

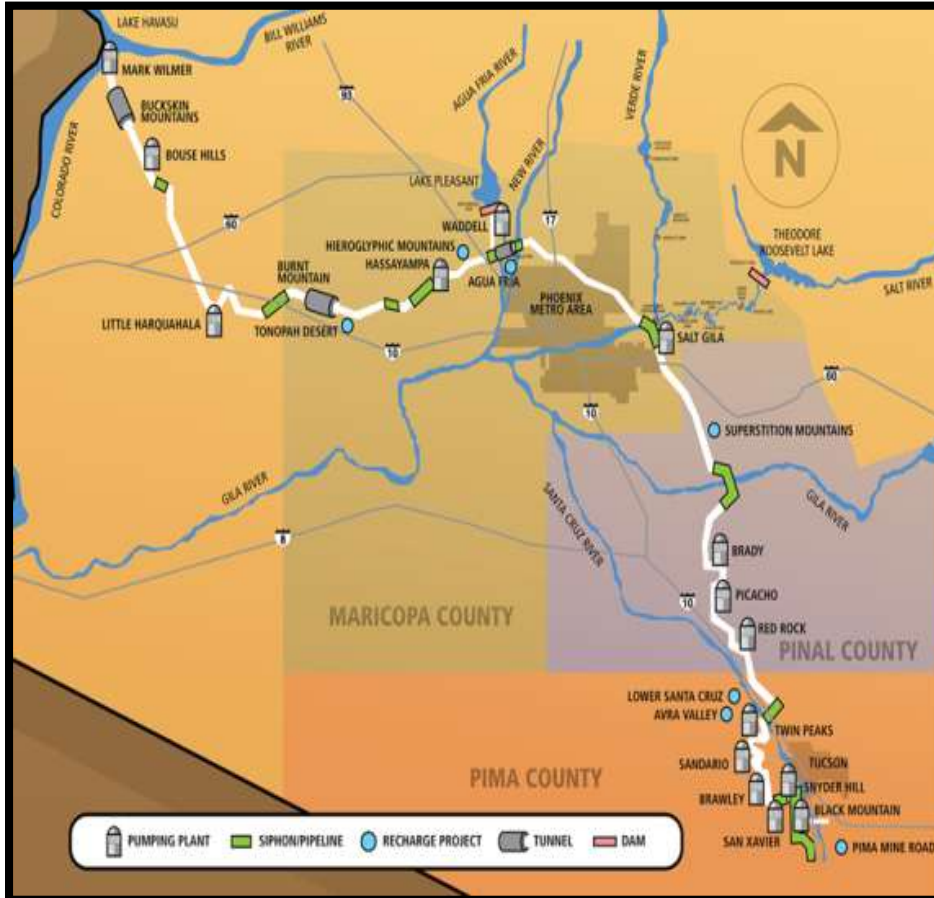
# Central Arizona Groundwater Replenishment District: Water Supply and Infrastructure Financing Needs

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YOUR WATER. YOUR FUTURE.

# Central Arizona Project



Constructed by U.S. Bureau of Reclamation at a cost of \$4+ billion

Owned by U.S. and operated by CAWCD

336-mile aqueduct stretches from Lake Havasu to Tucson

14 pumping plants lift water nearly 3000 feet

Delivers 1.6 million ac-ft/yr of Colorado River water for direct use or for underground storage

80% of Arizona population resides in CAP service area

## **The Central Arizona Water Conservation District was authorized by state legislation in 1971**

- **Operates and maintains CAP system**
- **Repays reimbursable costs to U.S.**
  - **\$1.65 billion**
- **Develops and operates underground storage projects**
- **Operates the Central Arizona Groundwater Replenishment District (CAGRDR)**
- **Governed by a popularly elected 15-member Board of Directors**

# CAGRD

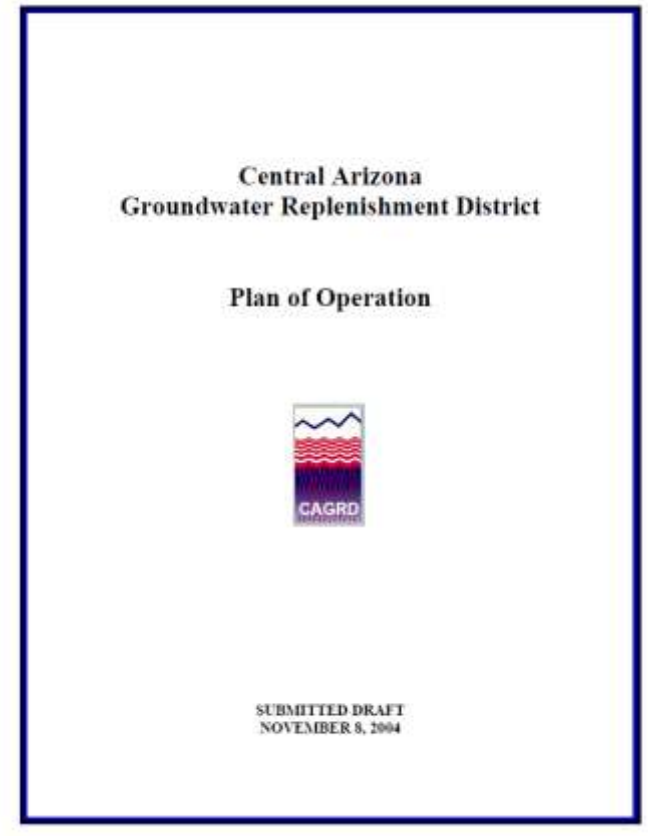


**The Central Arizona Groundwater Replenishment District is a special authority given to CAWCD by state legislation in 1993**

- **Membership in CAGRD allows certain property owners and water providers without access to renewable supplies to meet Arizona’s Assured Water Supply requirements**
- **Members include:**
  - **Member Lands: subdivisions and master-planned developments**
  - **Member Service Areas: municipalities and private water companies**
- **CAGRD replaces (replenishes) “excess” groundwater delivered to its members**
- **CAGRD collects revenues from its members to purchase water and replenish the aquifer**

# Plan of Operation

- **CAGRD operates under a 10-year Plan of Operation that must be approved by the Director of ADWR**
- **Plan must include information on:**
  - Previous 10 years' activities
  - Projected replenishment obligations
  - Available water supplies
  - Replenishment Reserve activity
  - Available recharge facilities
  - Financial capability
- **Current Plan approved in 2005**
- **New Plan due by 2015**



# Replenishment Process

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- **Members self-report excess groundwater usage annually**
- **CAGRDR has three years to replenish**
- **CAGRDR may use the following water supplies for replenishment:**
  - **Excess CAP water**
  - **Other CAP supplies**
  - **Effluent**
  - **Colorado River supplies**
  - **Underground storage credits**
  - **Imported groundwater**
  - **Other supplies??**
- **Due to its replenishment role, CAGRDR does not require 100% reliability for all its supplies**

# Replenishment Obligations

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- **CAGRD's 2011 replenishment obligation was nearly 35,000 ac-ft**
- **Plan approved by ADWR in 2005 projected a 2035 replenishment obligation of nearly 227,000 ac-ft/yr**
- **A 2011 re-evaluation (not submitted to ADWR for approval) estimated the 2035 obligation to be about 136,000 ac-ft/yr**
- **CAGRD also must establish a Replenishment Reserve account of 1.5 million ac-ft of storage credits to meet its obligations in years of supply shortage**
- **2015 Plan will provide new projections of obligations and Replenishment Reserve account**

# Current Water Supplies

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- **CAGRDR has CAP entitlement of 7,796 ac-ft/yr**
- **Excess CAP water (unused by those with long-term entitlements) is the primary supply used to meet CAGRDR's current replenishment obligation**
- **Availability of excess CAP water is rapidly diminishing as use by entitlement-holders grows**
- **As a result, CAGRDR is embarking on a major water acquisition program**

# Water Acquisition Program

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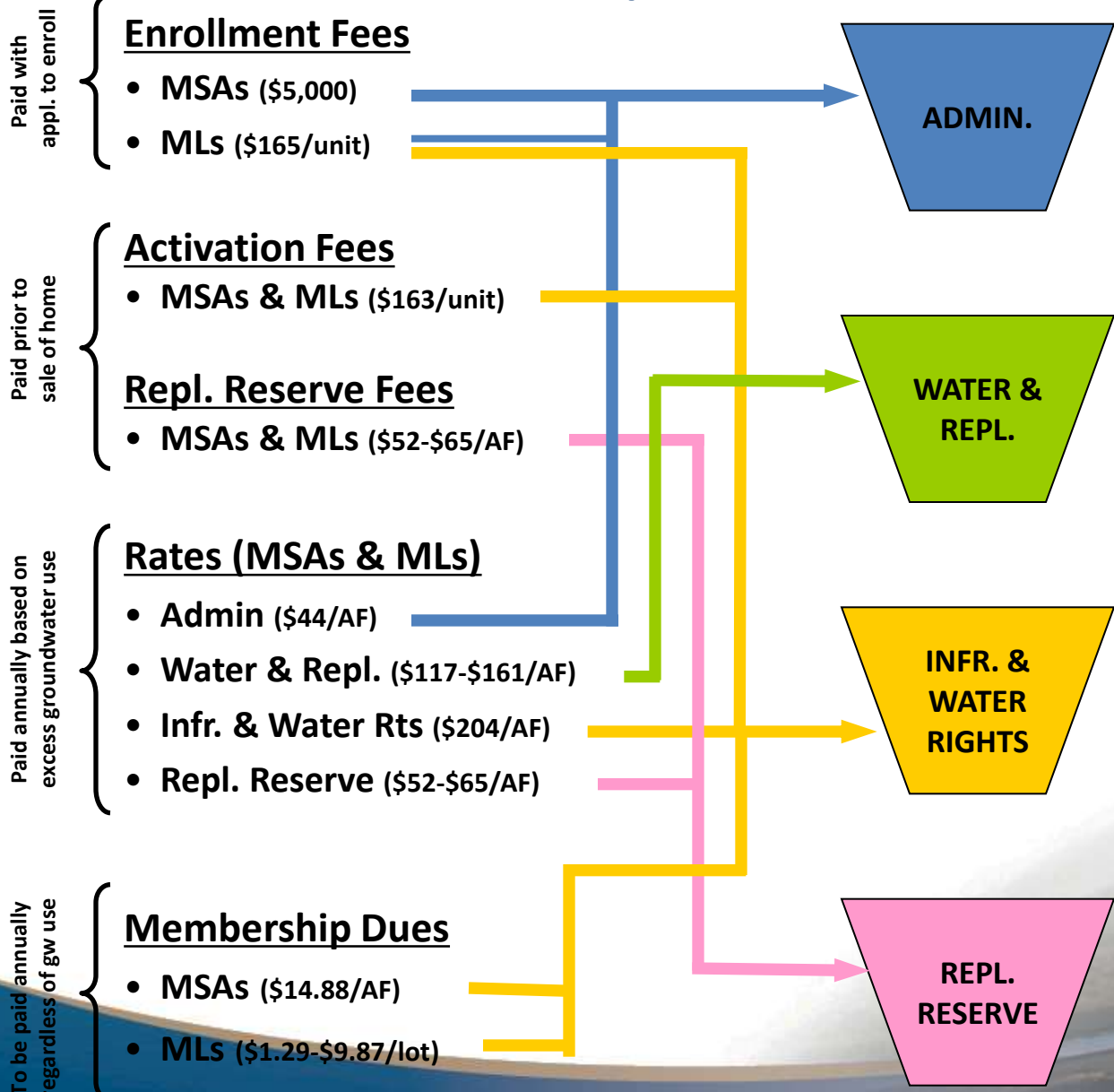
- **CAGR D has established a near-term water acquisition target of 25,000 ac-ft by 2015**
- **An additional 100,000 ac-ft is targeted to be acquired by 2035**
- **CAGR D may purchase underground storage credits in addition to “wet” water supplies**
- **Some water supplies will require infrastructure investments for delivery and/or replenishment**
- **Water acquisition and infrastructure costs are estimated to total many hundreds of millions of dollars**
- **2015 Plan will incorporate the water acquisition program and necessary financing provisions**

# Revenues

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- **CAGRD is authorized to collect the necessary assessments and fees from its members required to fulfill its obligations**
- **CAGRD assessments for each member are based on its “excess” groundwater use**
  - **Member Lands are assessed through the county assessors via property tax bills**
  - **Member Service Areas are billed directly by CAGRD**
- **CAGRD also collects several fees from its members that are not based on water use**
- **CAGRD is authorized to issue revenue bonds for the purpose of financing water acquisition and necessary infrastructure**

# CAGRDR Revenue Streams (2012/13 Rates and Fees)



Used to pay the administrative costs of CAGRDR (including salaries, benefits, overhead, equipment, special services, implementation of CAGRDR conservation program)

Used to pay the annual cost of water and replenishment to meet annual replenishment obligations

Used to pay the cost to acquire rights to water and develop infrastructure necessary for CAGRDR to perform its replenishment obligations

Used to pay the cost of establishing and maintaining a replenishment reserve of long-term storage credits

# Water Acquisition Financing



- **CAGRDR has an accrued balance in its Water Rights & Infrastructure Account**
- **CAGRDR will continue collecting a Water Rights & Infrastructure assessment sufficient to fund water acquisitions**
- **Debt service on revenue bonds would be incorporated into CAGRDR rate components and/or fees**
- **For the 2015 Plan, CAGRDR will be exploring alternative financing mechanisms to fund water acquisition**

# Financing Considerations

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- **CAGR D will seek to match the appropriate financing with the supply**
  - One time purchase (e.g., storage credits)
  - Longer-term supplies (e.g., subcontract or lease of CAP water, effluent, etc.)
  - Seller financed acquisitions
  - Traditional financing
- **Cash, rates or bonds, or a combination, may be used for different supplies**

# **“Equity” Considerations**

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- **CAGR D will seek to be “fair” in who pays and who benefits**
  - **Current users pay current costs**
  - **Current cash balance should benefit current members**
  - **Future members and current members should pay appropriate future costs**
  - **Long-term financing should not be used to resolve the “gap” between current obligation and available supply**

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