved Hydrology 2020-2021

- 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
- CAWCD Operational Supplies ~30 KAF

Resources:
- Phoenix AMA USF-GSF ~33 KAF/Yr
  Tier 1 or Tier 2a only
- Tucson AMA GSF 35 KAF/Yr
  ** Tier 2a/2b

NIA Pool:
- 100% Tier 1/2a/2b

Ag Pool:
- 105 KAF Tier 1

2020 2021 2022 2023 2024 2025 2026
- No CAP Wet Water Mitigation
- Groundwater Infrastructure Program 70 KAF / Yr
- NO Mitigation

* Until no supplies

Tier 2b

2026 or Tier 3

** No CAP Wet Water Mitigation

70 KAF Tier 2a/2b

Groundwater Infrastructure Program 70 KAF / Yr
Impact of Shortage on CAP Water Rates

- Volumetric impact that will increase the CAP Fixed OM&R Rate as a result of reduction in delivery supply
  - CAP Energy Rate is assumed to be proportional to deliveries and remain unchanged
  - Impacts shown are without mitigation and prior to application of any shortage stabilization funds

<table>
<thead>
<tr>
<th>Lake Mead Elevation</th>
<th>2019 $/AF</th>
<th>2020 $/AF</th>
<th>2021 $/AF</th>
<th>2022 $/AF</th>
<th>2023 $/AF</th>
<th>2024 $/AF</th>
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</thead>
<tbody>
<tr>
<td>Base Case 1075’ – 1090’</td>
<td>$96</td>
<td>$98</td>
<td>$99</td>
<td>$103</td>
<td>$105</td>
<td>$110</td>
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<tr>
<td>Tier 1 1050’ – 1075’</td>
<td></td>
<td>+ $27</td>
<td>+ $28</td>
<td>+$29</td>
<td>+$30</td>
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<tr>
<td>Tier 2a 1045’ – 1050’</td>
<td>-</td>
<td></td>
<td>+ $37</td>
<td>+ $38</td>
<td>+ $39</td>
<td>+ $41</td>
</tr>
<tr>
<td>Tier 2b 1025’ – 1045’</td>
<td>-</td>
<td>-</td>
<td></td>
<td>+ $45</td>
<td>+ $45</td>
<td>+ $47</td>
</tr>
<tr>
<td>Tier 3 Below 1025’</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+ $58</td>
<td>+ $61</td>
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</tbody>
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27% rate hike

37% rate hike

Excerpt from Nov 15, 2018 Special Board Meeting
### How much did the DCP Insurance cost?

<table>
<thead>
<tr>
<th>Amount</th>
<th>By</th>
<th>Amount</th>
<th>By</th>
<th>Amount</th>
<th>By</th>
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</thead>
<tbody>
<tr>
<td>$ 40,000,000</td>
<td>CAP</td>
<td>$ 24,000,000</td>
<td>AWBA</td>
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<td>Tucson</td>
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<tr>
<td>$ 5,000,000</td>
<td>CAP</td>
<td>$ 10,500,000</td>
<td>AZ DWR</td>
<td>$ 5,000,000</td>
<td>CAIDD</td>
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<tr>
<td>$ 59,904,000</td>
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<td>$ 30,000,000</td>
<td>AZ DWR</td>
<td>$ 10,500,000</td>
<td>GRIC</td>
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<td>$ 1,150,000</td>
<td>CAP</td>
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<td>AZ DWR</td>
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<tr>
<td>$ 261,054,000</td>
<td>CAP</td>
<td>$ 109,200,000</td>
<td>City / CAP contrs</td>
<td>$ 42,000,000</td>
<td>DWR / ID / CAP</td>
</tr>
</tbody>
</table>

**Total**: $ 412,254,000
Projected Growth
Projected Growth

Legend
HU_Change / Area
Low Growth
High Growth
New Water from Desalting


Carlsbad Desal Plant, 50 MGD largest seawater desalination plant in the nation, Kleinfelder.
Partner with AG for conservation & growth
Update your cap ex, auto triggers, cost of service

- $421 spent for soft water landing
- Drought cut back 25% likely in 2022
- Partnerships for future
- Don’t wait do a cost of service study
- Set auto triggers in pricing policy
- Email me for copies of these slides at Mark@WaterResources.org or text me at 480-788-5003
CAP – Largest renewable water resource in AZ
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 USF to GSF and 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
Impacts of Mitigation on CAP Water Rates

- Board approved $60 million is to be absorbed into CAP Fixed OM&R rates
- Deliveries of wet water mitigation will absorb these costs (generate the funding for compensated mitigation) with no additional increases to rates over the period
  - $60 million ÷ 450 KAF (CAP ICS + Lake Pleasant water) = $133/AF
- CAWCD commitment is that Fixed OM&R rates will be no worse with mitigation than without over the period
  - CAWCD can amortize the cost of compensated mitigation over wet water mitigation deliveries to smooth
  - No mitigation costs will be included in rates in years in which there is no mitigation
  - Overall use of dollars must be proportional to use of water resources
  - This will be more challenging to manage in improved hydrology if all resources are not used
Resources

Wet Water:
- 400 kaf CAP ICS
- 50 kaf CAP Lake Pleasant
- 50 kaf CAP-SRP Exchange
- 100 kaf USF-GSF
- Up to 91 kaf GSF (A portion would require WaterBUD partial repeal)
- Up to 30 kaf of CAP operational supplies

Compensated Mitigation
- $60M payments for impacted NIA supplies in lieu of wet water delivery.

Money for GW Infrastructure Development for Pinal Ag

Excerpt from Nov 29, 2018 Steering Committee Meeting
Interim Mitigation Plan - Recommendation

• Authorize utilization of CAP water resources 2020-2022
  – CAP ICS up to ~400 KAF in Lake Mead
  – CAP Project Water in Lake Pleasant up to ~50 KAF
• Authorize compensated conservation program to obtain necessary quantities for mitigation purposes
  – Up to 250 KAF 2020-2022
  – Up to $60 million to be included in CAP Fixed OM&R rates 2020-2022
• Authorize CAWCD support for development of separate programs for groundwater infrastructure and system efficiency for CAP Ag Districts in cooperation with the U.S., Arizona, the Ag districts, tribes and others
  – Funding participation TBD
• Authorize CAWCD Delegates to bring Interim Mitigation Plan Proposal to the AZ LBDCP Steering Committee