

Central Arizona Water Conservation District

District collects and spends revenues in accordance with legal requirements and/or policies, has established various financial reserves, and operates the Central Arizona Groundwater Replenishment District

Special Audit

December 2017

Report 17-112

A Report to the Arizona Legislature

Debra K. Davenport
Auditor General





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December 20, 2017

Members of the Arizona Legislature

The Honorable Doug Ducey, Governor

Mr. Theodore Cooke, General Manager
Central Arizona Water Conservation District

Transmitted herewith is a report of the Auditor General, *A Special Audit of the Central Arizona Water Conservation District*. This report is in response to Laws 2017, Ch. 305, §129, and was conducted under the authority vested in the Auditor General by Arizona Revised Statutes §41-1279.03. I am also transmitting within this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

As outlined in its response, the Central Arizona Water Conservation District agrees with the findings and plans to implement the recommendation.

My staff and I will be pleased to discuss or clarify items in the report.

Sincerely,

Debbie Davenport
Auditor General

cc: Central Arizona Water Conservation District Board of Directors

Attachment



Central Arizona Water Conservation District

CONCLUSION: The Office of the Auditor General has completed a special audit of the Central Arizona Water Conservation District (District) pursuant to Laws 2017, Ch. 305, §129. We found that the District collects and spends revenues in accordance with legal requirements and/or policies the District's Board of Directors (Board) established. The District has also established and maintains various financial reserves to meet contractual obligations and prepare for large or unusual costs that may arise. Further, the District operates the Central Arizona Groundwater Replenishment District (CAGR), which the Legislature established to conserve groundwater supplies and facilitate land development.

District delivers Colorado River water to central and southern Arizona

The District is a multicounty water conservation district formed under state law that delivers Colorado River water to entities in Maricopa, Pima, and Pinal Counties (the District's service area). This water is delivered via a 336-mile aqueduct system called the Central Arizona Project (CAP). The District's formation was authorized in 1971 to contract with the U.S. Secretary of the Interior to repay the federal government for a portion of the CAP construction costs. The District also operates the CAGR, which is responsible for replenishing groundwater pumped by its members.

District collects and spends revenues in accordance with requirements and/or policies

Revenues collected in accordance with legal requirements and/or board policies—The District is authorized to collect revenues from water delivery charges, two property taxes, and surplus energy sales and surcharges and does so in accordance with laws, contracts, regulations, and/or board policies. Specifically, the District charges some or all customers annual water delivery rates in accordance with their contracts, including rates based on its cost to operate, maintain, and replace the CAP (OM&R), the pumping energy costs to deliver water, and a capital charge for the annual repayment of CAP construction costs. In addition, the District is legally authorized to annually levy and collect two property taxes on the assessed valuation of homes within its three-county service area. The two taxes are a general ad valorem tax and a water storage tax. Finally, through contractual agreements, the District receives revenues from (1) the sale of surplus energy produced by the Navajo Generating Station (NGS) that is not needed for the District's water pumping needs, and (2) surcharges collected on energy sold in Arizona from the Hoover Power Plant and the Parker-Davis Project.

Revenues spent in accordance with legal requirements and/or board policies—The District's expenses include its obligation to repay CAP construction costs, general OM&R costs, and energy costs:

- **CAP construction costs**—The District's repayment obligation for CAP construction costs is approximately \$1.6 billion, plus interest. The District is responsible for making annual installment payments to the U.S. Bureau of Reclamation (Reclamation) until 2046. On average, the District's annual repayment obligation is approximately \$55 million per year for 2017 through 2032 but drops to approximately \$45 million annually for 2033 through 2043. The remaining three payments drop to \$10.6 million until paid in 2046.
- **Annual OM&R costs**—The District incurs annual OM&R costs, such as salaries and benefits, maintenance, capital projects, and lobbying. The District offers its employees a generous compensation package, including above-average base pay and a 401(k) plan with partial match. The District is also a member of the Arizona State Retirement System and covers the full pension costs for its employees. From 2014 through 2016, the District spent \$57.2 million to \$60.4 million per year in salary and benefit costs for its employees. During this same period, maintenance costs averaged \$27.6 million annually, and capital expenditures averaged \$36.7 million annually.

- **Pumping power**—In 2014 to 2016, the District spent an average of \$93.3 million per year on power to pump water through the CAP. Most of these costs were for power purchased from the NGS, which supplies the majority of the District's power. However, the NGS is scheduled to close at the end of 2019, and the District reported that it is exploring its future energy options.

District collects various groundwater replenishment revenues to administer the CAGR—As it is legally authorized to do, the District levies and collects one-time enrollment and activation fees, annual membership dues, and annual replenishment tax assessments from CAGR members to finance the CAGR's groundwater replenishment activities.

District has established and maintains various reserves

The District, through its Board, has established and maintains various financial reserves to meet contractual obligations and prepare for large costs that may arise. Statute gives the Board the authority to establish and maintain reserves. Some reserves are required by contracts with Reclamation. For example, the 1988 Master Repayment Agreement with Reclamation requires the District to maintain a \$40 million repayment reserve to help ensure payments are made to Reclamation for the District's share of CAP construction costs. The Board authorized other reserves to accomplish the District's purposes or pursuant to state law. Altogether, the District's reserves totaled nearly \$490.6 million as of December 31, 2016.

The District's reserves have been established to meet operating needs, capital projects, CAGR operations, or other purposes. For example, the District anticipates using reserves to pay its share of the NGS decommissioning costs, which it estimates will be between \$109.3 million and \$161.4 million. According to a contract between the Western Area Power Administration, Reclamation, and the District, the District is entitled to 24.3 percent of the power generated by the NGS but is also responsible for a corresponding portion of the costs to decommission the NGS.

CAGR acquires water supplies to replenish groundwater

CAGR is a district department charged with replenishing groundwater—The Legislature established the CAGR within the District to help ensure land development did not overdraw groundwater supplies. The CAGR provides a mechanism for developers to meet the Arizona Department of Water Resources' (ADWR) Assured Water Supply Rules, which require developers to demonstrate the land they wish to develop has a 100-year water supply. Developers who are unable to meet this requirement would not be approved to develop land unless they join the CAGR. The CAGR must replenish any groundwater its members use beyond a certain limit, and it charges its members fees, dues, and assessments to pay for its groundwater replenishment costs.

ADWR provides some CAGR oversight—The CAGR is statutorily required to provide reports and other information for ADWR review so it can determine if the CAGR is meeting its groundwater replenishment obligations. Specifically, the CAGR must submit a plan of operation every 10 years that describes how it will meet its future groundwater replenishment obligations. The plan identifies potential water sources the CAGR could acquire. The CAGR also submits annual reports to the ADWR that detail the CAGR's replenishment obligations and actual replenishment activities for the previous year.

CAGR has relied on excess CAP water but will need additional water supplies—Historically, there has been enough excess CAP water to meet the demand of any entity wishing to purchase it, including the CAGR to meet its groundwater replenishment obligations. However, entities that are entitled to CAP water began to order more of their entitlement, which has gradually reduced the amount of excess CAP water available to entities such as the CAGR. Therefore, the Board has limited excess CAP water allocations available to nonagricultural users to only the CAGR, the Arizona Water Banking Authority (which stores unused Colorado River water for use in times of shortage), and Reclamation. Even with this measure, the CAGR acknowledged that excess CAP water alone will not be sufficient to meet its future obligations. Thus, the CAGR has acquired, is working to acquire, or is considering acquiring additional water sources, such as leasing water, purchasing long-term storage credits (i.e., the right to use stored water in the future), or obtaining a CAP water allocation. In the future, alternative water sources for the CAGR could be costly and difficult to obtain.



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Scope and objectives

The Office of the Auditor General has conducted a special audit of the Central Arizona Water Conservation District (District) pursuant to Laws 2017, Ch. 305, §129. This audit was conducted under the authority vested in the Auditor General by Arizona Revised Statutes (A.R.S.) §41-1279.03. This audit addresses the District's legal requirements for collecting and spending revenues, establishing and maintaining financial reserves, and its operation of the Central Arizona Groundwater Replenishment District (CAGRDR). The report also includes various questions and answers related to the District.

District overview

The District is a multi-county water conservation district formed under A.R.S. Title 48 that delivers Colorado River water to entities in Maricopa, Pima, and Pinal Counties (the District's service area). This water is delivered via an aqueduct system called the Central Arizona Project (CAP). The Arizona State Legislature authorized the District's formation in 1971 to provide Arizona with the authority to contract with the U.S. Secretary of the Interior to repay the federal government for a portion of the CAP's construction costs. Subsequently, Maricopa, Pima, and Pinal Counties petitioned to form the District, and the petition was heard and granted by the Arizona Water Commission, which has been replaced by the Arizona Department of Water Resources. The District's mission is to be the steward of central Arizona's Colorado River water entitlement and be a collaborative leader in Arizona's water community. Additional information about the CAP, the District's repayment of CAP construction costs, and the entities that receive water through the CAP is provided in the remaining sections of the Introduction.

The District also operates the CAGRDR. The Legislature established the CAGRDR in 1993 to help ensure that groundwater supplies in its service area are not diminished because of development by assisting developers in demonstrating an assured water supply (see Chapter 3, page 25, for additional information).

Central Arizona Project

The CAP is a 336-mile aqueduct system that diverts Colorado River water from Lake Havasu on Arizona's western border to central and southern Arizona (see Figure 1 on page 2). In 1968, the U.S. Congress passed the Colorado River Basin Project Act, which authorized the CAP's construction and funding. The federal government spent approximately \$4.4 billion to complete the CAP. In addition to delivering water to central and southern Arizona, the CAP serves other purposes, such as recreation and flood control. As mentioned previously, the Arizona Legislature authorized the District's formation to contract with the U.S. Secretary of the Interior to repay a portion of the CAP's construction, operation, maintenance, and replacement costs. As discussed in Chapter 1, the District collects various revenues to pay the costs of operating the CAP, including revenues from water delivery charges collected from customers, property taxes, and surplus energy sales and surcharges (see pages 11 through 14). Of the \$4.4 billion, the District is contractually required to repay approximately \$1.6 billion, plus interest, for all nonfederal CAP construction costs. District payments began in 1994 and are scheduled to continue until 2046. As of December 2016, the District still owed \$1.141 billion for the CAP's construction costs (see Chapter 1, page 15, for additional information).

Figure 1
 Water is pumped through the CAP to central Arizona¹
 As of December 2017



¹ Although the CAP travels through La Paz County, La Paz County does not receive water from the CAP.
 Source: Auditor General staff review of district documents.

The U.S. Bureau of Reclamation (Reclamation) began the CAP's construction in 1973. The District began water deliveries as portions of the CAP were completed, with the first deliveries made in 1985. The CAP's construction was deemed substantially complete in 1993 when water could be delivered to Tucson. Although the District has a permanent service right to operate and maintain the CAP, Reclamation maintains ownership of the CAP and has oversight responsibilities, including auditing and reviewing the District's financial statements, developing annual operating plans, and monitoring water supply and flow on the Colorado River.¹ According to reclamation management, Reclamation will continue to oversee the CAP even after the District has met its repayment obligations.

The CAP's design required construction of pumping plants and canals into Arizona's interior. Along the CAP's 336-mile aqueduct, 15 pumping plants move water through the aqueduct and to higher elevations as it travels from Lake Havasu City to south of Tucson (see Photos for an example of a pumping plant). Water that travels as far as Tucson will be lifted about 3,000 feet. Lake Pleasant, formed by the damming of the Agua Fria River, stores CAP water for use during higher demand (see Photos). The CAP is operated from the District's headquarters in North Phoenix, and the CAP control room is staffed 24 hours a day, 365 days each year to monitor and control the CAP's operations.

In addition to constructing the CAP, Reclamation also entered into an agreement with various utilities to construct and operate the Navajo Generating Station (NGS) near Page, AZ, in part to supply power to the pumping facilities (see Photos). The NGS supplies the majority of energy needed for the CAP's operation. However, in early 2017, the NGS owners indicated that it is not economically feasible to continue to operate the coal-fired plant; therefore, the NGS may be shut down at the end of 2019 (see Chapter 1, page 17, for additional information).

Photos

Mark Wilmer Pumping Plant



Lake Pleasant and New Waddell Dam



Navajo Generating Station



Source: Courtesy of the District.

¹ The permanent service right represents the District's right to operate and maintain the CAP system and collect revenues from operations, for which the District has a repayment obligation to the federal government. For more information, see the Budget section on pages 9 through 10 and Chapter 1, pages 11 through 19.

Key terms for this discussion

Acre-foot—Enough water to cover one acre of land to a depth of one foot. This is approximately 326,000 gallons, which would supply about three average homes for 1 year.

CAP water—Colorado River water diverted to and through the CAP.

Allocation—An amount of water Reclamation assigns based on Arizona Department of Water Resources (ADWR) recommendations to potential subcontractors.

Entitlement—An amount of water specified in a contract or subcontract.

On-river entitlement holders—Entities along the Colorado River that receive water directly from it, such as the Colorado River Indian Reservation, Wellton-Mohawk Irrigation and Drainage District, and Lake Havasu City.

Contractor—An entity, such as the Ak-Chin Indian Community, that contracts directly with Reclamation for an amount of CAP water allocated through a water rights settlement or other agreement to be delivered through the CAP.

Subcontractor—An entity, such as the City of Phoenix, that contracts with Reclamation for the amount of CAP water that Reclamation allocated to it and with the District for delivery of that allocation through the CAP.

Source: Auditor General staff review of district and reclamation documents.

Colorado River water allocations and priorities

Colorado River water is apportioned to states by federal law. Specifically, the federal Boulder Canyon Project Act of 1928 apportioned 7.5 million acre-feet of Colorado River water annually to the lower Colorado River basin states—Arizona, California, and Nevada. Arizona is allocated 2.8 million acre-feet, California is allocated 4.4 million acre-feet, and Nevada is allocated 0.3 million acre-feet.² Of the 2.8 million acre-feet allocated to Arizona, the District receives the amount left after Reclamation delivers Colorado River water to on-river entitlement holders. Thus, the amount of water the District receives from Reclamation varies from year to year, but it has been about 1.5 million acre-feet annually. Specifically, the District received approximately 1.49 million acre-feet in 2016, 1.52 million acre-feet in 2015, and 1.63 million acre-feet in 2014.

The District delivers CAP water to specific entities in central and southern Arizona that have allocations as set by Reclamation or through other agreements, settlements, or court decisions. Tribes and Indian communities in central and southern Arizona are designated about half (46 percent) of the CAP's allocation. These allocations are determined through various agreements between tribal authorities and the United States. Pursuant to those settlement agreements, Reclamation contracts with the tribes for the water they are entitled. Some of the largest entitlement holders include the Ak-Chin Indian Community, the Gila River Indian Community, and the Tohono O'odham Nation.

Additionally, more than 50 cities, water utilities, and other entities within the District's service area have three-party subcontracts with Reclamation and the District for water delivery according to allocations made by Reclamation. The District acts as a wholesaler that delivers the entitlements at cost, and the municipality or utility supplements its CAP water with other water supplies (such as from the Salt River or groundwater), treats the water, and delivers it to residents.

The District also delivers CAP water to irrigation districts that supply water to farmers in the District's service area. The irrigation districts do not have entitlements in contracts or subcontracts with Reclamation, but they enter into year-to-year contracts with the District for excess CAP water that is not ordered by entitlement holders. Finally, the District allocates any excess CAP water that is not ordered by entitlement holders or by irrigation districts to various governmental users. In 2017, the District allocated this water to the CAGR, the Arizona Water Banking Authority (AWBA), and Reclamation.³

² Arizona's Colorado River water allocation supplies approximately 40 percent of the State's annual water supply. Another 40 percent comes from groundwater, and 17 percent comes from in-state surface water, such as the Gila, Salt, or Verde Rivers. The remaining 3 percent is from effluent.

³ The AWBA was established in 1996 to ensure Arizona benefitted from its entire allocation of Colorado River water. It stores unused Colorado River water to secure future water supplies for Arizona to be used during shortages.

Within the CAP's Colorado Water allocation, CAP water is divided into five priorities, as shown in Table 1 (see page 6).⁴ The highest CAP water priority is given to tribes and municipalities who are entitled to allocations of Colorado River water that were made prior to the CAP's establishment. The second highest CAP water priority is given to tribes, municipalities, utilities, and state agencies. The next highest CAP water priority is given to non-Indian agriculture water entitlement holders. This water is no longer used for agriculture and has been reallocated to other entities, although it retains the name and priority level Reclamation originally assigned to it. The "agricultural settlement pool" has the second-lowest CAP water priority level. This pool includes the irrigation districts discussed previously who do not have entitlements to Colorado River water but can buy excess CAP water through annual contracts. The lowest CAP water priority is for the "other excess pool," which includes users of any remaining excess CAP water not ordered by entitlement holders or irrigation districts. According to the District, since water delivery began in 1985, there was historically enough water in the other excess pool to sell to any entity that requested it. However, as of 2015, the other excess pool contained only enough water for the CAGR, the AWBA, and Reclamation. See Chapter 3, page 27, for a description of the District's process for allocating other excess water.

Reclamation has also established guidelines that would reduce Colorado River water allocations according to priority level in the event of a projected water shortage at Lake Mead.⁵ These guidelines, referred to as the federal 2007 Interim Guidelines, were approved in the eighth year of a drought that was still ongoing as of November 2017.⁶ See Table 2 (page 7) for a summary of these guidelines. In the event that water in Lake Mead falls below certain levels, Arizona's 2.8 million acre-feet allocation of Colorado River water would be diminished.⁷ The District would not be able to deliver water to lower-priority entities (primarily recipients of excess CAP water), and if shortages persist, deliveries to some municipalities and tribes would be reduced as well. However, the 2007 Interim Guidelines also provide entities, such as the District, with the ability to create an "intentionally created surplus" (ICS) whereby entities who use Colorado River water may find alternate water sources so they may leave an equivalent amount of water in Lake Mead, thus reducing the risk of Reclamation declaring a shortage (see the next section for an example of the District implementing an ICS program related to agricultural forbearance). From October 2016 through September 2017, the water levels at Lake Mead ranged from 1,076 feet to 1,090 feet. Reclamation projects that this level may fall to 1,075 feet in June 2018, which would trigger a Tier 1 shortage.

⁴ Reclamation has assigned priority levels to the various Colorado River water users in the event of a water shortage. CAP water is primarily fourth priority water. Entities that acquired rights to Colorado River water prior to the effective date of the Boulder Canyon Project Act of 1928 have first priority rights. Examples of entities that hold first priority rights include the Colorado River Indian Reservation, the Yuma County Water Users' Association, and the City of Parker. Additionally, second priority rights to Colorado River water are held by entities that acquired these rights prior to September 1968 or were created by the Secretary of the Interior for federal water use. Examples of these entities are the Cibola National Wildlife Refuge and the National Park Service. Finally, Arizona water users that held a contract for Colorado River water with the federal government prior to September 1968 have third priority rights. These entities include the University of Arizona, Gila Monster Farms, and the City of Yuma. A small amount of CAP water has third priority rights.

⁵ Lake Mead is the reservoir formed by the damming of the Colorado River by the Hoover Dam, which Reclamation uses to control the flow of water downstream to the lower basin states.

⁶ The federal 2007 Interim Guidelines are officially known as the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead.

⁷ During a declared shortage on Lake Mead, Nevada would also receive a reduced amount of Colorado River water. However, due to California's higher priority, California would not be affected during a shortage.

Table 1**Priority levels for CAP water deliveries and total entitlement or contracted delivery amounts by priority level**

Highest priority	
Pre-CAP water rights Entitlements totaling 73,703 acre-feet¹ Rights to water obtained prior to the CAP's establishment. The rights belonged to three irrigation districts and a tribe, but the Ak-Chin Indian Community and some municipalities subsequently acquired these rights.	
Second priority	
Indian priority Entitlements totaling 555,806 acre-feet¹ 11 tribes, nations, and Indian communities, including the Ak-Chin and Gila River Indian Communities, have entitlements.	Municipal & Industrial priority Entitlements totaling 620,678 acre-feet¹ 52 municipalities (including Phoenix, Buckeye, and Carefree), utilities, the CAGRDR, and the Arizona Land Department have entitlements.
Third priority	
Non-Indian agriculture priority² Entitlements totaling 271,514 acre-feet¹ Seven cities in Maricopa County and two tribes are entitled to some water from this priority. Reclamation is in the process of allocating about a quarter of the water to entities such as other tribes, the CAGRDR, additional municipalities, and mining companies.	
Fourth priority	
Agricultural settlement pool 258,237 acre-feet scheduled for delivery in 2017³ This pool of excess water was created when irrigation districts relinquished their water rights. Some relinquished water was used to settle tribal claims. The remainder is available through 2030 under year-to-year contracts to the irrigation districts. Seven irrigation districts, including Maricopa-Stanfield Irrigation and Drainage District and the Central Arizona Irrigation and Drainage District, have scheduled deliveries in calendar year 2017.	
Lowest priority	
Other excess pool 43,982 acre-feet scheduled for delivery in 2017³ This pool of excess water is the amount of water the highest, second, and third priority Arizona entitlement holders did not order minus the amount allocated to the fourth priority agricultural settlement pool. As stated previously, the District allocates this excess water to the CAGRDR, the AWBA, and Reclamation.	

¹ This is the total amount of water contractors and subcontractors are entitled to have the District deliver. However, if a contractor or subcontractor does not order its full entitlement for delivery, the excess water will be added to the excess water pools.

² Use of this water is no longer for agriculture, but the name and priority Reclamation assigned has not changed.

³ The amount of excess water varies from year to year because of climate and the amount of water entitlement holders order. Therefore, the amount of excess water available for delivery varies from year to year. See Chapter 3, page 27, for more information.

Source: Auditor General staff review of district and reclamation documents.

Table 2

Reductions to Arizona’s Colorado River water entitlement per the federal 2007 Interim Guidelines

	Lake Mead level	Reduction	Impact
Tier 1 shortage	1,051 to 1,075 feet	320,000 acre-feet	Excess water is no longer available to the CAGR D to help developers meet 100-year assured water supply requirements or to the AWBA to bank water for the future. A large portion of the excess water that fills the agricultural settlement pool would also no longer be available.
Tier 2 shortage	1,026 to 1,050 feet	400,000 acre-feet	No water available at all to the agricultural settlement pool for irrigation districts and a reduction to non-Indian agriculture water entitlement holders, including Maricopa County municipalities and two tribes.
Tier 3 shortage	1,025 feet or below	480,000 acre-feet	Substantial reductions to entitlement holders of non-Indian agriculture priority water.

Source: Auditor General staff review of the federal 2007 Interim Guidelines and district documents.

Other district programs

The District has developed or participates in various programs related to Colorado River water, including water augmentation and conservation efforts. These programs include:

- **Basin States Augmentation Program**—The District supported and completed an augmentation study to increase Colorado River water flows during the 2014-2015 biennial budget period. This led to the formation of the Basin States Augmentation Work Group. One initiative entailed the District providing \$150,000 to pilot snowpack augmentation programs in Colorado, Utah, and Wyoming to increase winter snowpack and resulting flow into the Colorado River.
- **Agricultural forbearance**—To improve water elevations in Lake Mead, the District implemented three agricultural forbearance programs and has planned a fourth. These programs allow agricultural users to reduce their orders of CAP water so the balance may be left in Lake Mead in exchange for an incentive. Specifically:
 - **Forbearance I**—Operated from 2015 to 2016. As an incentive for irrigation districts to reduce their CAP water orders, the District delivered the water they did order at a reduced rate.
 - **Forbearance II**—Operated in 2016. As an incentive to reduce CAP water orders in 2016, the District offered a reduced rate for water delivered in 2017 and 2018.
 - **Forbearance III**—Will operate from 2016 to 2030. As an incentive to reduce CAP water orders, the District is allowing eligible entities to act as a groundwater savings facility. This allows entities providing water to irrigation districts to earn long-term storage credits. See Chapter 3, page 26, for additional information about groundwater savings facilities and long-term storage credits.
 - **Forbearance IV**—Will operate in 2018. As an incentive to reduce CAP water deliveries in 2018, the District is offering a reduced rate for water delivered in 2019.

According to the District, these programs are voluntary and have resulted in over 240,000 acre-feet of water being conserved in Lake Mead, which contributed to approximately 3 feet of elevation on Lake Mead.

- **Multi-Species Conservation Program**—Since 2005, the District has helped fund the Multi-Species Conservation Program (MSCP). The MSCP is a joint effort between the lower basin states to conserve habitats and work toward the recovery of threatened species, in addition to optimizing future water and power development along the lower Colorado River.⁸ The MSCP includes federal, state, and tribal participants from the lower basin states. The District budgeted a total of \$3.4 million for the MSCP for both 2016 and 2017.

Organization and staffing

As required by A.R.S. §48-3708, the District is governed by a 15-member Board of Directors (Board). Ten directors represent Maricopa County, four directors represent Pima County, and one director represents Pinal County. Directors are chosen by majority vote in county elections and serve 6-year terms. There are no other requirements for board membership, and there are no term limits. The Governor makes interim term appointments to the Board if a director resigns without completing his/her term. As of December 2017, there were no board member vacancies. The Board's president or designee has automatic statutory membership on the AWBA.

The Board meets about once each month, primarily at its headquarters in north Phoenix. It also holds meetings in Pima and Pinal Counties once each year. In addition, the Board has active committees and task forces, including the Finance, Audit, & Power Committee to assist the Board in the areas of accounting, reporting, and power matters; the CAGR and Underground Storage Committee to advise the Board on issues and policies related to the District's replenishment responsibilities and underground storage and recovery activities; the Public Policy Committee to provide recommendations to the Board on legislative issues; the Excess Water Task Force to review existing board policies regarding the use of excess CAP water; and the Water Quality Standards Task Force to consider standards for the quality of non-CAP water that is introduced into the CAP canal. Committees also meet about once per month.

As of November 2017, the District had 486.3 filled full-time equivalent (FTE) staff positions and 16 vacant FTE. It employs one general manager who the Board oversees. The general manager oversees the following departments:

- **Legal Services**—Provides legal counsel to district staff and the Board to comply with statutes, regulations, and contracts.
- **Finance & Administration**—Manages the District's financial and administrative activities, including finance and accounting and risk management.
- **Public Affairs**—Conducts public relations, media, business, stakeholder, and employee communications programs to increase awareness of the District, the CAP, and water supply management issues.
- **Water Policy**—Manages the CAGR and develops Colorado River programs.

The general manager also oversees a deputy general manager who oversees the following additional departments:

- **Centralized Maintenance & Reliability**—Responsibilities include maintaining the District's vehicle fleet, heavy equipment, and headquarters.
- **Employee Services**—Consists of human resources, employee training, environmental health and safety programs, and protective services and security.

⁸ The lower basin states are Arizona, California, and Nevada.

- **Field Maintenance**—Includes the CAP canal repair crews and pumping plant staff who maintain the plants and aqueducts. Field maintenance is divided into Maintenance South (from Mesa to Tucson) and Maintenance West (from the Mark Wilmer Pumping Plant at Lake Havasu City to Mesa).
- **Operations & Engineering**—Responsible for operational control of water supply systems and deliveries to customers.
- **Technology**—Responsible for the operation and maintenance of the District's information technology, including applications, networks, servers, and workstations at its headquarters and the structures along the CAP.

The District also has an internal auditor who reports functionally to the Board and administratively to the general manager.

Budget

The District uses various revenues to pay the CAP's operating costs. The District collects revenues from water delivery charges collected from its water delivery customers, property taxes from property owners within its service area, and other revenues. These revenues are used to meet its CAP repayment obligation to the federal government and to pay for the CAP's annual operation, maintenance, and repair and replacement costs. The District also collects fees, dues, and assessments from CAGR members to finance the CAGR's groundwater replenishment obligations. Further, the District reserves revenues pursuant to A.R.S. §48-3713(A)(6) to meet contractual obligations and prepare for large or unusual costs that may arise. See Chapter 1, pages 11 through 19, for additional information about the District's revenues and expenditures, and Chapter 2, pages 21 through 23, for additional information about the District's reserves.

As shown in Table 3 (see page 10), the District's total operating revenues were approximately \$233 million in 2015 and \$230 million in 2016, while its total operating expenses were approximately \$230 million and \$287 million, respectively. In 2016, the District recorded an additional \$49.1 million of other operating expenses for its portion of the estimated NGS decommissioning costs (see Chapter 2, pages 21 through 22, for more information about the NGS decommissioning costs). The District projects that its operating revenues will total approximately \$274 million and its operating expenses will total approximately \$252 million in 2017. Its net position at the end of 2017 is projected to be approximately \$651 million.

Table 3
Schedule of revenues, expenses, and changes in net position
Operating years 2015 through 2017¹
(In thousands)

	2015 (Actual)	2016 (Actual)	2017 (Projected)
Operating revenues			
Water operations and maintenance charges	\$164,298	\$168,413	\$194,039
Water service capital charges	15,573	15,861	20,172
Power and basin development fund revenues ²	22,288	15,097	25,505
Reimbursements and other operating revenues ³	30,948	30,709	34,175
Total operating revenues	233,107	230,080	273,891
Operating expenses			
Salaries and related costs	56,133	60,396	64,081
Pumping power ⁴	96,376	92,333	94,928
Power transmission	6,833	5,104	11,357
Hoover capacity charges ⁴	3,868	3,999	
Amortization of permanent service right ⁵	23,017	23,018	23,001
Depreciation	19,756	21,597	21,858
Other operating expenses ⁶	24,347	80,216	36,884
Total operating expenses	230,330	286,663	252,109
Operating income (loss)	2,777	(56,583)	21,782
Nonoperating revenues (expenses)			
Property taxes	60,335	64,571	49,518
Interest income and other nonoperating revenues	3,455	5,418	6,481
Interest expense and other nonoperating expenses	(25,424)	(24,855)	(23,574)
Net nonoperating revenue	38,366	45,134	32,425
Change in net position	41,143	(11,449)	54,207
Net position, beginning of year	645,665	607,840	596,391
Cumulative effect in change in accounting principle ⁷	(78,968)		
Net position, end of year	\$607,840	\$596,391	\$650,598

¹ The District operates on a calendar year.

² Power and basin development fund revenues include surplus energy sales and energy surcharges.

³ Reimbursements and other operating revenues include all CAGR revenues and other miscellaneous revenues.

⁴ For the purposes of its financial review, the District presents projected pumping power and Hoover capacity charges together.

⁵ The permanent service right represents the District's right to operate and maintain the CAP system and collect revenues from operations, for which the District has a repayment obligation to the federal government.

⁶ In 2016, the District recorded an additional \$49.1 million of other operating expenses for its portion of the estimated decommissioning costs for the NGS.

⁷ Amount is an adjustment the District made to implement a new government accounting standard. The effect of implementing the standard is that beginning in operating year 2015, the District began recognizing its net pension liability.

Source: Auditor General staff analysis of the District's audited financial statements for operating years 2015 and 2016 and second quarter Financial Review for operating year 2017.



District collects and spends revenues in accordance with requirements and/or policies

The Central Arizona Water Conservation District (District) collects various revenues to pay for the costs of operating the Central Arizona Project (CAP) in accordance with legal and contractual requirements and/or policies its Board of Directors (Board) established. The District can legally collect revenues through water delivery charges, property taxes, and surplus energy sales and surcharges. These revenues may be used for various purposes, including paying the District's share of CAP construction costs, and its annual operation, maintenance, and repair and replacement costs. Pursuant to Arizona Revised Statutes (A.R.S.) §48-3713(A)(6), the District also reserves some revenues to meet contractual obligations and prepare for large or unusual costs that may arise, as discussed in Chapter 2 (see pages 21 through 23). Additionally, the District is authorized to collect fees, dues, and assessments to pay the cost of administering the Central Arizona Groundwater Replenishment District (CAGR).

Revenues collected in accordance with legal requirements and/or board policies

The District is authorized to collect various revenues and does so in accordance with laws, contracts, regulations, and/or board policies. Water delivery charges represent the District's largest source of revenue, and its two property taxes account for about 20 percent of total revenues. The District also receives revenues from surplus energy sales and energy surcharges and groundwater replenishment fees and dues.

District collects revenues from water delivery rates charged to its customers—The District collects revenues from water delivery rates charged to its customers, including its contractors, subcontractors, and excess CAP water users (see the Introduction, page 4, for additional information about these customers). These charges comprise various annual water delivery rates that the District charges some or all customers in accordance with their contracts, including rates based on its cost to operate, maintain, and replace the CAP (OM&R), the pumping energy costs to deliver water, and a capital charge for the annual repayment of CAP construction costs (see Table 4, page 12). In calendar year 2016, water delivery charges totaled more than \$184 million and comprised 61 percent of the District's total revenues.

The District establishes its annual water delivery rates through a biennial process that involves public input.⁹ Specifically, board policy states that its water delivery rates will be set only after being publicly announced and adequate time for public comment has been provided. To meet this requirement, district staff members will develop preliminary rate schedules and present this information by March of even-numbered years to the Board's Finance, Audit & Power (FAP) Committee in meetings open to the public. In April, the District will hold customer workshops and evaluate public comments, and in May, the proposed water delivery rates will be presented to the FAP Committee for recommendation to the full Board. Based on a review of the Board's meeting minutes, auditors determined that the Board approved the water delivery rates for tax years 2015 through 2017 in June of each year in meetings open to the public.

⁹ The Board establishes water delivery rates in even years when it engages in long-range financial planning, but may update the rates in odd years, as needed.

Table 4
Description of water delivery rates customers pay and the 2017 rates
As of June 8, 2017

Rate	Description	Customer	2017 rate (\$/acre-foot)
OM&R ¹	Based on the costs to annually operate, maintain, and replace or repair the CAP. It is charged based on the volume of water ordered, whether it is delivered or not.	Contractors and subcontractors	\$87
Pumping energy	Based on the cost of energy to pump and deliver water volumes. This rate is based on the volume of water delivered.	All	77
Capital charge	Established for the annual repayment of CAP construction costs. It is based on a subcontractor's entitled water volume.	Municipal and industrial subcontractors	31

¹ The OM&R rate includes a rate stabilization component of \$2 per acre-foot. The Board established this component to institute a reserve to help maintain stable and predictable rates. See Chapter 2, pages 21 through 23, for additional information on reserves.

Source: Auditor General staff analysis of various contracts, subcontracts, and the water delivery rate schedule dated June 8, 2017.

Additionally, two of the water delivery rates are based on estimated costs and are later reconciled to actual costs. Specifically, the OM&R and pumping energy rates are based on estimated costs developed during the District's long-range financial planning process.¹⁰ These estimated costs are then used to develop a rate schedule for a 6-year period.¹¹ However, pursuant to the 2003 Revised Repayment Agreement with the U.S. Bureau of Reclamation (Reclamation), the District is responsible for reconciling the rates to actual costs by May 30 of each year and settling any differences between the two amounts.¹² The District settles overpayments by refunding them to applicable customers or applying the amounts to future water orders.¹³ If underpayments are identified, customers have 30 days to pay the District the amounts owed. According to the water delivery contracts, the settlement is required only for the District's contractors and subcontractors and not for the customers who hold year-to-year contracts for excess CAP water.

In August 2017, Reclamation released its review of the District's rates for calendar years 2010 through 2016 and concluded that its water delivery rate-setting and reconciliation processes were appropriate. Specifically, Reclamation reviewed the District's processes for setting the OM&R and pumping energy rates and found the processes to be designed effectively. It also independently performed the annual reconciliations and found the reconciliation process to be reliable and accurate and determined that the financial data used to complete the reconciliation was supported by invoices, schedules, and other appropriate supporting documentation.

¹⁰ The financial planning process considers the cost of the District's major activities, including capital projects, pumping power, staffing requirements, and estimated water deliveries. It also considers revenues from other sources, such as property taxes, and reserve balances. The planning process incorporates information from the latest budget, financial statements, and forecasts of economic conditions both internal and external parties prepare to provide a 10-year perspective on its major activities.

¹¹ Preliminary water delivery rate schedules include a firm rate for the first year, a provisional rate for the second year, and advisory rates for the third through sixth years. The provisional rate will become firm in the following year unless the Board modifies the rate. The advisory rates are provided to district customers for planning purposes but may be modified as new information becomes available.

¹² The 2003 Revised Repayment Agreement is a contract between the District and Reclamation that modified the 1988 Master Repayment agreement to settle disputes about the District's repayment obligation and reallocate some CAP water entitlements. The 1988 Master Repayment Agreement is a contract between the District and Reclamation that stipulates the District's original annual repayment amount for CAP construction costs.

¹³ In 2015, in lieu of refunding overpayments to long-term subcontractors, the District implemented a voluntary rate-stabilization reserve in which the 2014 overpayments were held as a prepayment to offset future rate increases that could result from potential Colorado River water shortages, if the customer agreed. See Chapter 2, page 23, for additional information.

District levies two property taxes in its service area—The District is legally authorized to annually levy and collect taxes on all taxable property within its three-county service area (Maricopa, Pima, and Pinal Counties).¹⁴ In calendar year 2016, property tax revenues totaled nearly \$65 million and comprised 22 percent of the District’s total revenues. The District collects two types of property taxes on the assessed valuation of a home: a general ad valorem tax and a water storage tax (see textbox for an example of how these taxes are assessed). Specifically:

- **General ad valorem tax**—Pursuant to A.R.S. §48-3703, the District may levy an ad valorem tax, not to exceed \$0.10 per \$100 of assessed valuation, to pay the District’s administrative costs and expenses and help repay CAP construction costs. According to district staff, these tax revenues have been used to pay the OM&R costs related to some agricultural customers and to establish or replenish reserve accounts to meet contractual obligations and prepare for large or unusual costs that may arise. Specifically, provisions of the 2007 Arizona Water Settlement Agreement allowed some agricultural subcontractors to relinquish their water rights in exchange for access to excess CAP water at reduced water delivery rates (see the “agricultural settlement pool” described in Table 1 on page 6).¹⁵ These customers pay only the pumping energy rate for water delivered; the District pays the OM&R rate for these customers with general ad valorem taxes. Based on the OM&R rate and scheduled water deliveries for these customers for 2017, auditors estimate that the District will use nearly \$22.5 million of ad valorem taxes to pay for the OM&R costs.
- **Water storage tax**—Pursuant to A.R.S. §48-3715.02(B), the District shall levy a water storage tax not to exceed \$0.04 per \$100 of assessed valuation.¹⁶ According to A.R.S. §48-3715.03, the District’s Board shall annually determine by resolution whether all or part of these revenues shall be applied to repaying CAP construction costs or to the annual OM&R costs. If the tax revenues are not deposited in district accounts for those purposes, they should be deposited in the water banking fund, which the Arizona Water Banking Authority (AWBA) administers.¹⁷ According to the Board’s annual resolutions from June 3, 2010 through June 8, 2017, the Board applied water storage tax monies toward OM&R or repayment and deposited these monies in its account; however, in two instances, the Board amended its resolutions to transfer money to the AWBA.

The District works with the AWBA to use some of the water storage tax monies. Specifically, the AWBA is responsible for firming water supplies (i.e., storing unused Colorado River water for use in times of water shortage) for the District’s municipal and industrial subcontractors. By storing water for future use, the AWBA earns long-term storage credits (see textbox). A.R.S. §45-2457(B)(7) requires long-term storage credits purchased with water storage tax revenues to be distributed to the District for its municipal and industrial subcontractors in times of water shortage or disruption in the CAP’s

Example of property tax assessment

According to A.R.S. Title 42, a home’s assessed valuation is equal to 10 percent of its value. For example, a home with a value of \$150,000 would have an assessed valuation of \$15,000 and would be taxed on that amount. In this example, taxpayers within the District’s service area would pay \$15 in general ad valorem tax and \$6 in water storage taxes for a given year, based on the 2017 tax rates.

Source: Auditor General staff analysis of A.R.S. Title 42 and A.R.S. §§48-3703 and 48-3715.02(B).

Long-term storage credit—Earned when water is stored or banked for more than 1 year for future use. These credits grant the holder the right to recover 95 percent of the stored water in the future. Long-term storage credits can also be bought or sold.

Source: Auditor General staff review of A.R.S. §§45-802.01, 45-851.01, 45-852.01, and 45-854.01.

¹⁴ A.R.S. §§48-3703 and 48-3715.02.

¹⁵ The 2007 Arizona Water Settlement Agreement settled CAP allocation issues by making certain amounts of non-Indian agriculture priority water available for reallocation to tribes or the Arizona Department of Water Resources, and required a reallocation of uncontracted municipal and industrial priority water.

¹⁶ Beginning December 31, 2024, the water storage tax shall not exceed \$0.03 per \$100 of assessed value.

¹⁷ The AWBA was established in 1996 to increase utilization of the State’s Colorado River entitlement. Specifically, the AWBA stores unused Colorado River water for use in times of water shortage.

operation. To meet its obligation, the AWBA establishes firming goals and orders excess CAP water from the District or purchases long-term storage credits based on the availability of water storage tax revenues. Pursuant to A.R.S. §48-2457(B)(7), the AWBA is required to distribute the credits only for the benefit of the county in which monies are collected; therefore, the District tracks the collection and use of water storage tax monies by county. In 2016, \$9.8 million of water storage tax revenues were used for firming water supplies, including \$5.9 million for Maricopa County, \$2.6 million for Pima County, and \$1.3 million for Pinal County. Additionally, on January 5, 2017, the District amended its annual resolution to allow the AWBA to use another \$12.5 million in water storage tax monies to purchase long-term storage credits for Maricopa County in 2017.

The Board establishes both the ad valorem tax rate and the water storage tax rate annually in meetings open to the public. Both rates must be set in August of each year. Auditors determined that to meet the timeline requirement, staff will present information to the FAP Committee in open meetings to the public in March or April of each year. In some instances, public comments are made on the proposals presented to the FAP Committee. Thereafter, the FAP Committee will consider action to recommend that the Board approve the rates. The FAP Committee action generally takes place in May of each year, in which they vote in a public session if they will propose the rate to the Board. In June, the Board will vote to set the tax rates as proposed.

Based on a review of board minutes for June 2014 through 2017, auditors determined that, for both taxes, the Board set the tax rates for 2015 through 2017 at the maximum tax rates allowed in statute. Regarding the general ad valorem tax, district staff reported that charging the maximum rate was needed to generate sufficient revenues to pay for its OM&R costs and establish or replenish reserves. Regarding the water storage tax, district staff reported that charging the maximum rate was necessary to generate sufficient revenues in Pima and Pinal Counties to meet the AWBA's firming costs for those counties, which is supported by district records auditors reviewed. This rate generated significantly more revenues in Maricopa County than were needed to meet the AWBA's firming costs for that county. However, the Board was unable to lower the tax rate for Maricopa County because the Arizona Constitution requires the District to charge a uniform tax rate through its service area. The District would have had to lower the tax rate for all three counties, which would have resulted in insufficient revenues for firming water supplies in Pima and Pinal Counties. This has contributed to a large reserve of unspent water storage tax revenues primarily generated from Maricopa County. As of June 30, 2017, the District had a reserve balance of \$114 million, and nearly \$111 million, or 97 percent, of that reserve balance was created from taxes collected in Maricopa County.

District receives revenue from surplus energy sales and surcharges—The District has entered into agreements that allow it to receive revenues from (1) the sale of surplus energy and (2) surcharges on energy sold in Arizona. Specifically, the District, the U.S. Department of Energy, and Reclamation entered into a contractual agreement that allows the District to receive the revenue from the sale of surplus energy the Navajo Generating Station (NGS) produced that is not needed for the District's water pumping needs (see the Introduction, page 3, for additional information about the NGS). Further, the 2003 Revised Repayment Agreement states that the District can receive a credit for surcharges collected on energy sold in Arizona from the Hoover Power Plant and the Parker-Davis Project, which includes two power plants located on the Colorado River downstream from the Hoover Power Plant. Money from these activities is reported as power and basin development fund revenues. Reclamation tracks these activities and reports them to the District each month. The District's operating procedures include an annual settlement process where the net revenues from the sale of surplus energy are used to offset the District's annual CAP repayment obligation to Reclamation (see the next section for additional information). Based on a review of the District's financial statements for calendar years 2014 through 2016, auditors determined that annual revenues from surplus energy sales have decreased from nearly \$23.6 million to approximately \$9.7 million. Further, the NGS is scheduled to close at the end of 2019, and revenue from surplus energy sales will be eliminated, leaving energy surcharges as the District's only source of energy-related revenue. The energy surcharge revenues ranged from \$5.4 million to \$6.1 million annually between calendar years 2014 and 2016.

Revenues spent in accordance with legal requirements and/or board policies

The District has spent its revenues in accordance with applicable laws, contracts, and/or board policies. The District's expenses include its obligation to repay CAP construction costs, general OM&R costs, and energy costs. In addition, pursuant to A.R.S. §48-3713(A)(6), the District reserves revenues to meet contractual obligations and prepare for large or unusual costs that may arise. The District's reserves are discussed in Chapter 2, pages 21 through 23.

District must repay portion of CAP construction costs—As discussed in the Introduction (see page 1), the District was created to contract with the federal government for repaying a portion of the CAP's construction costs. The total cost under the original 1988 Master Repayment agreement was disputed; however, in the 2003 Revised Repayment Agreement between the District and Reclamation, it was determined that the District's repayment obligation is \$1.646 billion, plus interest. The District is responsible for making annual installment payments to Reclamation to repay these costs. Payments began in 1994 and are scheduled to continue until 2046. On average, the District's annual repayment obligation is approximately \$55 million per year from 2017 through 2032 but drops to approximately \$45 million for 2033 through 2043. The remaining three payments drop to \$10.6 million until paid in 2046. To make this annual payment, the District first applies its surplus energy sale and surcharge revenues as collected by Reclamation. Thereafter, the capital charges collected from municipal and industrial customers are applied to the repayment balance. If those revenues are insufficient to cover the annual repayment obligation, the balance is paid from the District's tax revenues or from monies held in reserve. Auditors reviewed the District's annual installment payments to Reclamation from 2014 through 2016 and found the payments complied with its contractual requirements. As of December 31, 2016, the District still owed the federal government \$1.141 billion, plus interest, for CAP construction costs.

District incurs annual OM&R costs—The District incurs annual OM&R costs that it pays with its water delivery revenues. These costs include, but are not limited to, salaries and benefits, maintenance, and capital projects. Specifically:

- **Salaries and benefits**—From 2014 through 2016, the District spent \$57.2 million to \$60.4 million per year in salary and benefit costs for its employees. The District offers its employees a generous compensation package, including above-average base pay, full pension benefit, and a 401(k) plan with partial match. Specifically:
 - The District employs an outside entity biennially to perform a compensation study that evaluates the competitiveness of the District's base pay and pay practices against a peer group of utilities and local municipalities.¹⁸ For its administrative, engineering, technical, and professional (AETP) employees, the District's goal is for these employees' base salaries to be at about the 65th percentile of its peers' average salary for similar positions. According to the most recent compensation study, completed in September 2017, the estimated 65th percentile of its peers' average salary for these positions was \$82,108. The District's average base salary for AETP employees was \$82,864, or 101 percent of its goal. For craft and trade (CT) employees, the District's goal is for these employees' base salaries to be about the average salary of its utility peers for similar positions. According to the compensation study, the District's peers' average base salary for CT employees was \$67,436. The District's CT employees' average base salary was \$69,243, or 103 percent of its goal.
 - The District joined the Arizona State Retirement System (ASRS) in 1998. Prior to this time, the District maintained and fully funded its own pension plan with no out-of-pocket costs to employees. Upon joining the ASRS, the District decided to continue covering its employees' pension costs. Specifically, the District provides a benefit through additional pay to its employees that is sufficient to cover the member

¹⁸ The peer entities used in the 2017 study were Reclamation (Phoenix Area Office); California Department of Water Resources; Denver Water; Metropolitan Water District of Southern California; Southern Nevada Water Authority; Arizona Public Service; AZ Electric Power; Freeport-McMoRan Copper & Gold Inc.; Salt River Project; Southwest Gas Corporation; Tucson Electric Power; and the Arizona cities of Chandler, Phoenix, Scottsdale, Tempe, and Tucson.

contribution, and it adds this benefit to employees' base salaries through its payroll system. The District uses the resulting adjusted salary to calculate the member contribution amount and reports the adjusted salary to the ASRS for pension benefit calculations. Thus, district employees' pensions are calculated using the combined total of their base salaries plus the added benefit paid to them to cover their member contributions. This is an uncommon practice, as other ASRS members, including state agencies and Arizona counties, pay member contributions through a deduction from employees' salaries.

The District implemented this process in accordance with an August 2005 settlement agreement with the ASRS following an audit the ASRS performed of the District. According to the settlement agreement, the District will deduct contributions from its employees' salaries, including the ASRS contribution, in calculating the amount of contributions due. However, auditors identified a calculation error in the District's process for adjusting salaries and calculating its employees' member contributions. According to district management, the ASRS recommended this process, but the District was unable to provide documentation to support the ASRS' involvement in developing and implementing this process. Therefore, the District should work with its legal counsel and the ASRS to determine if the payroll calculations should be revised to help ensure payroll calculations are accurate.

Further, since implementing this payroll process, the District has included the member contribution benefit amount in its Federal Insurance Contributions Act (FICA) tax calculations.¹⁹ However, according to a district internal audit report completed in September 2017, the District should not include the pension contribution benefit as part of its employee salaries to determine FICA taxes based on guidance the Internal Revenue Service provided (Internal Revenue Service bulletin 2006-35). Therefore, the District intends to revise its FICA tax calculations, effective January 1, 2018. During the audit, the District consulted with its legal counsel, who determined that the planned change to future contributions complies with applicable payroll and benefit requirements.

- In addition to the ASRS pension plan, the District offers its employees the option of enrolling in a 401(k) retirement plan. The District matches 50 percent of an employee's contribution up to an employee contribution of 6 percent of his/her salary.

According to district policy, the pay administration program and benefit package helps the District attract and retain a qualified workforce while reflecting the external labor market of its peers. According to the U.S. Department of Labor, Bureau of Labor Statistics' *Job Openings and Labor Turnover* report for January 2017, the national average annual turnover rate for the transportation, warehousing, and utilities industries from 2012 through 2016 was 37.5 percent.²⁰ During the same period, the national average annual turnover rate for state and local government employers was 18.6 percent. According to the District, its average annual turnover rate for 2012 through 2016 was 6.4 percent.

- **Maintenance**—In the early 2000s, the District developed its Maintenance Excellence program, shifting away from reactive maintenance and toward preventive maintenance (see textbox for definition of preventive maintenance). This decision was made largely because of increased maintenance costs, an aging infrastructure and workforce, decreased system reliability, and poor safety records. By adopting a preventive maintenance approach, the District has sustained consistent maintenance costs, when adjusted for inflation, over the last 5 years. In addition, according to the District, its main CAP pump units are operating more reliably, and workplace injuries and illness incidents per

Preventive maintenance—Actions performed on a time- or machine-run-based schedule that detect, preclude, or mitigate degradation of a component or system with the aim of sustaining or extending its useful life through controlling degradation to an acceptable level.

Source: U.S. Department of Energy, Operations & Maintenance Best Practices (2010).

¹⁹ FICA is a U.S. law that creates a payroll tax requiring a deduction from employee paychecks and a contribution from employers. The withheld amounts go toward funding Social Security and Medicare.

²⁰ U.S. Bureau of Labor Statistics. (2017). *Job openings and labor turnover—January 2017* [press release]. Retrieved from <https://www.bls.gov/bls/news-release/jolts.htm>.

100 employees have declined over the past decade. In calendar years 2014 to 2016, maintenance costs averaged \$27.6 million annually.

- **Capital projects**—In accordance with the 1988 Master Repayment agreement, the District is responsible for maintaining, repairing, and replacing the CAP infrastructure. To meet this responsibility, the District developed a capital improvement plan to help ensure system reliability and maintain stable water rates. The District also incurs capital costs for equipment and vehicles. The District budgets for capital projects and their associated costs biennially and adjusts them as needed between budget cycles. In addition to the 2-year capital budget, the District identifies capital projects and equipment for 4 additional years for planning purposes. To evaluate, prioritize, and oversee large capital projects, the District established a Project Steering Committee (Committee). The Committee provides overall project governance and evaluates proposed projects and alternatives. In addition, capital equipment purchases in excess of \$100,000 require committee approval. The District's purchasing policies also require construction services to be procured in accordance with A.R.S. Title 34, Public Buildings and Improvements, and that all purchases over \$5,000 be competitively bid.

During calendar years 2014 through 2016, the District's capital expenditures averaged \$36.7 million per year. Projects were funded through water delivery charges and reserves. The District also issued \$45.5 million in bonds in 2016 to fund power transmission projects. Auditors examined three capital projects in process or completed during calendar years 2014 through 2016, totaling an estimated \$31.0 million, and various equipment purchases during the same period totaling \$1.1 million. For all items examined, auditors found that the District complied with its procurement policies and procedures without exception.²¹

- **Lobbying**—During calendar years 2014 through 2016, the District used three lobbyists and spent approximately \$1.3 million for lobbying services. These costs were paid as a monthly retainer or as billed for additional services in accordance with contract. Lobbying services were performed at both the federal and state level and included acting as a liaison between the District and the U.S. Congress and monitoring and consulting on legislation related to the District. During 2017, the District reorganized its lobbying services, eliminating redundancies and lowering costs, and as of November 2017, used two lobbyists at an estimated annual cost of \$301,000, which is \$100,000 lower than its lobbying costs in 2016.

District's largest expense is pumping power—In calendar years 2014 to 2016, the District averaged \$93.3 million per year in pumping power costs. Most of these costs were for power purchased from the NGS, totaling approximately \$80.8 million per year over the same time frame. In 1976, Reclamation entered into the Navajo Project Co-Tenancy agreement to acquire 24.3 percent of the NGS' capacity for supplying the CAP's power requirements. The District uses NGS energy as needed, selling surplus energy as described previously (see page 14). In addition to NGS power, the District purchases energy on the open market to supplement NGS energy or reduce costs.²² In calendar year 2016, the cost per unit of NGS energy was considerably higher than energy available on the open market. In response, the District reduced its consumption of NGS energy and increased its purchases of market energy, saving more than \$7 million. Pumping power expenses are paid for through the pumping energy component of the District's water delivery rates. As discussed previously (see page 14), the NGS is scheduled to close at the end of 2019, and the District reported that it is exploring its future energy options.

District collects various groundwater replenishment revenues to administer CAGR

The CAGR is a district department responsible for conserving groundwater supplies and facilitating land development. The District is legally authorized to levy and collect fees, dues, and assessments from CAGR members to finance the CAGR's groundwater replenishment activities (see Chapter 3, pages 25 through 28, for additional information about the CAGR and its groundwater replenishment activities). Specifically, in accordance

²¹ Some capital project costs were incurred prior to, or are expected to be incurred after, the audit period.

²² The District also purchases power generated by the Hoover Dam from the Arizona Power Authority (APA). The APA contracts with Reclamation for Arizona's share of power generated by the Hoover Dam.

with laws and board policies, the CAGRDR collects from its members one-time enrollment and activation fees, annual membership dues, and annual replenishment tax assessments to pay CAGRDR administration costs. These fees, dues, and assessments are established by the District and may vary by member type and AMA (see Table 5, page 19). In 2016, the groundwater replenishment revenues generated from the collection of fees, dues, and assessments totaled nearly \$30.2 million and comprised 10 percent of the District's total revenues. Pursuant to A.R.S. §48-3772, the revenues collected from members shall be used to pay CAGRDR administration costs, including the cost of water needed to meet its annual groundwater replenishment obligations, acquiring water rights and infrastructure to meet near- and long-term obligations, and accruing long-term storage credits. Further, the District is legally authorized to establish reserves to meet its groundwater replenishment obligations (see Chapter 2, pages 22 to 23, for additional information).

The District establishes its CAGRDR fees, dues, and tax assessments through a biennial process that involves public input. Specifically, board policy states that it will set rates only after publicly announcing them and providing adequate time for public comment. To meet this requirement, the process begins in the first quarter of a calendar year. Between January and March, municipal providers report to the CAGRDR the excess groundwater delivered to MLs and MSAs. By April, district staff develop proposed rate schedules and provide these schedules to the Board for study. Rate proposals are discussed in May in board meetings that are open to the public. Interested parties are invited to comment on the rate proposals. After public comments are analyzed, the Board adopts final rates in June. Based on a review of board meeting minutes for 2014 through 2017, auditors determined that the Board approved the rates in June of each year in meetings open to the public.

Recommendation

- 1.1. The District should work with its legal counsel and the ASRS to determine if the payroll calculations should be revised to help ensure payroll calculations are accurate.

Key terms for this discussion

Active management area (AMA)—A geographical region the Arizona Department of Water Resources has identified as over-reliant on groundwater. There are three AMAs within the District's service area: Phoenix, Pinal, and Tucson. Each AMA has goals for ensuring that withdrawn groundwater is replaced.

Member land (ML)—An individual subdivision that qualifies for CAGRDR membership. Examples of MLs include individual subdivisions and master-planned developments. Qualifications for membership are outlined at A.R.S. §48-3774.

Member service area (MSA)—A municipal provider's service area that qualifies as a member service area under A.R.S. §48-3780, including any additions to or extensions of the service area. Examples of MSAs include municipalities and private water companies.

Source: Auditor General staff analysis of A.R.S. §§48-3701, 48-3774, 48-3780, and 45-402, the 2015 CAGRDR Plan of Operation, and the District's 2016-2017 Biennial Budget.

Table 5

Description of groundwater replenishment fees, dues, and assessments members pay, and the 2017 rates by member type and AMA¹
As of June 8, 2017

Fees/dues/assessments	Description	2017 rate by member type and AMA		
		Member type ²	AMA	Rate
One-time fees				
Enrollment fee	One-time fee when applying for CAGRDR membership. For ML subdivisions, the fee is assessed by unit, and for the ML commercial subdivision, it is assessed by parcel. ³	ML subdivision	All three	\$500 per unit
		ML commercial subdivision	All three	\$284 per unit
Activation fee	One-time fee assessed on each housing unit to be constructed within a subdivision. In 2017, the minimum activation fee was \$282.	ML and MSA	Phoenix	\$460 per unit
		ML and MSA	Pinal	\$460 per unit
		ML and MSA	Tucson	\$400 per unit
Annual dues and assessments				
Membership dues	Annual CAGRDR membership dues. The MSA annual dues are calculated based on the estimated volume of water needed for long-term replenishment obligations.	MSA	All three	\$52.68 per acre-foot
		ML	Phoenix	\$16.50 per lot
		ML	Pinal	\$10.57 per lot
		ML	Tucson	\$16.89 per lot
Tax assessments	Annual tax assessment based on the excess groundwater members used, as reported by the municipal or commercial water providers. The District sets rates considering administrative costs, excess groundwater delivered, and costs to secure long-term water supplies and long-term storage credits.	ML and MSA	Phoenix	\$660 per acre-foot
		ML and MSA	Pinal	\$656 per acre-foot
		ML and MSA	Tucson	\$706 per acre-foot

¹ An AMA is a geographical region the Arizona Department of Water Resources has identified as over-reliant on groundwater. There are three AMAs within district boundaries: Phoenix, Pinal, and Tucson.

² There are two membership classifications: Member lands (ML) and Member Service Areas (MSA). MLs are individual subdivisions and master-planned developments, while MSAs are municipalities and private water companies. The one-time fees are generally paid by the builder/developer of a ML or the MSA's water company. The annual dues and assessments are generally paid by homeowners.

³ The enrollment fee for MSA members is a minimum of \$5,000; however, there has not been a new MSA enrolled in the CAGRDR since February 2014.

Source: Auditor General staff analysis of various laws, board policies, and the CAGRDR rate schedule dated June 8, 2017.



District has established and maintains various reserves

The Central Arizona Water Conservation District (District), through its Board of Directors (Board), has established and maintains various financial reserves to meet contractual obligations and prepare for large or unusual costs that may arise. The Board established these reserves pursuant to Arizona Revised Statutes (A.R.S.) §48-3713(A) (6), which states that the Board shall establish and maintain reserves in amounts that may be required by federal contract or otherwise deemed necessary to accomplish the District's purposes. Some of these reserves are required by contracts with the U.S. Bureau of Reclamation (Reclamation) and may require Reclamation's approval to use. For example, the 1988 Master Repayment Agreement requires the District to maintain a \$40 million repayment reserve to help ensure payments are made to Reclamation for the District's share of Central Arizona Project (CAP) construction costs.²³ Other reserves were authorized by the Board to accomplish the District's purposes or are specifically required by state law. Altogether, the District's reserves totaled nearly \$490.6 million as of December 31, 2016. Table 8 in Appendix A (see pages a-1 through a-4) provides a complete listing of the District's reserves, including descriptive information about each reserve and their year-end balances for 2015 and 2016. This report chapter has no recommendations.

The District's reserves were established for various purposes. Several reserves were established to meet operating needs. Other reserves are in place to meet capital, Central Arizona Groundwater Replenishment District (CAGR), or other needs. Specifically:

- **Several reserves can be used to meet operational needs**—The District has various reserves available to meet its general operating costs and repayment needs (operational reserves), including both required and board-authorized reserves (see Table 6, page 22). The balance of operational reserves as of December 31, 2016, was approximately \$328.6 million, a \$17.9 million increase from December 31, 2015. The District reported it used the Government Finance Officers Association's fund balance guidelines when considering its reserves, which state that general-purpose governments should maintain an unrestricted fund balance of at least 2 months of operating revenues or expenditures but that each government should consider its own unique circumstances in determining the adequacy of unrestricted fund balance. For example, many of the District's operational reserves were established to help maintain consistent water delivery charges in the event of unplanned or unusual expenses or water shortages. The District also reported that these operational reserves are necessary to offset the decrease in surplus energy sales revenue used for the District's repayment obligation and to meet what the District describes as "lumpy expenses"—large, unplanned, and/or infrequent expenses. For example, as discussed in Chapter 1 (see page 14), the District's primary source of pumping power is the Navajo Generating Station (NGS). The NGS was originally expected to operate through 2044, and the District established the Navajo decommissioning reserve in 2005 to set aside monies associated with closing the NGS. According to a multi-agency contract between the Western Area Power Administration, Reclamation, and the District, the District is entitled to 24.3 percent of the power the NGS generates, and therefore is responsible for a corresponding portion of the costs to decommission the NGS, which involves removing the power plant from service and making the area safe.

²³ The 1988 Master Repayment Agreement is a contract between the District and Reclamation that stipulates the District's annual repayment amount of CAP construction costs. In 2003, the District and Reclamation entered into a Revised Repayment Agreement that stipulated a revised repayment amount. As discussed in Chapter 1 (see page 15), on average, the District's annual repayment obligation is approximately \$55 million per year but drops to approximately \$45 million per year in 2033.

Table 6
Contractually required and board-authorized operational reserves
As of December 31, 2015 and 2016
(In millions)

	Balance at 12/31/15	Balance at 12/31/16
Operational reserves		
Contractually required operational reserves		
Repayment reserve	\$ 40.0	\$ 40.0
Emergency operations, maintenance & repair and replacement (OM&R) reserve	5.9	6.0
Total contractually required operational reserves	45.9	46.0
Board-authorized operational reserves		
Water storage tax reserve	125.4	134.2
Extraordinary cost reserve	44.4	60.0
Operating reserve	59.9	50.2
Rate stabilization reserve	19.4	22.6
Working capital reserve	13.0	12.5
Navajo decommissioning reserve	2.7	3.1
Total board-authorized operational reserves	264.8	282.6
Total operational reserves	\$310.7	\$328.6

Source: Auditor General staff review of the District's Comprehensive Annual Financial Reports and Annual Financial Reviews for 2015 and 2016, and the District's 2016-2017 biennial budget, and interviews with district staff.

However, the NGS now is expected to close at the end of 2019 because its owners have indicated that it is not economically feasible to continue operations. Based on information from the Salt River Project, which manages the NGS, the District estimates its share of decommissioning costs to be between \$109.3 million and \$161.4 million. Of this estimate, the District believes that as much as \$100.2 million could be due by the end of 2019, with an additional \$43.1 million potentially due by the end of 2022. Use of operational reserves should allow the District to meet its NGS decommissioning obligation without substantially affecting water delivery rates.

- **Some reserves are for capital projects**—The District has three reserves established specifically for capital projects, totaling \$58.8 million as of December 31, 2016, an increase of nearly \$23.2 million from December 31, 2015 (see Table 7, page 23). The increase resulted from the District establishing a bond reserve in 2016, when it issued revenue bonds to fund various power transmission projects. The bond reserve was established to hold the bond proceeds prior to disbursement for the various transmission projects. This increase was partially offset by a decrease in the major repair and replacement reserve. According to the District, monies from this reserve were used to help meet the District's costs associated with major repair or replacement of the CAP.
- **CAGR D revenues reserved specifically for CAGR D use**—The District collects groundwater replenishment revenues from CAGR D members to administer the CAGR D, which is a district department responsible for conserving groundwater supplies and facilitating land development (see Chapter 3, pages 25 through 28, for more information on CAGR D). The District reserves some of the revenues, \$62.4 million in total as of December 31, 2016, for various purposes, including the purchase of infrastructure and water rights, which can be large and infrequent purchases (see Table 8 in Appendix A, pages a-1 through a-4). For example, in January 2017, the District purchased 50,000 acre-feet of long-term storage credits—the right to recover

Table 7
Contractually required and board-authorized capital reserves
As of December 31, 2015 and 2016
(In millions)

	Balance at 12/31/15	Balance at 12/31/16
Capital reserves		
Contractually required capital reserves		
Major repair and replacement reserve	\$35.5	\$29.7
Total contractually required capital reserves	35.5	29.7
Board-authorized capital reserves		
Capital reserve	0.1	0.1
Bond reserve		29.0
Total board-authorized capital reserves	0.1	29.1
Total capital reserves	\$35.6	\$58.8

Source: Auditor General staff review of the District’s Comprehensive Annual Financial Reports and Annual Financial Reviews for 2015 and 2016, and the District’s 2016-2017 biennial budget, and interviews with district staff.

stored water in the future—for \$12.5 million.²⁴ Further, in October 2017, the District agreed to acquire water rights to generate a water supply for the CAGR for \$34 million.

- **Other reserves established for various purposes**—In addition to its operational, capital, and CAGR reserves, the District has established several reserves for other purposes totaling nearly \$41 million as of December 31, 2016 (see Table 8 in Appendix A, pages a-1 through a-4). For example, the District has two additional rate stabilization reserves to help maintain consistent water delivery rates. The District also has a contingency reserve in place for extraordinary legal, medical, or property and liability damages.

²⁴ An acre-foot of water is enough water to cover one acre of land to a depth of one foot. This is approximately 326,000 gallons, which would supply about three average homes for 1 year.



CAGRDR acquires water supplies to replenish groundwater

The Arizona State Legislature established the Central Arizona Groundwater Replenishment District (CAGRDR) within the Central Arizona Water Conservation District (District) to conserve groundwater supplies and facilitate land development. Subdivisions, municipalities, and water providers in Maricopa, Pima, and Pinal Counties may enroll as members of the CAGRDR to meet the Arizona Department of Water Resources' (ADWR) Assured Water Supply Rules, which require proof of a 100-year water supply or membership in the CAGRDR before development can begin. The CAGRDR is obligated to replenish groundwater its members use with other water supplies, and the ADWR monitors its groundwater replenishment activities and plans. The CAGRDR has historically relied on excess Central Arizona Project (CAP) water to meet its replenishment obligations.²⁵ However, the amount of excess CAP water available to the CAGRDR has diminished, while its demand for water is expected to increase. As a result, the CAGRDR has begun looking for other water supplies to meet its groundwater replenishment obligations. This report chapter has no recommendations.

CAGRDR is a district department charged with replenishing groundwater

Laws 1993, Ch. 200, established the CAGRDR within the District to help ensure that land development does not overdraw groundwater supplies. Specifically, the CAGRDR provides a mechanism for developers and water providers to meet the ADWR's Assured Water Supply Rules. These rules include a requirement that developers demonstrate the land they wish to develop has a 100-year water supply.²⁶ Developers who are unable to meet this requirement would not be approved to develop land unless they enroll as CAGRDR members. By law, the CAGRDR is obligated to replenish any groundwater its members use beyond a certain limit, which satisfies this requirement. The CAGRDR has historically relied on excess CAP water to do so. According to district management and other stakeholders, the CAGRDR was placed within the District because it already had the infrastructure for delivering water through the CAP and, therefore, could facilitate groundwater replenishment. In addition, placing the CAGRDR within the District was more efficient because it allowed the State to avoid establishing another governing body and staff, and associated costs, needed to administer the CAGRDR. As a result, the CAGRDR is also administered by the District's Board of Directors (Board) and staff.

CAGRDR membership is voluntary and available to all subdivisions, municipalities, and water providers located in the District's three-county service area (Maricopa, Pima, and Pinal Counties). The CAGRDR has two types of members:

- **Member lands (MLs)**—MLs are individual subdivisions that enroll each parcel of subdivision land in the CAGRDR. As of November 2017, more than 1,100 subdivisions were enrolled as MLs in the District's service area. These subdivisions represent over 270,000 homes.

²⁵ CAP water consists of Colorado River water that the District delivers to entities in its service area. See the Introduction, page 1, for more information.

²⁶ The ADWR adopted the Assured Water Supply Rules in 1995.

- **Member service areas (MSAs)**— MSAs are cities, towns, districts, and water providers that enroll their entire service areas in the CAGR. As of November 2017, 24 water providers and municipalities were enrolled as MSAs. For example, the City of Surprise, the City of Casa Grande, and the Vail Water Company are enrolled as MSAs.

CAGR staff review applications to become MLs and MSAs, and the CAGR cannot refuse membership to qualifying applicants. To qualify, each applicant must submit an application and supporting documentation, including a complete copy of its application for a certificate of assured water supply that it filed with ADWR. In addition, ML applicants must provide a copy of the approved final plat and evidence of property ownership. MSA applicants must provide a map of their service areas and proof of their legal authority to do business in Arizona.

After enrollment, Arizona Revised Statutes (A.R.S.) §48-3775 requires members to submit an annual report to the CAGR that details how much groundwater each ML parcel or MSA used. CAGR staff review the amounts and determine how much water is needed to meet the CAGR’s replenishment obligation. The CAGR charges its members fees, dues, and assessments to pay for its groundwater replenishment costs (see Chapter 1, pages 17 through 19, for more information about the CAGR’s fees and assessments).

A.R.S. §48-3771 requires the CAGR to replenish the groundwater within 3 years of its withdrawal and in the same area where the withdrawal occurred. The CAGR uses two methods to replenish groundwater. The first is to deliver water to an underground storage facility in the same geographic region as where the groundwater was withdrawn. The CAP canal includes six underground storage facilities where water may be delivered and discharged into an underground aquifer. The second is to deliver water to a groundwater savings facility. Groundwater savings facilities are not actual facilities but are irrigation districts that receive renewable water sources from an entity, such as CAP water, to use instead of pumping groundwater. In addition, the CAGR has also purchased long-term storage credits, which grant the owner the authority to recover the water from the ground in the future, to meet its future groundwater replenishment obligations.²⁷

ADWR provides some CAGR oversight

The ADWR provides some oversight of the CAGR’s activities. As required by statute, the CAGR provides reports and other information to the ADWR for review so the ADWR may determine if there is a sufficient water supply to meet the groundwater replenishment obligations. Specifically:

- A.R.S. §45-576.02 requires the CAGR to submit a plan of operation to the ADWR every 10 years that describes how it will meet its groundwater replenishment obligations. The plan identifies potential water sources the CAGR could acquire to meet groundwater replenishment obligations. The plan also includes current and projected ML and MSA enrollment and the groundwater replenishment obligations they will incur in the future. These projections rely on various assumptions, such as projected housing units and the increased use of renewable water supplies, such as CAP water allocations, by MSAs before reliance on the CAGR. Since the CAGR’s creation, the ADWR has approved the CAGR’s 1995, 2005, and 2015 plans.
- A.R.S. §45-576.04 requires the CAGR to submit a replenishment report to the ADWR at least once in the 5 years after a plan of operation is approved. This update describes the CAGR’s projected groundwater replenishment obligations and available water sources for the following 20-year period. Although statute requires the ADWR to provide comments, the District’s Board makes the final determination on whether the CAGR will meet its obligations.
- Finally, A.R.S. §48-3775(E) requires the CAGR to submit annual reports to the ADWR that detail the CAGR’s replenishment obligations and actual replenishment for the previous year. This annual report compiles the verified information the MLs and MSAs provided to the CAGR.

²⁷ Each long-term storage credit represents an acre-foot of water less physical losses that an entity has discharged into a groundwater savings facility or underground storage facility for more than 1 year. An acre-foot of water is enough water to cover one acre of land to a depth of one foot. This is approximately 326,000 gallons, which would supply about three average homes for 1 year.

If the ADWR determines that the CAGR is unable to meet the groundwater replenishment obligations the MLs and MSAs created, A.R.S. §45-576.06 requires the ADWR to place a moratorium on land development. According to district management, this has never occurred as of October 2017.

CAGR has relied on excess CAP water but will need additional water supplies

The CAGR has relied on excess CAP water to meet its groundwater replenishment obligations, but it will likely need to rely on additional water supplies in the future. Historically, there has been enough excess CAP water to meet the demand of any entity wishing to purchase it from the District, including the CAGR (see the Introduction, pages 4 through 7, for additional information about excess CAP water users and their priorities with regard to other customers). The CAGR's 1995 plan of operation indicated that the CAGR would rely entirely on excess CAP water to meet its groundwater replenishment obligations through 2004. However, the 2005 plan of operation anticipated that the CAGR would not be able to rely exclusively on excess CAP water in the future. As the population increased within the District's service area, entities that are entitled to CAP water began to order more of the water they were entitled to. This has gradually reduced the amount of excess CAP water available to entities such as the CAGR. In response, the Board began allocating the excess CAP water available to nonagricultural users through resolutions in 2009.²⁸ The most recent resolution, which the Board approved in March 2014 and remains in effect through 2019, limits excess CAP water allocations to only the CAGR, the Arizona Water Banking Authority (AWBA), and the U.S. Bureau of Reclamation (Reclamation).²⁹ For 2017, the Board allocated 25,352 acre-feet of excess CAP water to the CAGR, 17,630 acre-feet to the AWBA, and 1,000 acre-feet to Reclamation. However, if Reclamation declares a water shortage at Lake Mead, the excess CAP water available to these entities would no longer be available (see the Introduction, pages 5 through 7, for additional information).

The CAGR also acknowledged that its allocation of excess CAP water alone will not be sufficient to meet its future groundwater replenishment obligations. According to the 2015 plan of operation, the CAGR projects that it will need 86,900 acre-feet of water annually to meet groundwater replenishment obligations for current and new members by 2034.³⁰ To meet this demand, the CAGR has acquired, is working to acquire, or is considering acquiring additional sources of water that include:

- Water leased (i.e., transferred to another user for a specified time period) from other Colorado River water entitlement-holders, such as the Town of Quartzsite (see Chapter 4 on pages 30 through 31 for more information);
- Water savings accomplished through district-funded conservation measures, such as lining canals to prevent seepage;
- Water already banked by other entities and available as long-term storage credits for purchase; and
- A potential allocation of CAP water from the Non-Indian Agriculture pool (see Table 1 in the Introduction, page 6). This allocation was recommended by the ADWR and is contingent on Reclamation's approval.

The District's water supply acquisition resolution states that it will acquire new water for the CAGR only when obligations are incurred. However, due to the prolonged drought in the Southwest, costs of water are expected to rise as entities compete for water to satisfy their demands. Thus, in the future, alternative water sources for the CAGR could be costly and difficult to obtain. For example, one potential future source is desalinated water; however, desalinating water is expensive and results in higher water costs. In 2007, Reclamation conducted a

²⁸ The District's authority to allocate excess CAP water is based on a stipulation and judgment to the 1998 Master Repayment Contract between the United States and the District that gave the District the exclusive right to sell or use all excess CAP water for any district purpose, including groundwater replenishment.

²⁹ The Arizona Water Banking Authority is a state-sponsored program that stores surplus Colorado River water in central and southern Arizona to meet groundwater management goals and provide water supplies to safeguard against potential shortages on the Colorado River.

³⁰ The replenishment obligation for current members alone will reach nearly 63,000 acre-feet annually by 2034.

demonstration run of its Yuma Desalting Plant and estimated that the cost of water delivered to the Colorado River from the plant operating at full capacity would range from \$322 to \$556 per acre-foot. By comparison, in 2017, the CAGRDR paid approximately \$200 per acre-foot for excess CAP water.



Questions and answers

This chapter presents information related to water management in Arizona, including management of Colorado River water delivered through the Central Arizona Project (CAP). In addition, this chapter includes information regarding the Central Arizona Water Conservation District's (District) legal authority and use of executive session. This information is presented in a question-and-answer format and presents additional information that may be of specific legislative and public interest. This report chapter has no recommendations.

What entities participate in managing Arizona's water supplies?

Because Arizona's water comes from various sources, several entities participate in managing the State's water. These entities include the District, the U.S. Bureau of Reclamation (Reclamation), the Arizona Department of Water Resources (ADWR), and the Arizona Water Banking Authority (AWBA). Their roles and responsibilities for managing the State's water are as follows:

- **The District**—The District delivers Colorado River water to its contractors and subcontractors in Maricopa, Pima, and Pinal Counties (the District's service area) through the CAP, which is a 336-mile aqueduct system from Lake Havasu to Tucson. In addition, the District replenishes groundwater in its service area through the Central Arizona Groundwater Replenishment District (CAGR), which is a district department responsible for conserving groundwater supplies and facilitating land development, and operates several groundwater recharge facilities. Also, Arizona Revised Statutes (A.R.S.) §48-3713 grants the District the authority to work with and contract with Reclamation.
- **Reclamation**—Reclamation is an agency of the U.S. Department of the Interior that manages the last 688 miles of the Colorado River, including providing oversight for the operation and maintenance of the CAP and the Salt River Project in Arizona.³¹
- **ADWR**—When the ADWR was created in 1980, it assumed the responsibilities of the Arizona Water Commission relating to the control of the State's surface water, groundwater, dams, and reservoirs.³² Its responsibilities include ensuring a long-term water supply for the State, administering the State's water rights system, and representing Arizona's water rights with the federal government. The ADWR administers all state water laws, except for those related to water quality, which come under the Arizona Department of Environmental Quality's jurisdiction. The ADWR Director is authorized to act on behalf of the State on water matters related to the Colorado River.

ADWR mission statement

ADWR is the steward of Arizona's water future and ensures long-term, reliable water supplies to support the State's continued economic prosperity.

Source: Auditor General staff review of ADWR documents.

³¹ Authorized in 1903 by the U.S. Secretary of the Interior, the Salt River Project was one of Reclamation's first projects, which included constructing six storage dams that control the Salt River and Verde River. The Salt River Project services the Phoenix metropolitan area with water and electricity.

³² According to A.R.S. §45-101, surface water includes CAP water.

- **AWBA**—The AWBA was created in 1996 to ensure the use of Arizona’s allocated Colorado River water. The AWBA recharges, stores, and firms (supplies water in times of drought) water. Water storage began in 1997, and as of 2016, the AWBA had stored more than 4 million acre-feet of water in Arizona for future use.³³ Through an interstate banking agreement, the AWBA has also stored water for Nevada to recover in the future. The remaining amount of banked water has been stored to firm intrastate uses for municipalities and tribes. The ADWR provides staff and support to the AWBA.

Does the District act within its authority?

The District acts within its authority. Although it has taken some actions, proposed other actions, and developed programs that are outside of its core legal responsibilities, general counsel to the Auditor General review indicates that the District’s arguments for engaging in these activities are reasonable interpretations of various federal laws, state statutes, and contract provisions.

As enacted in 1971, the District’s core legal responsibilities are stated in A.R.S. §48-3703: to levy taxes to repay the CAP’s construction costs and to deliver CAP water (see Chapter 1, pages 11 through 19, for a description of the District’s revenues and expenditures).³⁴ A.R.S. §48-3713 also gave the District the responsibilities of cooperating and contracting with the U.S. Secretary of the Interior to implement provisions of the Reclamation Act of 1902, which funded irrigation projects for arid lands throughout the western states, and the Colorado River Basin Project Act of 1968, which authorized the CAP.³⁵ In 1993, the Arizona Legislature added the responsibility to replenish groundwater to the District through the CAGR (see Chapter 3, pages 25 through 28, for a description of the CAGR).

In addition to federal law and state statutes, contracts between Reclamation, the District, and entities that hold entitlements to Colorado River water require the District to deliver water to those entities (see Introduction, page 4, for the entities that receive CAP water deliveries). Finally, the District’s legal authority is also specified in federal regulations and contracts and agreements between Reclamation and the District. For example, a 2003 revision to the 1988 Master Repayment Contract grants the District jurisdiction over excess CAP water (see Introduction, pages 4 through 7, for a discussion of excess water).³⁶

To determine if the District acts within its legal authority, auditors identified a set of programs, actions, and proposed actions that are outside the District’s core responsibilities and requested that the District provide the source of legal authority for each. General counsel to the Auditor General reviewed the District’s response and indicated that the District’s arguments for engaging in the following activities are reasonable interpretations of various federal laws, state statutes, and contract provisions:

- **Developing agricultural forbearance programs**—As discussed in the Introduction (see pages 7 through 8), the District implemented three agricultural forbearance programs and has planned a fourth. These programs give agricultural customers an incentive to not use agriculture pool water (a type of excess CAP water) so that water may be left in Lake Mead to prevent the reservoir levels from falling below levels that would trigger a shortage. The District is authorized to develop and implement these programs according to a 2003 stipulation to the 1988 Master Repayment Contract that gives the District jurisdiction over excess CAP water.
- **Entering into a water right lease agreement with the Town of Quartzsite**—As discussed in Chapter 3 (see pages 25 through 28), the District is responsible for replenishing groundwater through its operation of the CAGR. To assist in that duty, the Legislature authorized the District to “acquire, hold, exchange, own,

³³ An acre-foot of water is enough water to cover one acre of land to a depth of one foot. This is approximately 326,000 gallons, which would supply about three average homes for 1 year.

³⁴ A.R.S. §45-2603 was enacted in 1971 and renumbered as A.R.S. §48-3703 in 1985.

³⁵ A.R.S. §45-2613 was enacted in 1971 and renumbered as A.R.S. §48-3713 in 1985.

³⁶ The 1988 Master Repayment Contract set the terms for the District’s repayment of some costs of building the CAP. The 2003 Revised Repayment Agreement included a provision that gave the District exclusive jurisdiction over all excess CAP water.

lease, retire, or dispose of water rights for the benefit of member lands and member service areas” enrolled in the CAGR. The Town of Quartzsite holds an annual entitlement to 1,070 acre-feet of Colorado River water but has never taken delivery of this water because it lacks the infrastructure to do so. The District has proposed entering into a 50-year lease agreement with Quartzsite to use the 1,070 acre-feet of water annually to meet its member lands’ and member service areas’ groundwater replenishment obligations. According to ADWR management, as of November 2017, the District was in the process of obtaining regulatory approval from the ADWR director for the lease pursuant to the process outlined in A.R.S. §45-107. This statute requires Quartzsite and the District to seek the ADWR director’s advice on any proposed transfer of an entitlement of Colorado River water.

- **Considering entering into an interstate banking agreement**—Federal regulations regarding interstate water banking agreements grant the authority to store water with or receive water from other states. In 2015, the District developed a concept where it could potentially arrange with Reclamation to divert a portion of excess CAP water to the Metropolitan Water District of Southern California (MWD) and then arrange with Reclamation to divert the water back to the CAP in the event of a shortage, according to the terms of a potential Storage and Interstate Release Agreement. For example, the District could bank excess water from a year of above-annual precipitation with the MWD and “withdraw” the water later during a dry year or if a shortage is declared (see Introduction, pages 5 through 7, for more information on declared shortages). The District did not go forward with the concept, but district counsel claimed that if it had, it would have continued to work with the ADWR to develop it and follow the process outlined in federal regulations.
- **Entering into a Pilot System Conservation Program (PSCP) agreement**—Consistent with A.R.S. §48-3713, which grants the District the authority to cooperate and contract with the U.S. Secretary of the Interior, the District entered into the 2014 PSCP agreement with Reclamation, the MWD, the Southern Nevada Water Authority (SNWA), and Denver Water to contribute funds to support projects that could help mitigate drought conditions along the Colorado River. As discussed in the Introduction on pages 5 through 7, should the reservoir at Lake Mead fall below certain levels, Reclamation would declare shortages that would impact Arizona’s allocation of Colorado River water. The PSCP supports projects that help ensure a shortage is not declared. For example, the agricultural forbearance programs discussed on pages 7 through 8 were developed to meet the District’s PSCP goals. The District provided funding for the forbearance programs’ incentives.
- **Retaining operational water in Lake Pleasant**—The District’s authority to use Lake Pleasant as a reservoir stems from the design of the CAP itself and a permit from the ADWR. The CAP’s route intersects with Lake Pleasant where Reclamation installed New Waddell Dam. This CAP feature allows the District to store water for operational purposes. In addition, the District has a permit for Lake Pleasant with ADWR to store and deliver water as a reservoir permittee under A.R.S. §45-161, pursuant to the terms of the 1988 Master Repayment Contract. According to district staff, about 200,000 acre-feet of CAP water is kept in the reservoir to use in case of emergency. For example, in 2012, when a canal breach caused water to spill onto surrounding land rather than flow through the canal, the District used the CAP water stored in Lake Pleasant to meet its water delivery requirements. The District also uses the reservoir to store water it takes off the river when pumping energy costs are lower to mitigate against high energy costs (see Chapter 1, page 17, for a discussion of energy costs). Specifically, when the cost of energy needed to pump water is lower, the CAP will accept more of the water needed for delivery to its customers and store it at Lake Pleasant. Then, when energy costs are higher, because the water is already being held more than mid-way through the CAP’s route and will not need to travel as far, it will not require as much energy to move the water through the CAP to reach its final destinations. Finally, the District stores water that entitlement-holders order but do not accept delivery of in the reservoir until it is able to find another entity that will purchase the water. The District publishes information about the volume of water stored in Lake Pleasant on its website.
- **Making operational water delivery decisions**—The District’s authority for making operational water delivery decisions is contained in contracts between the District, Reclamation, and subcontractors who receive deliveries via the CAP. Specifically, these contracts include a procedure for ordering water that requires subcontractors to submit orders by October 1 each year so the District may prepare a delivery schedule for

the next calendar year. If a subcontractor needs to revise the delivery schedule after it has been approved, it may do so in writing, but approval is subject to the District's review. According to district staff, an approval for an increase in the amount of water to be delivered would be contingent on there being sufficient water available and capacity in the CAP to transport it.

Does the District conduct appropriate executive sessions?

During the audit, auditors identified a finding regarding the District's compliance with an administrative requirement of open meeting law regarding executive session minutes. The State's open meeting law generally requires governing bodies, such as the District's Board of Directors (Board), to discuss, deliberate, and decide issues in public meetings. However, open meeting law also permits governing bodies to meet without the public present in executive session under certain statutorily permissible circumstances. For example, statute allows the Board to meet in executive session to obtain legal advice from its counsel. Although A.R.S. §38-431.03(B)(3) authorizes the Auditor General to obtain and review executive session minutes, A.R.S. §38-431.03(F) prohibits the disclosure of the confidential information set forth in those minutes.³⁷ As a result, this finding and associated recommendations were communicated directly to the District's Board.

³⁷ In addition to conducting test work to evaluate notices and minutes, auditors also typically evaluate compliance with open meeting law by attending executive sessions. However, auditors were not able to conduct this test work for this audit because statute does not authorize the Auditor General to attend executive sessions of political subdivisions, which include the District. Whether evaluated through review of minutes or attendance, though, the results of the review may not be publicly disclosed.



District reserves

As discussed in Chapter 2 (see pages 21 through 23), the Central Arizona Water Conservation District (District), through its Board of Directors (Board), has established various financial reserves to meet contractual obligations and prepare for large or unusual costs that may arise. Table 8 provides a complete listing of the District's reserves, including descriptive information about each reserve and their year-end balances for 2015 and 2016.

Table 8
Listing of required and board-authorized district reserves and account balances
As of December 31, 2015 and 2016

Reserve name	Description	Balance at 12/31/15	Balance at 12/31/16
Operational reserves			
Water storage tax reserve	Board-authorized. Established in 2003 to provide for underground storage water delivery expenses. Monies deposited into this fund are collected from an ad valorem tax assessed at the rate of \$0.04 per \$100 of assessed valuation of all taxable property in Maricopa, Pinal, and Pima Counties. Prior to the 2003 tax year, monies collected were deposited into the Arizona Water Banking Fund held by the State of Arizona for the AWBA's benefit.	\$125,370,404	\$134,164,498
Extraordinary cost reserve	Board-authorized. Monies committed to address unpredictable cost concerns due to uncertainty in the power and related markets as well as the impact of Proposition 117 that has placed a cap on property taxes. The Board will direct the purposes for the use of these monies.	44,412,279	59,953,370
Repayment reserve	Required by the 1988 Master Repayment agreement with the U.S. Bureau of Reclamation (Reclamation). To help ensure monies are available to make payments to Reclamation for Central Arizona Project (CAP) construction costs. Requires annual deposits of \$4 million plus interest until \$40 million is reached.	40,000,000	40,000,000
Emergency OM&R reserve	Required by the 1988 Master Repayment agreement with Reclamation. Provides for extraordinary costs of operations, maintenance, and repair and replacement (OM&R) project work. Requires annual deposits of \$400,000 plus interest until \$4 million is reached. Interest shall be added to the fund.	5,914,145	6,001,444

Table 8 continued

Reserve name	Description	Balance at 12/31/15	Balance at 12/31/16
Rate stabilization reserve	Board-authorized. A component of the fixed OM&R water rate is a stabilization fee that the Board established to institute a reserve to help maintain stable and predictable rates and mitigate the effect of rate increases during times of a water shortage. The Board established the stabilization fee in 2011, in meetings open to the public, and this fee was incorporated into the OM&R rate beginning in 2012.	19,360,519	22,573,488
Working capital reserve	Board-authorized. To provide for day-to-day cash flow needs.	12,934,919	12,460,591
Operating reserve	Board-authorized. Established in 1990 to provide for operating needs, excluding pumping power expenses, for 12 months in the event of an interruption to district operating revenue streams, which exclude tax receipts.	59,905,550	50,248,964
Navajo de-commissioning reserve	Board-authorized. Established in 2005 to set aside monies for the District's share of the future costs associated with decommissioning the Navajo Generating Station (NGS).	2,700,302	3,060,394
Capital reserves			
Major repair and replacement reserve	Required by the 2003 Revised Repayment agreement with Reclamation. To cover the costs associated with major repair or replacement of the CAP aqueduct. This reserve was funded with a portion of the revenue from the sale of surplus energy from the NGS and pledged bond revenues in excess of the amount needed to satisfy the bond obligation.	35,522,020	29,664,738
Capital reserve	Board-authorized. Monies available for capital projects. This reserve is managed in conjunction with the major repair and replacement reserve. The combined target for these reserves is \$65 million and is intended to cover the cost of capital projects for 2 years. The District uses a 10-year average of capital costs to calculate the reserve target.	99,946	99,991
Bond reserve	Board-authorized. The District issued revenue bonds in 2016 to pay for various power transmission projects. This reserve was established to hold bond proceeds prior to disbursement for those projects. The District has pledged a portion of the fixed OM&R water delivery rate toward bond repayment.	0	28,991,112
Central Arizona Groundwater Replenishment District (CAGRD) reserves			
Infrastructure and water rights reserve	Board-authorized. Includes monies for water rights and infrastructure for each active management area (AMA) and an administration account. ¹	43,251,714	57,557,049
Replenishment reserves	Required by Arizona Revised Statutes (A.R.S.) §48-3772. Consists of three accounts, one for each (AMA). Reserve monies are to establish and maintain a replenishment reserve of long-term storage credits for each AMA. ²	133,306	634,753

Table 8 continued

Reserve name	Description	Balance at 12/31/15	Balance at 12/31/16
Administrative, including water and replenishment reserve	Board-authorized. Monies used to meet daily cash requirements and includes monies set aside for annual water purchases to replenish AMA use.	4,616,570	3,687,372
Water conservation fees reserve	Board-authorized. Monies reserved for a water conservation program. This reserve is funded with a portion of the annual CAGR assessments.	448,024	504,422
Other reserves			
Supplemental water reserve	Board-authorized. Established as part of the Ak-Chin Settlement Act of 1984 that settled a water rights claim. Pursuant to A.R.S. §48-3715.01, the reserve was created when both the federal government and the District contributed \$1 million each. Investment income continues to accrue in this reserve.	8,115,684	8,235,479
Contingency reserve	Board-authorized. To act as a reserve for extraordinary legal, medical, or property and liability damages. The monies are to be available to respond to any claims, judgments, and related costs against the District, its officers, directors, and employees, if any, in excess of the outstanding insurance coverage.	7,995,666	7,999,284
Captive insurance reserve	Required by the Hawaii Insurance Division. ³ Established in 2003 to provide a self-insurance mechanism for property, casualty, and medical insurance claims.	2,644,917	2,644,917
Sulfur dioxide (SO ₂) credit reserve	Board-authorized. The District had an agreement with Reclamation to establish a rate stabilization reserve to use, at its discretion, to stabilize pumping energy costs. The SO ₂ credit reserve was created to stabilize the energy portion of rates and was funded by the sale of excess SO ₂ emission allowances.	7,605,500	7,642,898
Voluntary rate stabilization reserve	Board-authorized. Established in 2015 to provide additional monies to mitigate rate impacts due to potential Colorado River shortages and allow them to be “softened” or phased out over a longer period. Participation is voluntary, and only certain customers elected to participate in this program using 2014 rate reconciliation refunds that otherwise would have been reimbursed to them.	6,507,320	6,603,373
Ag forbearance reserve	Board-authorized. Agriculture forbearance programs are agreements with agricultural customers to forego a portion of their water entitlement in exchange for reduced water delivery rates in the future. This reserve is used to offset that reduction and was funded by the Pilot System Conservation Program (see Chapter 4, page 31).		2,509,660
Pima water reliability reserve	Board-authorized. To help ensure a reliable water supply for Pima County in event of a CAP supply interruption.	5,297,380	5,319,317
Total reserves		\$432,836,165	\$490,557,414

¹ An AMA is a geographical region the Arizona Department of Water Resources has identified as over-reliant on groundwater. There are three AMAs within the District’s service area: Phoenix, Pinal, and Tucson. Each AMA has goals for ensuring that withdrawn groundwater is replaced.

Table 8 continued

² Long-term storage credits are earned when water is stored or banked for more than 1 year for future use. These credits grant the holder the right to recover 95 percent of the stored water in the future. Long-term storage credits can also be bought or sold.

³ The District's captive insurance is incorporated in the state of Hawaii, and therefore subject to requirements of Hawaii's Insurance Division.

Source: Auditor General staff review of the District's Comprehensive Annual Financial Reports and Annual Financial Reviews for 2015 and 2016, and the District's 2016-2017 biennial budget, and interviews with district staff.



Methodology

Auditors used various methods to address the issues in this report on the Central Arizona Water Conservation District (District). These methods included reviewing applicable federal laws, including the 1902 Reclamation Act, the 1968 Colorado River Basin Project Act, and the 2004 Arizona Water Settlements Act; state laws, including Arizona Revised Statutes (A.R.S.) Titles 45 and 48; and district contracts, policies, procedures, and information from the District's website. Auditors also interviewed members of the District's Board of Directors (Board), staff, and various stakeholders, including representatives of the District's customers of Arizona's share of Colorado River water.

In addition, auditors used the following specific methods to meet the audit objectives:

- To review how the District operates the Central Arizona Groundwater Replenishment District (CAGR), auditors reviewed the CAGR plans of operation from 1995, 2005, and 2015; approved rate schedules; a 2015 annual report to the Arizona Department of Water Resources (ADWR); and a 2015 annual operations report.
- To determine if the District collects and spends revenues in accordance with legal requirements and/or board policies, auditors reviewed the District's audited financial statements for operating years 2015 and 2016, board policies, minutes from various board meetings, water delivery contracts and subcontracts, the 1988 Master Repayment agreement between the District and the U.S. Bureau of Reclamation (Reclamation), and the 2003 Revised Repayment agreement. Additionally, auditors reviewed agreements that allow the District to receive revenues from (1) the sale of surplus energy and (2) surcharges on energy sold in Arizona, and a reclamation examination of the District's water delivery rates for 2010 through 2016. Finally, auditors reviewed lobbyist disclosures maintained on the U.S. House of Representatives and Arizona Secretary of State websites.
- To determine if the compensation study performed by an outside entity was reasonable, auditors evaluated the methodology employed to develop the comparison and the peer group.
- To determine if the District's maintenance program controls maintenance costs, auditors reviewed best practice documents from the U.S. Department of Energy's *Operations & Maintenance Best Practices: A Guide to Achieving Operational Efficiency*, verified maintenance expenditures, and adjusted maintenance expenditures for inflation to calculate the trend over time.
- To determine if the District complied with its procurement practices, auditors judgmentally selected and examined 3 of 86 capital projects completed or in process from January 1, 2014 through December 31, 2016, or about \$31 million of \$95.2 million total capital project expenses. Auditors also judgmentally selected five capital purchases totaling \$1.1 million of about \$15 million in total capital purchases during the same time period, and scanned the remainder of the population for any unusual items.
- To identify the District's reserves and their purposes, auditors examined district reports and contracts. To verify the reserves' amounts, auditors examined general ledger downloads, which were reconciled to the audited financial statements.
- To obtain additional information for the Introduction, auditors reviewed documents from and websites maintained by the District, Reclamation, and the ADWR.

- To obtain information for the questions and answers chapter, auditors reviewed documents from the District, the ADWR, Arizona Water Banking Authority, and Reclamation, and an Arizona State Senate Brief. Auditors also assessed the District's compliance with open meeting law requirements pertaining to executive session. Auditors identified a finding regarding compliance with an administrative requirement of open meeting law related to executive session minutes after reviewing minutes for 15 meetings held from June 2016 to August 2017. Because the content of executive session minutes is confidential, the finding was communicated directly to the District's Board.

The Auditor General and staff express their appreciation to the District's Board and staff for their cooperation and assistance throughout the audit.

AGENCY RESPONSE



December 19, 2017

Ms. Debra K. Davenport, CPA
Auditor General
State of Arizona
2910 North 44th Street, Suite 410
Phoenix AZ 86018

Dear Ms. Davenport:

On behalf of the Central Arizona Water Conservation District (CAWCD) Board of Directors, please find attached our formal response to the Recommendation on page 18 of the final draft of the special audit of CAWCD.

I would like to express our continued appreciation for the professionalism and responsiveness of your staff during this process as we near completion of the report by the end-of-year deadline.

Sincerely,

Theodore C. Cooke, D.B.A.
General Manager

cc: CAWCD Board of Directors
Jeff Gray

Chapter 1: District collects and spends revenues in accordance with requirements or policies

Recommendation 1.1: The District should work with its legal counsel and the ASRS to determine if the payroll calculations should be revised to help ensure payroll calculations are accurate.

District Response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: CAWCD worked with ASRS in the prior ASRS audit to determine if the payroll calculations should be revised to help ensure payroll calculation accuracy. This issue will be addressed again with ASRS.

