



CAGRD
CENTRAL ARIZONA GROUNDWATER
REPLENISHMENT DISTRICT
A Division of Central Arizona Project

Discussion of the Draft CAGRD 2025 Plan of Operation

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August CAGRD and Underground Storage Committee Meeting
August 15, 2024

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Agenda

- 2025 Plan of Operation (2025 Plan) Purpose
- 2025 Plan Development Process
- 2025 Plan Acknowledgements
- 2025 Plan Overview
 - Chapter 1-7 (Highlights)
- Next steps



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2025 Plan Purpose



In accordance with Arizona statute, the CAGRDR 2025 Plan of Operation (2025 Plan) describes the activities that CAGRDR proposes to undertake in the Phoenix, Pinal and Tucson Active Management Areas (AMAs) over the next 100 years based on continued enrollment through 2034.



To provide sufficient information to allow the ADWR Director to determine if the CAGRDR's planned activities over the next 20 years are consistent with the management goals of each AMA within which CAGRDR member lands or member service areas are located



Director's determination is made on an AMA-by-AMA basis

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2025 Plan Development



Presented on the topic at ten Committee meetings since August 2022



Conducted multiple stakeholder Briefings & Roundtables



Conducted multiple focus groups that included: industry and land use experts, Member Land and Member Service area water providers



Engaged with the ITCA Tribal Leader's Water Council



Gave numerous Board reports and received Board approval on foundational elements throughout the process

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2025 Plan Acknowledgements

- CAWCD Board
- CAGRDR & Underground Storage Committee
- CAGRDR and CAWCD staff and consultant
- Stakeholders and Focus Group participants



2025 Plan Overview

Chapter One: Background

- Historical Background and Creation of CAGRDR
- CAGRDR's Water Resource Management Role
- CAGRDR Membership Types
- Chronology of Plans of Operation & Mid-Plan Reviews
- Plan Development and Related Stakeholder Processes



2025 Plan Overview

Chapter Two: Historic Operations

- Purpose is to describe CAGRD’s replenishment obligation and extent to which that obligation has been met over the past ten years (2014-2023)
- Conclusions:
 - CAGRD’s 10-year obligation has totaled 321,614 ac-ft (average 32,161 ac-ft/yr)
 - CAGRD’s 10-year replenishment has totaled 287,721 ac-ft *
 - CAGRD has met, and continues to meet, its replenishment obligation within its 3-year window

* Does not include replenishment expected to occur in 2024 for 2023



2025 Plan Overview

Chapter Three: Obligation and Enrollment

- Purpose is to estimate CAGRD’s projected 20-year and 100-year replenishment obligation for current and new members
- Conclusions:
 - Projected 2044 obligation is 64,100 ac-ft per year
 - Projected 2124 obligation is 77,200 ac-ft per year
 - Assumes 4 large water providers become designated (ADAWS) in Phoenix AMA
 - Does not include ADWR’s recent proposal to add the Pinal AMA in ADAWS Rules nor the proposed Rules related to the issuance of a CAWS served by the commingled system



2025 Plan Overview

Table 3.3
Estimated 100-Year CAGRD Annual Replenishment Obligation (AF)

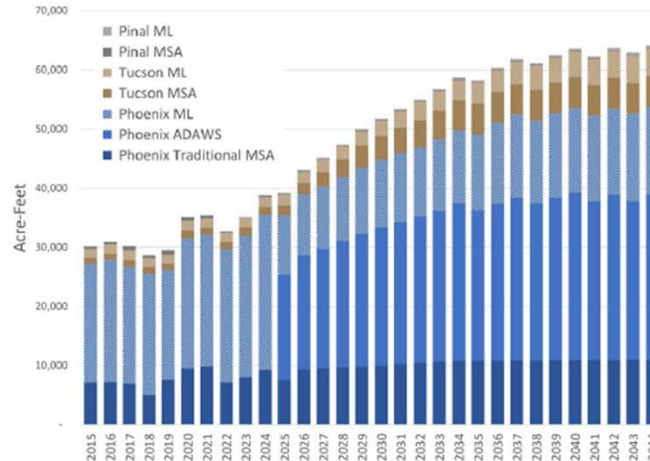
Active Management Area		2025	2030	2035	2040	2044	2124
Current Members	Phoenix AMA	35,400	44,700	49,100	53,600	53,700	64,800
	Pinal AMA	300	400	400	500	500	500
	Tucson AMA	3,500	6,500	8,200	8,700	8,900	10,600
New Members	Tucson AMA	-	200	500	800	1,000	1,400
	Total	39,200	51,800	58,300	63,600	64,100	77,200

Volumes have been rounded to whole numbers for this Plan, resulting in minor discrepancies in some cumulative totals.



2025 Plan Overview

Figure 3.13
Projected 20-Year Annual Replenishment, MSA and ML



2025 Plan Overview

Chapter Four: Water Supplies

- Purpose is to describe water supplies CAGRD “plans to use” over next 20 years and water supplies “potentially available” over subsequent 80 years
- Note:
 - “Plans to use” and “potentially available” are the terms used in ARS 45-576.02.C.2 to establish the classifications of supplies that CAGRD must identify in the Plan



2025 Plan Overview

Chapter Four: Water Supplies (continued)

- Conclusions:
 - CAGRD has secured annual rights to 77,141 acre-feet of water supplies, no longer reliant on CAP Excess water
 - Acknowledges uncertainty regarding future CAP availability, especially CAP NIA
 - CAGRD has sufficient supplies to meet its projected 20-year obligation for current and new members even under sustained shortage conditions
 - Will continue to acquire supplies to mitigate future shortage impacts to its lower priority CAP supplies while using its LTSC credits to offset any difference



2025 Plan Overview

Table 4.1
Current CAGR D Annual Water Supply Portfolio

Water Supply	Annual Volume (AF/YR)	First Year Available	Term of Acquisition	Notes
CAP NIA (White Mtn. Apache)	2,500	2028	Annual Lease Volume	Lease awaiting final authorization; estimated availability; subject to reduction under any shortage condition
CAP NIA (Reallocation)	18,185	2022	Permanent contract	Subject to reduction under any shortage condition
CAP NIA (GRIC Lease)	18,185	2020	Leased through 2044	Subject to reduction under any shortage condition
Long-Term Storage Credits	14,445	2022	100-year	Total volume annualized over 100 years
Effluent	2,400	2017	100-year lease	
CAP Tribal (GRIC Exchange)	15,000	2020	Leased through 2044	Subject to reduction under deep shortage
CAP M&I	6,426	2006	Permanent contract	Subject to reduction under deep shortage
TOTAL	77,141			

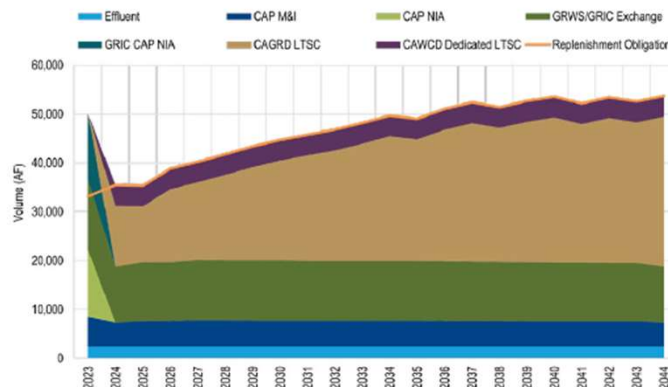
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Figure 4.2
CAGR D Water Supply Utilization (Phoenix AMA) to Meet Replenishment Obligation Under Sustained Shortage Equivalent to Tier 3



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TABLE 4.3
Potentially Available Water Supplies (2025-2124)

Supply Category	Supply Location	Total Current Volume (AF)	20 Years		80 Years	
			Potentially Available High (AF/yr)	Potentially Available Low (AF/yr)	Potentially Available High (AF/yr)	Potentially Available Low (AF/yr)
Long-Term Storage Credits	Phoenix AMA, Pinal AMA, Tucson AMA	140,000	49,700	14,200	49,700	14,200
Effluent	Phoenix AMA, Pinal AMA, Tucson AMA	407,700	116,400	38,800	116,400	38,800
Central Arizona Project	Phoenix AMA, Pinal AMA, Tucson AMA	1,275,000	410,900	205,400	289,500	144,700
Colorado River	Arizona Entitlements Excluding CAP Supplies	997,400	199,500	99,700	199,500	99,700
Imported Groundwater	Harquahala, Butler, McMullen Valleys	168,000	157,100	78,500	157,100	78,500
Desalinated Water	In-State, Binational Study	100,000	100,000	30,000	100,000	30,000
New Verde River Supply	Phoenix AMA	94,000	12,850	0	12,850	0
Total	All	3,182,100	1,046,450	466,600	925,050	405,900



2025 Plan Overview

Chapter Five: Replenishment Reserve

- Purpose is to describe CAGRD activities over past 10 years toward meeting the Replenishment Reserve Target (RRT) requirements and planned activities over next 10 years, and
- Calculate a new **Replenishment Reserve Target = (Obligations – Supplies) * 20%**
- Conclusions:
 - CAGRD has accrued over 323,000 acre-feet of credits in the RR accounts to date
 - New RRT total is 788,356 acre-feet compared to the current at 764,502 acre-feet
 - CAGRD has a significant volume of CAWCD dedicated credits available to assist in meeting its total RRT across the three AMAs
 - Additional credits will be needed to maintain the RRTs over time



2025 Plan Overview

Table 5.6
AMA Replenishment Reserve
Targets and Available Credits
Summary

AMA	Target (AF)	Available Credits (AF)	Balance (AF)
Phoenix AMA	622,693	463,064	(159,629)
Pinal AMA	10,056	317,459	307,403
Tucson AMA	155,607	43,816	(111,791)
Total	788,356	824,339	35,983

* Available Credits include credits already accrued in the RR accounts and CAWCD dedicated credits. CAWCD dedicated credits must first be purchased by CAGRDR before they can be transferred to the RR account.



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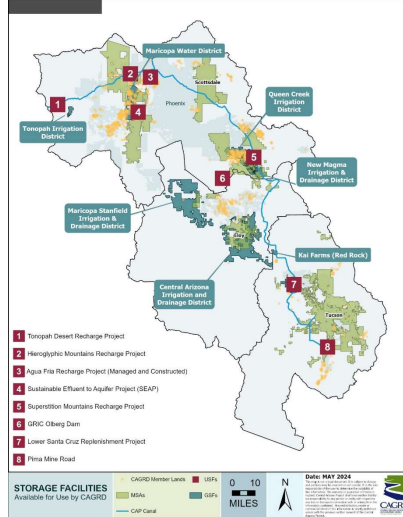
Chapter Six: Storage Facilities Planned for Use

- Purpose is to demonstrate that CAGRDR has available or planned capacity for replenishment purposes over the next 20 years
- Conclusions:
 - CAGRDR currently has more than sufficient replenishment capacity to meet its needs over the next 20 years
 - Two new USFs are available since the 2015 Plan (SEAP and Olberg Dam)



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Figure D-1 Storage Facilities Available for Use by CAGRD



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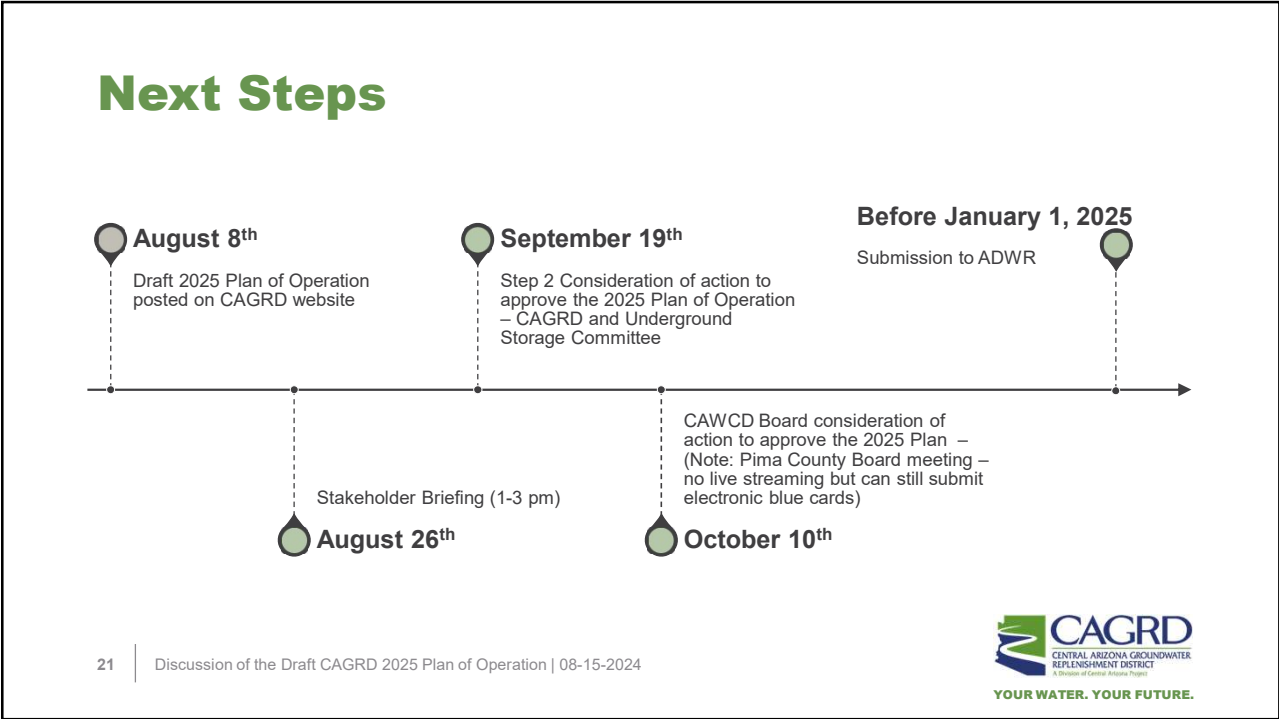
2025 Plan Overview

Chapter Seven: Financial Capability

- Purpose is to demonstrate that CAGRD has the financial capability to meet its replenishment obligations over the next 20 years
- Conclusions:
 - CAGRD has multiple revenue sources available to fulfill its obligations
 - Since the 2015 Plan, CAGRD has exercised its bonding authority (\$20M)
 - The financial mechanisms available to CAGRD have/will ensure its capability to meet its statutory obligations using funds collected exclusively from its members

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