Paul R. Orme

GENERAL COUNSEL TO:

CENTRAL ARIZONA I&DD (ELOY)

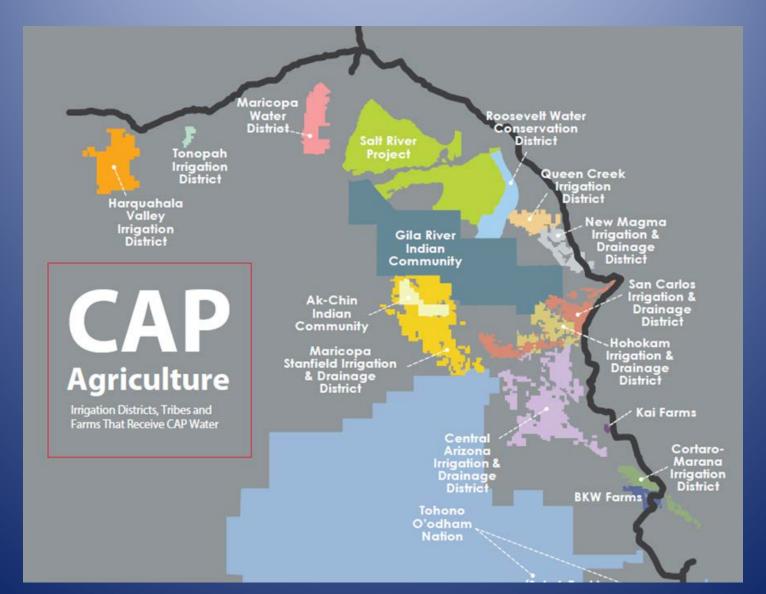
MARICOPA-STANFIELD I&DD (WEST OF CASA GRANDE)

NEW MAGMA I&DD (QUEEN CREEK AREA)

QUEEN CREEK I&DD (QUEEN CREEK AREA)

Over 200,000 Irrigable Acres
Over 200 Mostly Family Owned Farms
Combined Entitlements to Approximately 70% of CAP Agricultural Pool (Ag Pool)

CAP Irrigation Districts



Pinal County Irrigation Districts 2016 Summary

Pinal Districts CAIDD Hohokam	Service Area Acres 89,000 34,000	Farmed			
			MSIDD	87,000	67,000
			New Magma	29,000	26,900
San Carlos IDD	50,000	21,000			
TOTAL:	283,000	197,000			

2004 ARIZONA WATER SETTLEMENTS ACT

The Districts relinquished long term CAP subcontract rights to provide CAP water for Tribes and municipal and industrial providers in return for:

> Federal Distribution System Debt Relief. (approx. 70-80% of cost of construction of CAP water distribution systems)

Relief from the Reclamation Reform Act of 1982 (restricted number of acres which could receive CAP water).

Contractual rights to a shorter term supply of CAP water (through 2030) at a reduced price (energy cost only)

400,000 AF from 2004-2016 300,000 AF from 2017-2023 225,000 AF from 2024-2030

Most districts assumed that their water use mix would slowly transition from 60-70% CAP and 40-30% groundwater to the reverse by 2018, and near 100% groundwater after 2030. The two largest Ag Pool users (CAIDD and MSIDD) currently use about 50% CAP and 50% groundwater.

CAP Agriculture

- As of 2013, investments totaling more than \$750m yielded onfarm efficiencies around 85% and reduced delivery losses to 3%¹
- Includes a diverse mix of crops and supports significant beef and dairy industries
- Maricopa and Pinal Counties ranked in top 1% of all US counties for cattle inventory and milk sales, contribute 27% and 25% of Arizona Ag sales estimated at \$23.3b in 2014²



- 1. Colorado River Basin Stakeholders *Moving Forward*, Phase 1 Report (2015)
- 2. UA Cooperative Extension, Arizona's Agribusiness System: Contributions to the State's Economy (2017)

CAP Agriculture

- Major beef and dairy operations depend on local feed crops
- Crops feed approx.
 220,000 beef cattle in
 Pinal County, providing
 \$348m annual direct sales
 - Pinal Feeding Co.(Maricopa)
 - Red Rock Feeding Co. (Eloy)



CAP Agriculture

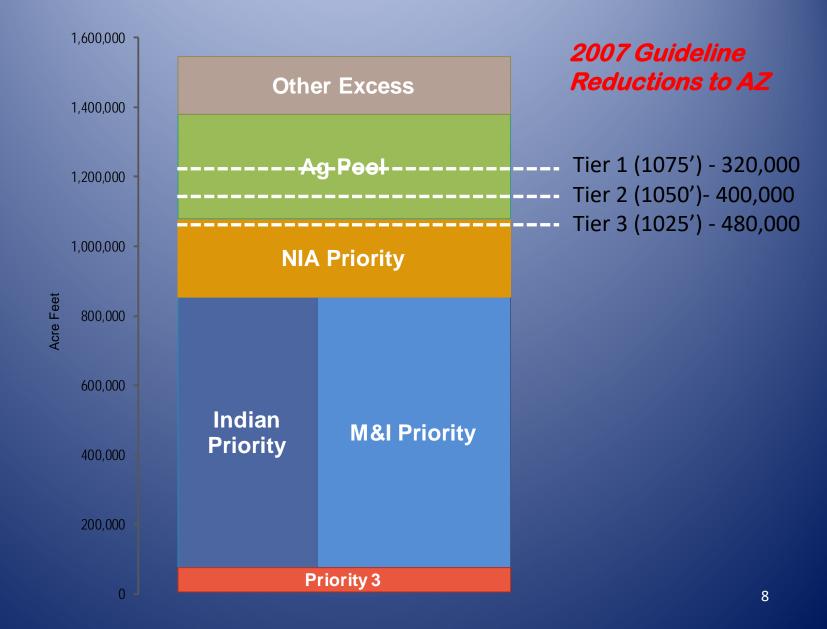
- Farms also feed

 approximately 90,000
 dairy cows on 25 Pinal
 County dairies
- Supply many Arizonans' dairy products

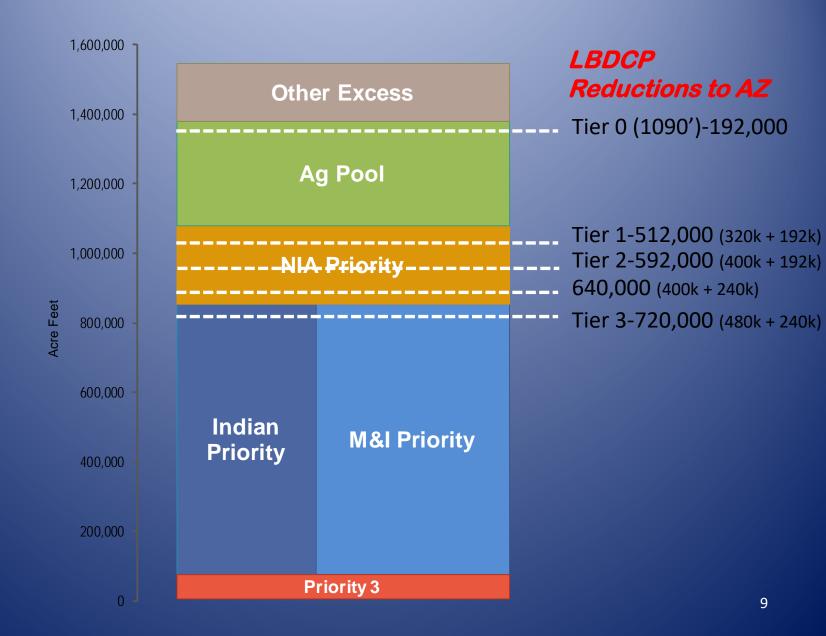


Shamrock Farms, Stanfield

2007 Guidelines



DCP Reductions



Impacts of DCP on CAP Agriculture

- DCP reductions eliminate the entire Ag Pool in a Tier 1 Shortage (1075'), with the goal of avoiding lower elevation shortage triggers
 - 2007 Guidelines would not eliminate the Ag Pool until Tier 3 Shortage (1025')
- With no other supply, most Ag users would rely 100% on groundwater when shortage declared
 - Instead of transitioning to groundwater incrementally through 2030 as planned, districts would need to rapidly maximize groundwater usage, adding stress to groundwater supply with up to 10 extra years of maximum pumping

Impacts of DCP on CAP Agriculture

- Pumping and delivery constraints could take 50% or more of current farmland out of production immediately, even using full groundwater capacity
- Remaining farms would suffer from insufficient water to effectively operate irrigation systems and farming practices
- Zero surface water scenario presents unacceptable risk of devastating economic and groundwater impacts

Mitigating Impacts on CAP Agriculture

- Goal: Identify substitute water supplies for CAP Ag to mitigate comparatively severe impacts of shortage under DCP (0 Ag Pool at Tier 1) vs shortage under 2007 Guidelines (50% Ag Pool at Tier 1)
 - Volume: 120,000-150,000 AF/year total, depending on needs of Phoenix and Tucson AMA users currently receiving water through GSFs
 - Approx. 106,000 AF/year to Pinal AMA districts
- Term: First year of shortage declared under DCP through 2026
 - Consideration of impacts on CAP Agriculture through 2030 in negotiations of new Guidelines

Mitigation Water Volumes

- Mitigation targets track Ag Pool supply available at 2007 Guidelines shortage tiers because DCP cuts are meant to protect lower Mead elevations and higher-priority water
 - Tier 1: 120,000-150,000 AF/year
 - Tier 2: 45,000-60,000 AF/year?
 - Volumes at lower end of range assume storage continues at Phoenix and Tucson AMA GSFs
 - Mitigation target reduced 25% in 2024, when Ag Pool would be reduced to 225,000 AF
 - Tier 1: 90,000 112,500 AF/year
 - Tier 2: 33,750 45,000 AF/year

Potential Mitigation Resources

- I. CAP water in Lake Pleasant
- II. CAP Intentionally Created Surplus
- III. Voluntary conservation of high-priority water with genuine history of use as contribution to shortage reductions
- IV. Redirection of underground storage from USFs to GSFs and increased storage in Pinal GSFs
- V. Imported groundwater
- VI. Short-term leases of high-priority water
- VII. Compensation for fallowed land

Funding?

- Portion of CAWCD tax revenues previously devoted to Ag Pool program
- State Legislature appropriations
- NGO contributions
- Federal
- Other

Agricultural Mitigation Discussions

- Water for Arizona Coalition initiated meetings in spring of 2018 among EDF/Walton Family Foundation, Pinal County irrigation districts, City of Phoenix, and City of Tucson to discuss DCP and CAP Ag Mitigation
- Parties' stated goals:
 - Irrigation districts seek solutions to mitigate impacts of DCP reductions
 - Cities seek reform of AWBA, use of CAP "Other Excess" water, and CAGRD
- The Parties have not reached any consensus on these difficult issues, but all parties agree the time spent to date has been worthwhile in carefully sorting through the possible proposals and the various points of view