



SUMMARY OF CAGRD HISTORY AND OPERATIONS

This document summarizes the history and mission of CAGRD along with its relationship to the water laws of Arizona. More information is available at www.cagrd.com and details of specific years may be found on our yearly Conservation District Annual Report (CDAR) or its supplementary Annual Operations Report.

Founding and Purpose

In 1993, the Arizona legislature created a groundwater replenishment authority to be operated by the Central Arizona Water Conservation District (CAWCD) throughout its three-county service area. This replenishment authority of CAWCD is commonly referred to as the Central Arizona Groundwater Replenishment District (CAGRD).

The purpose of CAGRD is to provide a mechanism for landowners and water providers to demonstrate specific criteria required under the State's Assured Water Supply Rules (AWS Rules) that became effective in 1995.

Relationship to Assured Water Supply (AWS) Rules

The benefits provided by CAGRD cannot be fully understood without a basic understanding of the AWS Rules.

The AWS Rules are designed to protect groundwater supplies within each Active Management Area (AMA) and to ensure that people purchasing or leasing subdivided land¹ within an AMA have a water supply of adequate quality and quantity. Thus, in each AMA, new subdivisions must demonstrate to the Arizona Department of Water Resources (ADWR) that a 100-year assured water supply is available to serve the subdivision before sales can begin. An AWS can be demonstrated in two ways. First, the owner of the subdivision may obtain a Certificate of Assured Water Supply (CAWS) from ADWR following a rigorous application process describing how it meets the necessary criteria of an AWS. Secondly, the owner of a subdivision can receive service from a city, town or private

¹ The legal definition of subdivision is given in A.R.S. §32-2101.58 and excludes leases of one year or less.



water company, which has obtained a Designation of Assured Water Supply from ADWR.

There are five basic criteria for proving an AWS. An applicant for an AWS must prove:

1. A sufficient quantity of water is continuously, legally and physically available to satisfy the water demands of the development for 100 years;
2. the water source meets water quality standards;
3. the proposed use of water is consistent with ADWR's conservation goals;
4. the proposed use is consistent with water management goals; and
5. the applicant is financially capable of installing the necessary water distribution and treatment facilities.

Under the 1993 CAGRD enabling legislation, membership in CAGRD provides a means by which an AWS applicant can satisfy the requirement of consistency with water management goals (No. 4, above) of the particular AMA.² The consistency with management goals section of the AWS Rules limits the quantity of unreplenished groundwater that an applicant may use to demonstrate an AWS. The effect of this groundwater pumping limitation is to prevent new development from relying solely on mined groundwater to serve its water demands.

Development can still occur for those landowners and water providers who have no direct access to CAP water or other renewable supplies. If a water provider or a landowner has access to groundwater and desires to rely on groundwater to demonstrate a 100-year water supply, it may do so, provided it becomes a member of CAGRD. As a member of CAGRD, the landowner or provider must pay CAGRD to replenish any groundwater pumped by the member which exceeds the pumping limitations imposed by the AWS Rules.

In summary, under the AWS Rules, unreplenished groundwater may not be the basis for any new subdivision development in the Phoenix, Tucson and Pinal AMAs. If a development does not have CAP water or other renewable supplies, usually it must join CAGRD.

² For the Phoenix and Tucson AMAs, the management goal is safe-yield by 2025. The goal for the Pinal AMA is to allow development of non-irrigation uses and to preserve existing agricultural economies in the AMA for as long as feasible, consistent with the necessity to preserve future water supplies for non-irrigation uses.



Replenishment Obligation of CAGRD

CAGRD must replenish (or recharge) in each AMA the amount of groundwater pumped by or delivered to its members which exceeds the pumping limitations imposed by the AWS Rules in each AMA. This category of water is referred to as "excess groundwater." The replenishment may be accomplished through the operation of underground storage facilities (permitted spreading or recharge basins) or groundwater savings facilities (irrigation districts that use renewable supplies in lieu of pumping groundwater). Water used for replenishment may be CAP water or water from any other lawfully available source, except groundwater withdrawn from within an AMA.

The replenishment obligation, or the excess water pumped by or behalf of CAGRD members required to be replenished, was 35,400 acre-feet (AF) in 2021. From 2008 onwards, CAGRD replenishment obligation has been relatively stable and between 30,000 and 40,000 AF.

CAGRD is required to build and maintain a replenishment reserve, a collection of Long-Term Storage Credits to be used in the event of infrastructure or water supply challenges to ensure the stability of rates and the certainty of fulfilling replenishment obligation.

Physical Access to Groundwater

Under the provisions of the 1993 CAGRD enabling legislation, membership in CAGRD does not waive the requirement under the AWS Rules that an applicant must demonstrate the physical and legal availability of groundwater. Providers or subdivisions which rely on CAGRD to meet the AWS requirements must still meet the depth-to-groundwater criteria established in the AWS Rules and have the legal right to withdraw groundwater from the proposed point of withdrawal.

Membership

Membership is voluntary. Any city, town, water company, or subdivision located in Pima, Pinal or Maricopa Counties and in an AMA may join CAGRD. There are two types of members:

- a. Member Service Areas (MSAs): The service area of a city, town or private water company. As of Oct. 19, 2022, there are 23 MSAs – nine in the Phoenix AMA, four in the Pinal AMA and ten in the Tucson AMA.



- b. Member Lands (ML): An individual subdivision with a defined legal description. As of Oct. 19, 2022 there are 1,256 ML subdivisions enrolled in CAGRD (990 in the Phoenix AMA, 138 in the Pinal AMA and 128 in the Tucson AMA) consisting of a total of about 307,000 homes at full build out (219,000 in the Phoenix AMA, 63,000 in the Pinal AMA and 25,000 in the Tucson AMA).

Planning Requirements

CAGRD is required by law to submit a Plan of Operation to the Director of ADWR every ten years. The primary purpose for the Plan is to describe the activities that CAGRD proposes to undertake in each AMA during the 100 calendar years following Plan submission. The plan must include:

1. An estimate of CAGRD's projected groundwater replenishment obligations for one hundred calendar years following the submission of the plan for current members and members that are projected to enroll in the ten years following plan submission.
2. A description of the water resources CAGRD plans to use for replenishment purposes during the twenty calendar years following submission of the plan and water resources potentially available to CAGRD during the subsequent 80 calendar years.
3. A description of any facilities and projects to be used for replenishment and the replenishment capacity available to CAGRD during the 20 calendar years following submission of the plan and an analysis of additional storage facilities that may be used by CAGRD for replenishment purposes.

CAGRD's current Plan of Operation was approved by the Director of ADWR in August 2015 and remains in effect through 2025. Under this plan, CAGRD's annual replenishment obligations are projected to be about 86,900 AF by 2035 (68,600 AF in the Phoenix AMA, 4,900 AF in the Pinal AMA and 12,700 AF in the Tucson AMA). The plan identifies a portfolio of water supplies potentially available to CAGRD that includes CAP municipal and industrial (M&I) subcontract water, leases of CAP Indian priority water, effluent, imported groundwater and water acquired through lease or purchase from right-holders on the Colorado River.

Work on the 2025 Plan of Operation is currently underway, with an anticipated submittal to ADWR in the second half of 2024.



CAGRD Finances

All costs of CAGRD must be paid its members and are covered by a combination of annual replenishment taxes/assessments and up-front fees. Water providers serving Member Service Areas (MSAs) pay a replenishment tax directly to CAGRD according to the number of acre-feet of excess groundwater they deliver within their service areas during a year. For Member Lands (MLs), a replenishment assessment is collected by the county assessor on behalf of each tax parcel according to the number of acre-feet of excess groundwater delivered to that parcel. In accordance with statutes, the CAWCD Board adopts a schedule that defines CAGRD rates for each year. The rates are designed to cover costs associated with CAGRD's replenishment activities, including: the capital costs of constructing recharge facilities, water acquisition and use costs, operation and maintenance costs, replenishment reserve costs and administrative costs. CAGRD replenishment assessment rates must be calculated separately for each AMA.

In addition to the annual replenishment taxes and assessments, CAGRD collects up-front fees from members to help fund the acquisition of water rights, development of infrastructure and establishment of a replenishment reserve of long-term storage credits. These fees are established at the same time the CAWCD Board establishes the replenishment assessment rates.

In 2010, the Arizona State Legislature granted CAWCD with additional authorities to issue revenue bonds to support the acquisition of water supplies and development of infrastructure necessary for CAGRD to provide replenishment services to its members. If the Board chooses to exercise these authorities, all costs of issuing and repaying the bonds must be paid by CAGRD members.