



Inter-AMA M&I CAP Firming

Tucson AMA GUAC Presentation

April 21, 2014

Background

- Projected Colorado River shortages could affect Phoenix and Tucson M&I CAP subcontractors in the distant future
- AWBA and CAWCD provide firming services for M&I subcontractors to offset shortages
- AWBA predicts M&I firming goal for Phoenix AMA will be met, but not for Tucson AMA
- Tucson AMA will be short 260,900 AF by 2023
- CAWCD is responsible for M&I firmed water deliveries to M&I CAP subcontractors
- Some M&I subcontractors supplement AWBA firming by storing their unused CAP water for future recovery (“Self-Firming”)

Background – Cont'd

- Tucson AMA subcontractors have developed large-scale projects that allow for both recharge and recovery
- Capacity in the TAMA facilities could be expanded to allow for “Inter-AMA Firming “

Inter-AMA Firming

- Under this concept, Maricopa County interests (AWBA, Cities, etc.) could help fund expansion of TAMA facilities
- Maricopa water would be delivered for storage in the expanded TAMA facilities. The storing entity accrues long-term storage credits
- During a future shortage:
 - the credits are transferred to the participating TAMA M&I subcontractor for recovery, and
 - the TAMA subcontractor leaves a corresponding volume of its CAP water in the canal for delivery in Maricopa County (for AWBA firming or M&I Self-Firming)

Inter-AMA Firming

- Benefits:
 - Expansion of TAMA facilities with funding from outside sources
 - Increased water table elevation in TAMA while Maricopa water is in storage -> reduced pumping costs
 - Cut-to-the aquifer benefits in TAMA
 - Reduced recovery costs for Maricopa County
 - Maricopa County entities receive recovered water at treatment plants

AMWUA/SAWUA Proposal

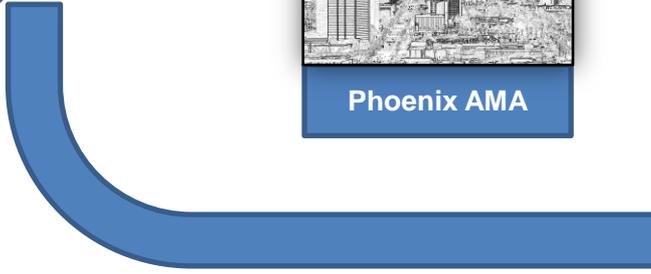
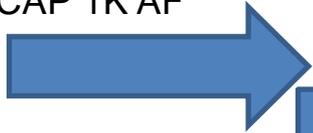
Phase 1 Pilot

- A Pilot project to test the administrative feasibility of the Inter-AMA Firming concept
- Agreement between one or more CAP M&I subcontractors in Maricopa County and with Tucson and Metro Water
- Maricopa M&I subcontractor orders up to 1,000 AF of its CAP water for delivery to TAMA facilities – and accrues credits
- Recovery to occur in the following year:
 - credits are transferred to TAMA M&I subcontractors for recovery
 - TAMA M&I subcontractors order corresponding volume of water for delivery to Maricopa County storer
- If the Pilot is successful, Phase 2 can be implemented

Pilot Phase - Year 1

Phx AMA M&I
Subcontractor Order
Up to 1K AF

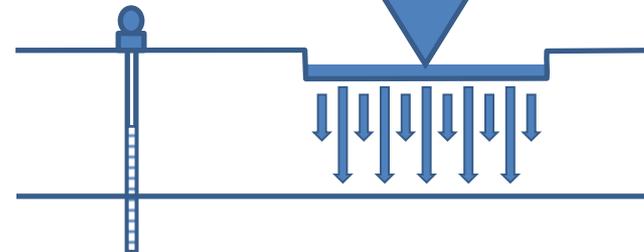
CAP 1K AF



CAP 1K AF

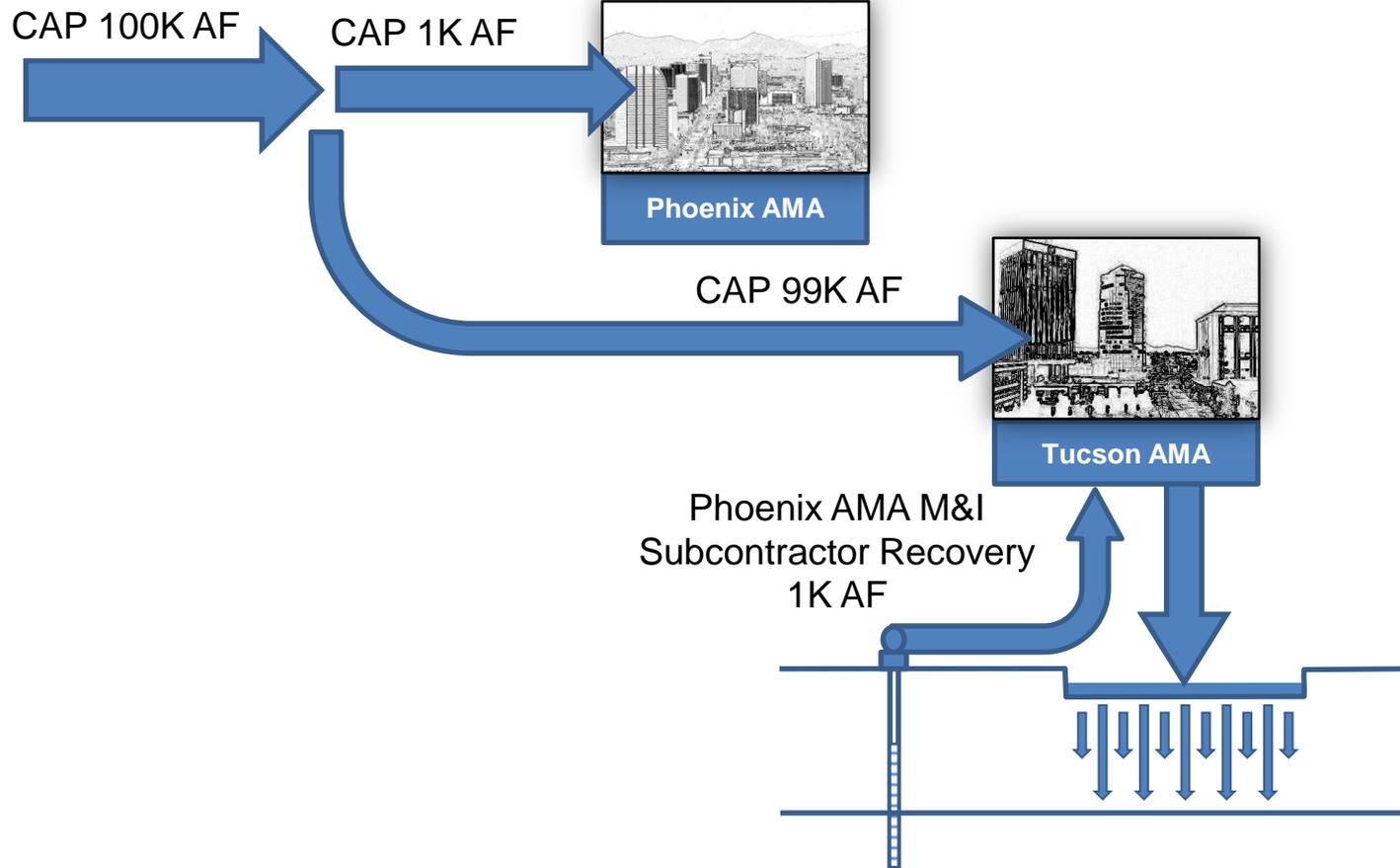


Recharge
1 KAF



Pilot Phase – Year 2

TAMA M&I
Subcontract Order
100K AF

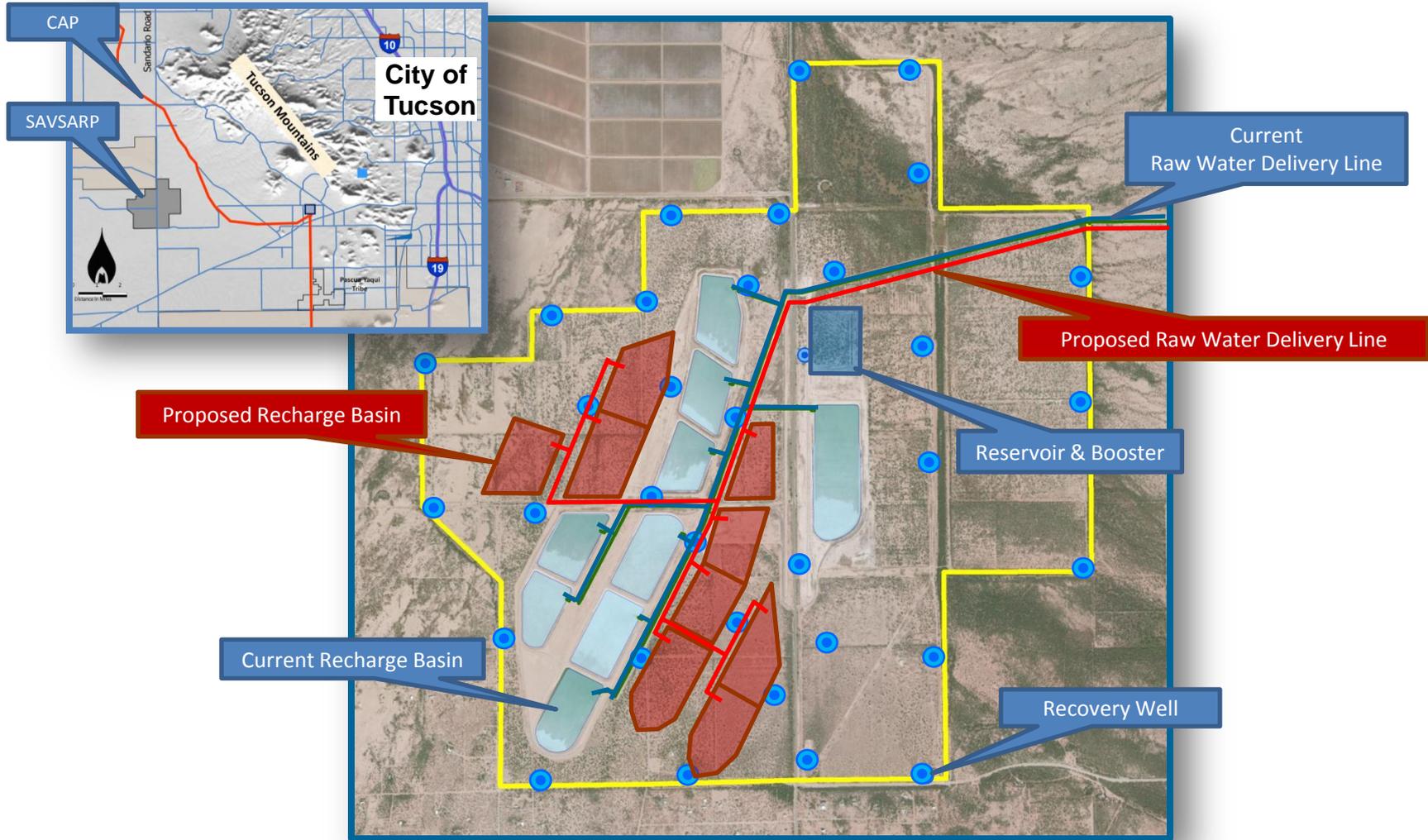


AMWUA/SAWUA Proposal

Phase 2 (AWBA and Self Firming)

- Construct 50,000 AF expansion of annual recharge capacity in Tucson AMA with outside funding
 - AWBA 4 cent *ad valorem* tax collected in Maricopa County
 - Individual entities to support self-firming
- 50,000 AF/yr of CAP water stored for at least 20 years
 - Use Maricopa 4 cent *ad valorem* tax for storage of Excess CAP water
 - Individual Maricopa M&I subcontractors purchase and store their own unused CAP water for self-firming
- During shortages:
 - Credits are transferred to Tucson M&I subcontractors for recovery
 - Tucson subcontractors order a corresponding volume of their CAP water for delivery to Maricopa subcontractors

SAVSARP Raw Water Delivery and Potential Basin Expansion for Inter-AMA Firming



Avra Valley Recharge Project Basin Expansion for Inter-AMA Firming





Questions