

**Arapahoe County Water and Wastewater Authority
(ACWWA)**

2017 Operating and Capital Improvement Budget

November 9, 2016

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(ACWWA)**

2017 Operating and Capital Improvement Budget

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BUDGET MESSAGE



1. Budget Message

November 9, 2016

Board of Directors
Arapahoe County Water and Wastewater Authority

Your management team is pleased to present the Arapahoe County Water and Wastewater Authority (ACWWA) 2017 Proposed Budget. The purpose of this budget is to provide citizens, investors, and other interested parties with reliable financial information about ACWWA. This budget represents our best effort to predict revenues and expenditures for the year 2017.

ACWWA's budget is one of the most important documents prepared by ACWWA. Through the process of planning and preparing the budget, ACWWA is given the opportunity to assess its plans and goals for the coming and future years. The process also provides direction for management and staff.

It is important to note that while the adoption of this budget focuses on identifying and estimating the spending of financial resources, it is also a policy-setting document. It makes determinations on the use of ACWWA's facilities, the use of staff time, and drives management decisions for 2017. As ACWWA's policy makers, you play a critical role in making decisions regarding ACWWA's future.

Several years of stagnant economic conditions throughout the country and Colorado in the early 2010's resulted in below-average development throughout ACWWA's service area. ACWWA's service area has a large number of undeveloped land parcels and is now seeing a substantial increase in development. The increased activity began in 2015 and continues to trend positively. We have prepared a budget that reflects the improving economy.

The 2017 Budget is designed to meet the goals of ACWWA's mission and vision statements including the objective of providing the highest quality service to our customers at the lowest reasonable cost. This budget provides for planning and development of additional water resources, as well as the operation and maintenance of existing production, distribution, collections and treatment facilities to support the economic growth of ACWWA. This budget is organized and structured to meet external and internal managerial needs. The budget also incorporates the direction for ACWWA as established by the Board's priorities.

1.1 Board of Directors' Priorities

The Board of Directors has developed a series of Strategic Priorities to assist staff in the development of this budget. These priorities are:

- Improve Water Quality
- Improve Customer Service/Relations
- Expansion/Growth of Service Area

- Expense Management.

The 2017 budget furthers the Board's priorities as follows:

1. Improve Water Quality

- a. Together with Cottonwood Water and Sanitation District, ACWWA has been evaluating potential modifications to the treatment process at the Joint Water Purification Plant (JWPP). Additional analysis is currently being conducted, and ACWWA has budgeted to fund modifications to the JWPP in 2017 that will allow for a higher quality water to be delivered from the plant.
- b. ACWWA has been tasked with ensuring that a substantial portion of ACWWA's water supply comes from the ACWWA Flow project, a high-quality water supply. The 2017 budget provides funding for several critical components of the ACWWA Flow project:
 - i. ACWWA will continue to develop this project, and has allocated funding in 2017 to further this effort. The goal in 2017 is to identify all necessary components necessary for the entire project. The completion of the necessary infrastructure is anticipated by 2019.
 - ii. The continued adjudication of water rights for municipal use. ACWWA has adjudicated about one-third of the ACWWA Flow Project water rights. The 2017 budget provides funding for additional adjudication.
 - iii. The purchase of 500 acre-feet of firming storage in the South Platte Basin
 - iv. The construction of a deep injection well at the East Cherry Creek Valley Water and Sanitation District reverse osmosis (RO) water plant in which ACWWA owns capacity.
 - v. Phase 1 and 2 of pipeline development along Arapahoe Road to allow for the transmission of ACWWA Flow water.
 - vi. Treatment and delivery of 1,500 acre-feet of ACWWA Flow water.
- c. In 2017, ACWWA will fund additional areas of enhanced water main cleaning. In the areas that were cleaned in 2016, discolored water events decreased by 80%.
- d. ACWWA will further refine its water quality model to better manage water supplies and improve water quality in 2017.
- e. ACWWA will enhance its Geographic Information System (GIS) program by hiring a GIS Specialist, which will allow ACWWA to provide better customer service, program development and water quality monitoring at reduced costs.

2. Improve Customer Service/Relations

- a. ACWWA will continue to focus on customer service in 2017 to ensure that customer issues are addressed promptly and effectively. In 2015, ACWWA completed a customer survey and has utilized the responses to help shape ACWWA's customer service/communication strategy. ACWWA will continue to reach out to the community with information and to listen to our ratepayers.

- b. ACWWA will enhance its website in 2017 to improve communication between ACWWA and its ratepayers.
- 3. Development Review
 - a. ACWWA conducted an evaluation of its development review process in 2015 (the steps that developers follow to get water and wastewater service from ACWWA). During 2016, ACWWA created a Development Handbook to assist developers with this process. In 2017, ACWWA will continue to review processes and policies.
 - b. Staff will continue to reach out to the development community for input.
- 4. Expense Management
 - a. ACWWA is in a mode of continuous improvement, and will review policies and procedures in 2017 to ensure they meet ACWWA's needs in the most cost-effective manner.
 - b. ACWWA is constructing a multi-phase pipeline in Arapahoe Road that will connect ACWWA's system to the East Cherry Creek Valley Water and Sanitation District. This pipeline will allow ACWWA's water supply being treated at the ECCV Water Plant (in which ACWWA owns capacity) to be delivered to ACWWA's service area from another location. Phase 2 of this project will be coordinated with the Southeast Metro Stormwater Authority (SEMSWA) and Urban Drainage, producing considerable savings to ACWWA for construction of this project.
 - c. ACWWA, in partnership with East Cherry Creek Valley Water and Sanitation District, will be constructing a well to ensure the future utility of a water treatment plant. By partnering with ECCV, ACWWA is realizing economies of scale in this project which ACWWA would not have on its own.
 - d. In 2017 ACWWA will continue its preventative maintenance program, which provides for scheduled maintenance of equipment to minimize the risk of failure. Preventative maintenance helps manage costs by reducing the chance of expensive line and system breaks that can interrupt service to ACWWA's rate payers.
 - e. Bond Refunding – ACWWA anticipates refunding its Series 2007 bonds in 2017. This will likely result in substantial savings due to lower interest rates
 - f. Ensuring system reliability through the maintenance of ACWWA's infrastructure is essential to avoiding significant service interruptions. The 2017 budget includes several projects to facilitate reliability:

The 2017 budget is shaped by ACWWA's mission and reflects the Board's priorities. The operating budget was developed to ensure that enough funds are available to pay for anticipated costs. The non-operating budget includes only those projects that are necessary to meet the challenges of ensuring an adequate supply of water and the effective treatment of wastewater. The budget document reflects the progressive nature of ACWWA and promotes accountability, prudence, and fiscal conservatism.

ACWWA's Board and management strive to be proactive in anticipating future developments that will affect ACWWA's operating environment. Issues that will impact ACWWA in the coming years include:

- Greater federal and state regulation of water and wastewater operations;
- Increased pressure on water supplies, resulting in the need to manage current water supplies and for greater regional cooperation;
- Capital costs required for additional treatment capacity for the ACWWA Flow project;
- Higher future costs as a result of regulation and managing increasing demand for water coupled with decreasing supplies;
- An aging workforce in this sector which is creating a shortage of skilled workers;
- Aging water and wastewater infrastructure that is being addressed with ACWWA's asset management program to optimize the life of the systems.

As we move into 2017, we will continue with our commitment to provide the highest quality water and wastewater services for our customers while keeping rates as low as possible. Staff will focus on maintaining and developing internal processes to most efficiently manage ACWWA's finances and continue to be accountable to the Board of Directors and ACWWA's rate payers.

We would like to thank the Board of Directors for their leadership and foresight in adopting policies and priorities to guide the development of ACWWA's 2017 Budget. We would also like to extend our gratitude to the ACWWA employees, who through their hard work and dedication have enabled ACWWA to meet its goals and objectives for 2016. The preparation of this document would not have possible without the support and input from all departments.

Respectfully submitted,

Steve Witter, P.E.
General Manager

Kate McRae
Director of Finance and Business Operations

INTRODUCTION





GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished
Budget Presentation
Award

PRESENTED TO

Arapahoe County Water & Wastewater Authority
Colorado

For the Fiscal Year Beginning

January 1, 2016

A handwritten signature in black ink that reads "Jeffrey P. Evans".

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented an award of Distinguished Presentation to Arapahoe County Water and Wastewater Authority, Colorado for its annual budget for the fiscal year beginning January 1, 2016.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, and as a communications device.

The award is valid for a period of one year only. We believe that our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

2. Summary of Operations

Form of Government	Authority
Government Code Section	Colorado Revised Statutes Section 29-1-204.2
Date of Organization	November 1989
Fiscal Year End	December 31
Number of FTEs authorized	38
Number of Accounts	3,200
Average census	31,000
Lone Tree Creek Water Reuse Facility	
Average Daily Wastewater Flow	2.5 million gallons
Total Capacity	3.6 million gallons
ACWWA's Capacity	2.5 million gallons
Inverness' Capacity	1.1 million gallons
Sewer Collection Pipeline (in miles)	102
Water Pipeline (in miles)	227
Number of Water Storage Tanks	3
Number of Fire Hydrants	1,467
Number of Valves	5,978
Number of Meters	4,600
Number of Water Supply Wells	22
Number of Booster Stations	3
Number of Lift Stations	3
Number of Manholes	3,115
Number of Interceptors	7
Number of Water Tap Equivalents	7,578

3. Description and History

3.1 Description

ACWWA represents a cooperative effort among public entities to provide water and wastewater service. ACWWA is a political subdivision formed pursuant to an intergovernmental agreement (IGA) between Arapahoe County and the Arapahoe Water and Sanitation District (AWSD or the District). ACWWA was formed in 1988 for the purpose of developing water resources, systems and facilities, and wastewater treatment and disposal systems and facilities in whole or in part for the benefit of the customers, county inhabitants, and others.

3.2 History

Effective January 1, 1989, the IGA granted ACWWA all responsibility for and control over AWSD's operating system, related operating assets, tap fees, contributions, revenues and expenses. The agreement provided for a lease of the District's property, plant and equipment. The lease was set to expire on either December 1, 2010, or upon the dissolution of the District or ACWWA, whichever came first. Pursuant to an IGA dated July 7, 1995, the District and ACWWA entered into a plan to dissolve the District. The voters of the District approved the plan and the Arapahoe County District Court signed the Order of Dissolution March 4, 2000, officially dissolving the District. All property, assets and water rights were turned over to ACWWA and any prior agreements between the two entities are subordinate to the July 7, 1995 Agreement.

On February 6, 2002 ACWWA entered into an IGA with the Arapahoe County Water and Wastewater Public Improvement District (the PID). The PID was organized in 2001, pursuant to the provisions of Title 30, Article 20, Part 5, and Colorado Revised Statutes (CRS) for the purpose of constructing certain public improvements to serve customers both in and out of its jurisdiction boundaries. The IGA was amended and restated, in part, to have the PID replace the District as a party to the IGA. The PID retains ACWWA as an independent contractor to serve as its management agency. In consideration for ACWWA's commitment to provide management services, the PID agreed to issue general obligation bonds and certify a mill levy on property within the PID at a level sufficient to make the annual debt service payments as identified in the PID's annual capital plan.

ACWWA's core mission is to provide for water and wastewater service within its service area. ACWWA complies with a number of regulatory programs designed to protect the region's water resources, including the Safe Drinking Water Act (SDWA) and Clean Water Act (CWA) which are examples of a number of forces that will continue to challenge the municipal water and wastewater industry in the near future. Other regulatory compliance requirements, increasing customer awareness, aging infrastructure, and a growing scarcity of high-quality water sources will require greater creativity and innovations.

4. Organizational Structure

4.1 Authority Powers

ACWWA is a political subdivision and a public corporation of the State of Colorado, separate from the Members of the Establishing Contract. The rights, powers, privileges, authorities, functions, and duties of ACWWA are established by the laws of the State of Colorado, particularly C.R.S. §29-1-204.2, , which provides ACWWA the power: to enter into contracts; to sue and be sued; to hire employees and agents; to incur debts, liabilities, or obligations; to issue revenue obligations or refund outstanding indebtedness; to acquire, hold, lease, or dispose of real and personal property utilized only for the purposes of water treatment, distribution, and wastewater disposal; to develop water resources, systems, or facilities or drainage facilities for the benefit of the inhabitants of the Members or others; to condemn non-public utility property for use as rights-of-way; and to fix, maintain, and revise fees, rates, and charges for functions, services, or facilities provided by ACWWA. ACWWA does not have the power to tax.

4.2 Governing Board

There are nine authorized positions for the Board of Directors of ACWWA. These board positions are appointed at the discretion of the Arapahoe County Commissioners. Two of the five County Commissioners currently serve on the ACWWA's Board of Directors.

ACWWA's Board sets policy and direction for ACWWA. These nine individuals serve for a term of three years and appointments are made as vacancies occur. The Board elects its own officers, including a President, Vice-president, Secretary, and Treasurer.

ACWWA's Board of Directors and any reported conflicts of interest are as follows:

- **Doyle Tinkey's** conflict form has been filed; he owns a home in the ACWWA service area. Mr. Tinkey is retired from CH2M Hill.
- **Geri G. Santos-Rach's** conflict form has been filed; she has no conflicts to report and notes that she has contributed to the campaigns of Arapahoe County Commissioners who have served or are currently serving on the ACWWA Board.
- **Nancy Sharpe's** conflict form has been filed; she is a member of the Arapahoe County Board of County Commissioners, the Centennial Airport Authority Board, an alternative on the SEMSWA Board, and the Urban Drainage and Flood Control Authority Board. Her 2010 campaign received donations from Bob Lembke and Pat Mulhern.
- **Nancy Doty's** conflict form has been filed; she is a member and Finance Officer of the Arapahoe County Board of County Commissioners, is on the SEMSWA Board, and is Secretary of the Centennial Airport Authority Board. She received a 2012 campaign contribution from Bob Lembke and 2015 campaign contributions from Doyle Tinkey and Geri Santos-Rach.

- **Brad Cromer's** conflict form has been filed; he has no conflicts to report and noted that he has previously made campaign contributions to Arapahoe County Commissioners Rod Bockenfeld, Nancy Sharpe, and Nancy Doty.
- **Kenneth Beard's** conflict form has been filed; he has no conflicts to report.
- **Keith Gardner's** conflict form has been filed; he has no conflicts to report.
- **Cliff Dodge's** conflict form has been filed; he is currently working for the Arapahoe County Clerk and Recorder doing ballot security for the primary and general elections in 2016.
- **Tom Wood's** conflict form is pending; he was appointed in October 2016.

4.3 ACWWA's Management Team and Staff

Steven F. Witter, PE is ACWWA's General Manager. The General Manager is the chief executive officer and administrative head of ACWWA and is responsible for carrying out policies set by the Governing Board and leading ACWWA toward the successful accomplishment of its mission. Kate McRae, CPA, MPA, is ACWWA's Director of Finance and Business Operations, Kevin McBrien, PE, serves as ACWWA's Engineering Manager, and Martin Stegmiller is ACWWA's Operations Manager. This group comprises ACWWA's Management Team.

ACWWA currently has 38 budgeted positions, including two new positions added for 2017.

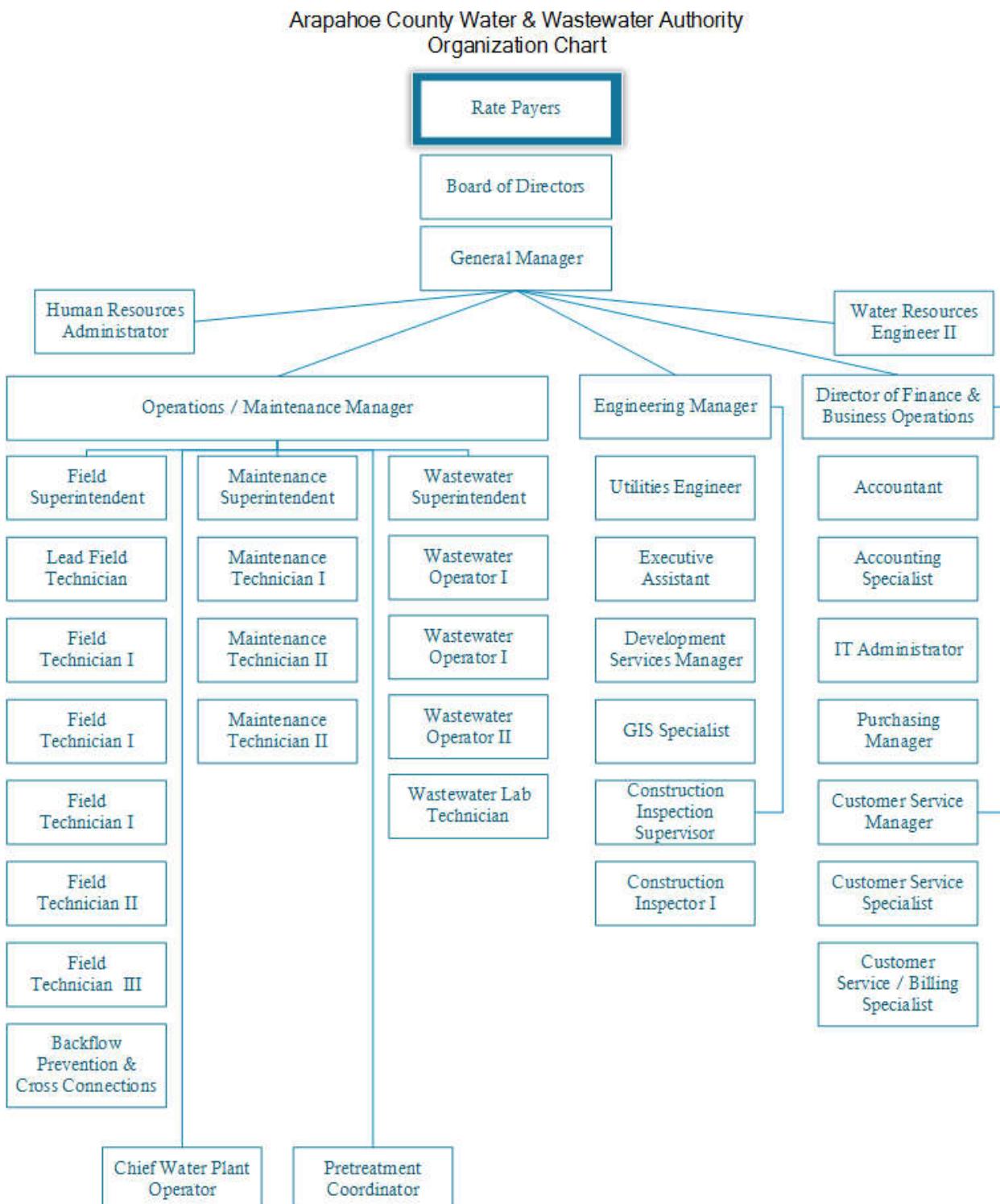


Pictured above is the Clean in Place system at the Joint Water Purification Plant (JWPP); to the right is the Pall Microfiltration System currently in use to filter potable water.

ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY
APPROVED POSITIONS 2015 - 2017

REGULAR EMPLOYEES (FTE)	2015 BUDGET	2015 ACTUAL	2016 BUDGET	2016 ACTUAL	2017 PROPOSED
ADMINISTRATION					
General Manager	1.0	1.0	1.0	1.0	1.0
Director of Finance and Business Operations	1.0	0.5	1.0	1.0	1.0
Capital Projects Manager	1.0	1.0	1.0	1.0	1.0
Operations Manager	1.0	1.0	1.0	1.0	1.0
Customer Service Manager	1.0	1.0	1.0	1.0	1.0
Development Services Manager	1.0	1.0	1.0	1.0	1.0
Maintenance Superintendent	1.0	1.0	1.0	1.0	1.0
Purchasing/Building Manager	1.0	1.0	1.0	1.0	1.0
Water Resources Engineer	1.0	1.0	1.0	0.8	1.0
Utilities Engineer	1.0	-	1.0	0.8	1.0
Construction/Facilities Supervisor	1.0	1.0	1.0	1.0	1.0
IT Analyst	1.0	1.0	1.0	1.0	1.0
Human Resources Administrator	1.0	0.3	1.0	1.0	1.0
Accountant	1.0	1.0	1.0	1.0	1.0
Executive Assistant	1.0	1.0	1.0	1.0	1.0
Accounting Specialist - Payroll	1.0	1.0	1.0	1.0	1.0
Accounting Specialist - A/R & A/P	1.0	1.0	1.0	0.2	-
Billing Specialist	-	-	-	0.3	1.0
Customer Service Specialist	1.0	1.0	1.0	1.0	1.0
Maintenance Technician	1.0	0.3	1.0	1.0	1.0
Maintenance Technician	1.0	1.0	1.0	1.0	1.0
Maintenance Technician	1.0	1.0	1.0	1.0	1.0
Field Inspector	1.0	1.0	1.0	0.6	1.0
GIS Coordinator	-	-	-	-	0.8
WATER OPERATIONS					
Field Superintendent	1.0	0.3	1.0	1.0	1.0
Lead Field Technician	1.0	1.0	1.0	1.0	1.0
Pretreatment Coordinator	1.0	1.0	1.0	1.0	1.0
Chief Plant Operator	1.0	1.0	1.0	1.0	1.0
Field Technician	1.0	1.0	1.0	1.0	1.0
Field Technician	1.0	1.0	1.0	1.0	1.0
Field Technician	1.0	1.0	1.0	1.0	1.0
Field Technician	1.0	1.0	1.0	1.0	1.0
Field Technician	1.0	0.6	1.0	1.0	1.0
Cross-connection/Backflow Technician	1.0	1.0	1.0	1.0	1.0
WASTEWATER OPERATIONS					
Wastewater Plant Superintendent	1.0	1.0	1.0	1.0	1.0
Wastewater Plant Operator II	1.0	1.0	1.0	1.0	1.0
Wastewater Plant Operator II	1.0	1.0	1.0	0.4	1.0
Wastewater Plant Operator II	-	-	-	-	1.0
Wastewater Lab Technician	1.0	1.0	1.0	1.0	1.0
Totals	36.0	31.9	36.0	34.0	37.8

4.4 Organization Chart



4.5 Our Vision

Our vision is to consistently meet or exceed customer expectations.

4.6 Our Mission

It is our goal to provide unparalleled service and accountability to our customers while furnishing the highest quality water.

4.7 Our Values

- ☆ Integrity – we strive always to do the right thing: for our ratepayers, for our employees, and for our environment.
- ☆ Customer Service – we aim to provide superior service to both our internal and external customers.
- ☆ Sustainability – we will be proactive in planning, constructing, operating, maintaining, and financing our system in a manner consistent with the principles of environmental, social and economic sustainability.
- ☆ Focus – we stay committed to our goals and strive to make the best use of our local water resources and adopt practices which encourage conservation of water, energy, and other natural resources.
- ☆ Communication- we value open, honest and timely communication.
- ☆ Teamwork – we value our employees as our most important resource and we are committed to the success of every member of the team.
- ☆ Excellence – we are passionate about our knowledge and experience that sets us apart and makes us good stewards of the public's resources.



Above is the re-use pump gallery at the Lone Tree Creek Water Reuse Facility

5. ACWWA's Service Area

ACWWA's service area encompasses approximately 5,000 acres in the southeastern Denver metropolitan area and is located approximately 10 miles south of downtown Denver in the southern part of Arapahoe County. The general boundaries are Parker Road on the east, Cherry Creek Recreation Area on the north, Havana Street on the west, and the Arapahoe/Douglas County line on the south.

ACWWA's service area is primarily comprised of office complexes, commercial businesses and light industrial areas. ACWWA also serves a number of single and multi-family residential customers. Through intergovernmental agreements, ACWWA also provides wholesale wastewater treatment services for the Cottonwood Water and Sanitation District located south along Jordan Road in Douglas County, and retail water service to the Town of Foxfield located east of Parker Road and south of Arapahoe Road. Unlike the ACWWA service area, these areas are predominantly residential. ACWWA contracts with the Elkhorn Ranch Subdivision in Elbert County to provide water services. ACWWA charges a PID equivalency fee or extra-territorial fees to those customers who do not reside in Arapahoe County.

5.1 Demographic and Economic Activity Information

Included in this section is historical and demographic and economic information relevant to the Denver metropolitan area, Arapahoe County and ACWWA's budget.

5.2 Population

The following table provides a history of the populations of Arapahoe County, the Denver-Aurora Core Based Statistical Area (the "Denver-Aurora CBSA") and the State. The Denver-Aurora CBSA is comprised of six metropolitan counties and four bordering counties: Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, and Park. Between 2000 and 2010, the population of Arapahoe County increased 17.2%, and the populations of the Denver-Aurora CBSA and the State increased 15.8% and 16.9%, respectively.

Population

Year	Arapahoe County	Percent Change	Denver-Aurora CBSA			Percent Change
			Aurora	Percent Change	Colorado	
1970	162,142	--	1,116,226	--	2,207,259	--
1980	293,621	81.1%	1,450,768	30.0%	2,889,735	30.9%
1990	391,511	33.3	1,650,486	13.8	3,294,394	14.0
2000 ⁽¹⁾	487,967	24.6	2,196,957	33.1	4,301,261	30.6
2010	572,003	17.2	2,543,482	15.8	5,029,196	16.9
2011	585,552	--	2,601,472	--	5,120,193	--
2012	595,779	1.7%	2,647,908	1.8%	5,191,979	1.4%
2013	607,438	2.0	2,698,817	1.9	5,270,986	1.5
2014	618,341	1.8	2,753,338	2.0	5,353,471	1.6

(1) Population of the Denver-Aurora CBSA adjusted by Colorado State Demography Office to reflect the 2001 creation of the City and County of Broomfield.

Sources: United States Department of Commerce, Bureau of the Census (1970 to 2010) and Colorado State Demography Office (2011 to 2014 estimates, which are subject to periodic revision).

5.3 Income and Employment

The following table sets forth the annual per capita personal income levels for the residents of Arapahoe County, the Denver-Aurora CBSA, the State and the nation. Per capita personal income levels in Arapahoe County have consistently exceeded Denver-Aurora CBSA, State and national levels during the period shown.

Per Capita Personal Income

Year ⁽¹⁾	Denver-Aurora			
	Arapahoe County	CBSA	Colorado	United States
2010	\$49,765	\$46,068	\$41,877	\$40,277
2011	53,551	48,953	44,349	42,453
2012	55,980	51,524	46,402	44,266
2013	53,856	51,603	46,746	44,438
2014	56,294	53,983	48,869	46,049
2015	n/a	n/a	50,410	47,669

(1) Denver-Aurora CBSA and County figures updated November 19, 2015. State and national figures updated March 24, 2016. All figures are subject to periodic revisions.

Source: United States Department of Commerce, Bureau of Economic Analysis.

Labor Force and Employment

Year	Arapahoe County ⁽¹⁾		Denver-Aurora CBSA ⁽¹⁾		Colorado ⁽¹⁾		United States
	Labor Force	Percent Unemployed	Labor Force	Percent Unemployed	Labor Force	Percent Unemployed	Percent Unemployed
2011	319,253	8.3%	1,431,161	8.3%	2,736,079	8.4%	8.9%
2012	323,152	7.7	1,449,450	7.7	2,759,437	7.9	8.1
2013	327,811	6.6	1,471,025	6.6	2,780,536	6.8	7.4
2014	332,801	4.9	1,494,529	4.8	2,815,200	5.0	6.2
2015	334,800	3.7	1,504,944	3.7	2,828,529	3.9	5.3
<u>Month of June</u>							
2015	337,322	4.0%	1,516,377	3.9%	2,852,411	4.2%	5.3%
2016 ⁽²⁾	345,589	3.8	1,554,973	3.8	2,915,108	4.0	4.9

(1) Figures for Arapahoe County, the Denver-Aurora CBSA, and the State are not seasonally adjusted.

(2) June 2016 figures for Arapahoe County, the Denver-Aurora CBSA, and the State are preliminary.

Sources: State of Colorado, Department of Labor and Employment, Labor Market Information and United States Department of Labor, Bureau of Labor Statistics.

5.4 Building Activity

The following table provides a history of building permits issued for new construction in unincorporated Arapahoe County for the years indicated.

Building Permits Issued in Unincorporated Arapahoe County

Year	Single Family		Multi-Family ⁽¹⁾		Commercial/Industrial ⁽²⁾	
	Permits	Value	Permits	Value	Permits	Value
2011	93	\$15,333,125	0	\$0	206	\$33,357,583
2012	178	28,391,024	296	28,527,700	206	23,762,897
2013	249	47,085,131	247	32,955,609	210	35,518,235
2014	265	53,359,420	15	3,498,000	215	71,029,000
2015	346	67,039,979	611	41,700,000	189	66,910,543
2016 ⁽³⁾	185	40,827,165	8	1,615,896	101	22,520,584

(1) Includes apartments, condominiums and townhomes.

(2) Includes commercial remodel, addition, new structure or tenant finish.

(3) Figures are for January 1 through July 31, 2016.

Source: Arapahoe County Public Works and Development Department, Building Division.

5.5 Foreclosure Activity

The following table presents historical information on foreclosure filings. Such information represents the number of foreclosures filed, but does not take into account the number of foreclosures which were filed and subsequently redeemed or withdrawn.

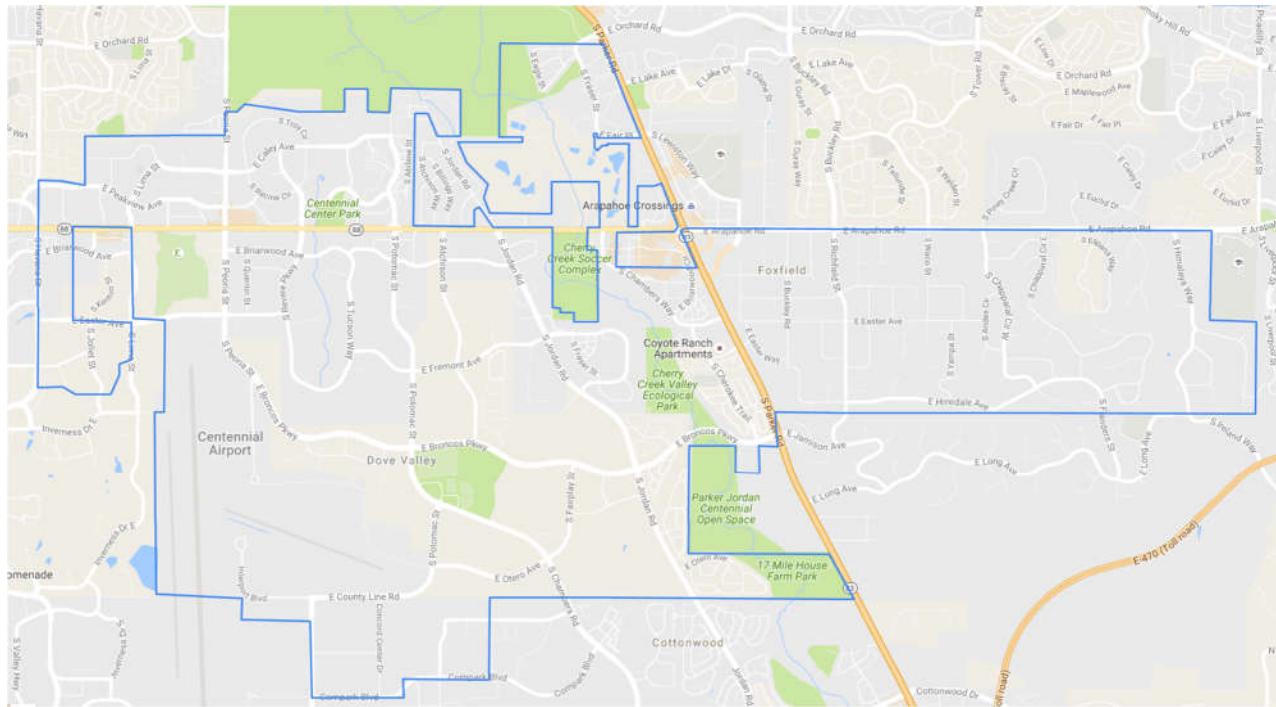
History of Foreclosures – Arapahoe County

Year	Number of Foreclosures Filed	Percent Change
2011	3,959	--
2012	3,589	(9.3)%
2013	1,700	(52.6)
2014	1,314	(22.7)
2015	858	(34.7)
2016 ⁽¹⁾	459	--

(1) Figures are for January 1 through July 31, 2016.

Sources: Colorado Division of Housing (2011-2015 figures) and the Arapahoe County Office of the Public Trustee (2016 figure).

5.6 Service Area Map



6. Water Supply

At full build-out of the current service area, ACWWA estimates that demand will be approximately 10,500 acre-feet per year. In 2009, ACWWA began developing the ACWWA Flow Project, and as of 2017 has purchased water rights with an estimated average yield of 4,400 acre-feet. ACWWA has a diversified water rights/supply portfolio that includes non-tributary groundwater from the Denver Basin Aquifer, senior water rights on Cherry Creek and tributary surface water rights in the South Platte Basin. ACWWA also utilizes augmentation plans to allow ACWWA the ability to maximize the use of its water supplies.

ACWWA further optimizes its water supply by operating a non-potable irrigation system and a reuse irrigation system. The non-potable irrigation system will include the use of Chambers Reservoir, a 1,400-acre-foot reservoir located at the southwest corner of Chambers Road and E 470. Reservoir construction has been completed; however, some issues need to be resolved before filling and placing in service as part of the non-potable system.

6.1 The ACWWA Flow Project

In the early 2000's, ACWWA's leadership recognized that additional water supply would be needed for ACWWA's future. The new water supply would address the increased water demand from growth, but also provide for current customers who were being served in part by non-tributary groundwater wells. Due to the heavy use of non-tributary groundwater wells in the Front Range, the production of these wells was anticipated to drop over time and a replacement water source would become necessary.

In 2009, after evaluating multiple options, the ACWWA Board approved a project to develop renewable water supplies. The project, named the “ACWWA Flow Project,” includes the purchase and adjudication of 4,400 acre-feet of average yield consumptive use surface water rights from the South Platte Basin. It also includes the necessary infrastructure to store, treat and deliver that water to the ACWWA service area.

ACWWA used a portion of the 2009 Series Bonds’ net proceeds to acquire the ACWWA Flow water rights. Infrastructure for treatment, storage, and delivery of the new water rights must be constructed. Several proposed facilities will require environmental and other permits which have not yet been issued; ACWWA cannot guarantee that such permits will be issued.

The ACWWA Flow water rights are being adjudicated in the District Court in and for Water Division No.1 in Greeley, Colorado (Water Court). These water rights are expected to provide water supply for over 17,000 tap equivalents, and will be enhanced by ACWWA’s ability to reuse its water supply. ACWWA expects this water to provide a secure water supply to meet its anticipated future demands. However, unlike non-tributary groundwater, surface water rights are impacted by the variable hydrologic conditions. It is anticipated that ACWWA’s portfolio of non-tributary groundwater and Cherry Creek water rights will provide water in drought years to supplement surface water rights from the ACWWA Flow Project.

In order to be allowed permanent use for a municipal water supply, the water rights must be successfully adjudicated in Water Court. ACWWA began the adjudication of the ACWWA Flow Project water rights in 2009, and that process continues. Since 2009, ACWWA has successfully adjudicated a number of water rights and an augmentation plan. The ACWWA Flow Project is currently delivering about 1,500 acre-feet of water annually, or about one-third of ACWWA’s current potable water demand, and is providing a more diversified water supply as well as improved water quality to ACWWA customers. ACWWA began delivering ACWWA Flow water to its service area in 2013.

In 2017, ACWWA will continue to develop this project and has budgeted to acquire capacity in a storage reservoir in the South Platte Basin to increase the effective yield of the water from the Project. ACWWA will also be investing in a deep injection well being constructed at the East Cherry Creek Valley Water and Sanitation District (ECCV) Water Treatment Plant. ACWWA owns capacity in this plant to treat its ACWWA Flow Project water supply. In 2017, ACWWA will develop monitoring facilities and meet other obligations from the decreed Augmentation Plan. ACWWA currently projects that all necessary infrastructure to deliver 4,400 acre-feet to the ECCV treatment plant will be in place by 2019.

7. Accomplishments

2016 has been a productive year for ACWWA. Key accomplishments include:

Water Quality Improvements:

- Conducted an enhanced main cleaning program which impacted approximately 3,000 households. This cleaning removed sediment in the pipes that had accumulated over time. Customer calls related to discolored water issues decreased 633% from 2015 to 2016 in the areas that underwent the enhanced flushing process.

- Developed and evaluated a potential solution to return the Joint Water Purification Plant (JWPP) to a higher water treatment level. In the near-term, this will help ACWWA improve water quality to meet its goals of 160 mg/l hardness and under 400 mg/l TDS (total dissolved solids) in the service area. The project is currently under review.

Managing Internal Expenses/Financial Planning

- Reduced ACWWA expenses related to retirement contributions from 2015 to 2016 by 2.0%.
- Made changes to ACWWA's health insurance program that will reduce costs an estimated 18% in 2017.
- Reduced overtime costs for two consecutive years. Overtime expense for 2016 is projected to decrease more than 30% over 2014 expense.
- Modified policies related to the issuance of service termination notices, which saves over \$6,000 annually.
- Restructured the utility locate program, saving over \$25,000 in consultant costs.
- Changed administrators for ACWWA's retirement programs, providing more service to employees for lower cost.
- Received an upgrade in our credit rating from A+ to AA due to improvements in our credit risk profile, which lowers ACWWA's interest costs.
- Refunded the Series 2006 Bonds, resulting in a present value savings of more than \$3.0 million over the remaining term of the bonds in reduced principal and interest payments

Managing External Costs

- Analyzed water tier sizes and rates for residential domestic accounts and modified each of these, which will result in a reduction in water bills for low-volume water users beginning in 2017.

Improving Customer Service/Relations

- Instituted a program for public tours of ACWWA systems.
- Enhancing customer communication related to water shut offs for non-payment. This change in procedure resulted in a decrease in water shut-offs in 2016, saving ACWWA significant staff and trip time.
- Revised website to be easier to navigate, and added more informative and relevant content.
- Completed and approved a Water Efficiency Plan with the State of Colorado. This will allow ACWWA to roll out additional services to customers related to water conservation and education.

- Attended and presented at several Homeowners Association Meetings in 2016.

Service Area Development

- Created a Development Process Handbook and made it interactive on ACWWA's new website.

Safety

- There were no lost time accidents in 2016

Employee Certifications

- ACWWA employees achieved seven new certifications in 2016.

Vulnerability Assessment

- Staff worked with the Arapahoe County Sheriff's office to assess the vulnerability of ACWWA facilities and services. A plan was created to address the areas of highest priority.

Projects

- Successfully decreed water rights in the Weldon Ditch Company for ACWWA's use.
- Took out of operation and repaired one of ACWWA's storage tanks.
- Completed the first phase of the pipeline project down Arapahoe Road near Waco Road.
- Started design on the second phase of the pipeline project to allow water to be delivered in 2017.



Above are the tertiary effluent pumps at the Lone Tree Creek Water Reuse Facility (LTCWRF).

8. Budget Process and Timeline

8.1 Budget Preparation

ACWWA prepares an annual budget to provide a blueprint for operations for the coming year. Copies of the draft and final budget will be made available to all interested parties and opportunities will be provided for public input prior to final adoption. Each year, as part of the budget process, ACWWA's goals and objectives are reviewed and updated as necessary to reflect current challenges as well as changed conditions. Staff also seeks direction from the Board of Directors.

8.2 Budget Calendar

<u>Date</u>	<u>Activity</u>
March 2016	Long-term strategic priorities are approved by the Board.
August 2016	Director of Finance meets with Executive Team and department heads to determine staffing levels, expense budgets, and capital outlay needed for 2017; begin developing budget.
September 2016	Staff continues to develop the budget.

October 2016	Staff presents draft 2017 budget to the Finance Committee on October 3 and to the full Board on October 12.
November 2016	Staff presents 2 nd draft of 2017 budget to Board and holds rate hearing.
December 2016	On or before December 31, the Board adopts the budget.
January 2017	No later than 30 days following the beginning of the fiscal year of the budget adopted, the budget is filed with the State of Colorado.

8.3 Annual Budget Statutory Requirements

ACWWA's annual budget is prepared and adopted under the provisions of C.R.S. §29-1-113. ACWWA's fiscal year is January 1 through December 31.

On or before October 15 of each year, ACWWA's budget officer submits a draft budget to the Governing Board. The budget covers proposed operations and funding requirements for the ensuing fiscal year. On or before December 31 of the current year the Governing Board adopts the budget. ACWWA advertises all required meetings of budget discussions along with the intent to adopt the budget.

A resolution adopting the budget and appropriating the funds is filed with ACWWA's Director of Finance, whose duty it is to disburse monies or issue orders for the payment of monies as required by statute. The final adopted budget for ACWWA is the operating and fiscal guide for the ensuing year.

8.4 Budget Amendments

A budget amendment is defined as any action that increases or decreases total appropriated fund amounts in ACWWA's adopted budget. Budget amendments could be caused by various reasons, such as:

- The availability of more accurate information after the budget is adopted;
- Modified operating requirements;
- Year-end accounting adjustments.

Budget amendments must follow strict statutory guidelines. The intent to amend the budget and the notice of the Governing Board meeting and Public Hearing at which the amendment will be considered and potentially receive approval must be published in a newspaper that has general circulation within the ACWWA service area.

8.5 Lapse of Appropriations

All unexpended appropriations expire at the end of the fiscal year pursuant to C.R.S. §29-1-108 (6).

8.6 Budget Transfers

Budget transfers are defined as any action that changes the budget amount associated with a service, as adopted by the Governing Board. Budget transfers change budget amounts from one line item to another. It is important to note that budget transfers, unlike budget amendments, do not change total overall budget appropriation levels. Budget transfers may be processed by action of the General Manager.

8.7 Filing of the Budget

No later than thirty days following the beginning of the fiscal year of the budget adopted, the governing body shall cause a certified copy of the budget, including the budget message, to be filed with the State of Colorado pursuant to C.R.S. §29-1-113 (1).

8.8 Financial Structure

The State of Colorado and Generally Accepted Accounting Principles govern the use of funds and the budgeting, accounting and auditing associated with this fund structure, as determined by the Governmental Accounting Standards Board.

ACWWA works in concert with Arapahoe County to accomplish water management objectives. The primary authority for the operation of ACWWA is an IGA between Arapahoe County and the PID. ACWWA's budget includes all operations over which ACWWA is financially accountable. ACWWA has one fund, a general fund. There are no component units required for inclusion in ACWWA's budget; however, ACWWA is a component unit of Arapahoe County.

The primary budgetary objective is to provide the highest possible level of service to ACWWA's project participants without impairing ACWWA's sound financial condition. Continual efforts are made to improve productivity, lower costs and enhance service. ACWWA will endeavor to keep current expenditures less than current revenues. Current expenditures are defined as operating expenses, debt payments and capital improvement expenditures.

ACWWA will maintain a budgetary control system to ensure adherence to the budget and will prepare regular reports comparing actual revenues and expenditures to the budgeted amounts. Law and policies limiting revenue sources and expenditures must be explicitly addressed in the budget process. The Governing Board will not establish a goal or policy without also providing the necessary funding to accomplish those goals or policies.

The adopted budget may only be changed through actions by the Governing Board. Staff may make budget change requests to the Governing Board at a regularly scheduled Board meeting. The Governing Board will then consider the requests based on staff's recommendations and approve or deny the requests by a majority vote.

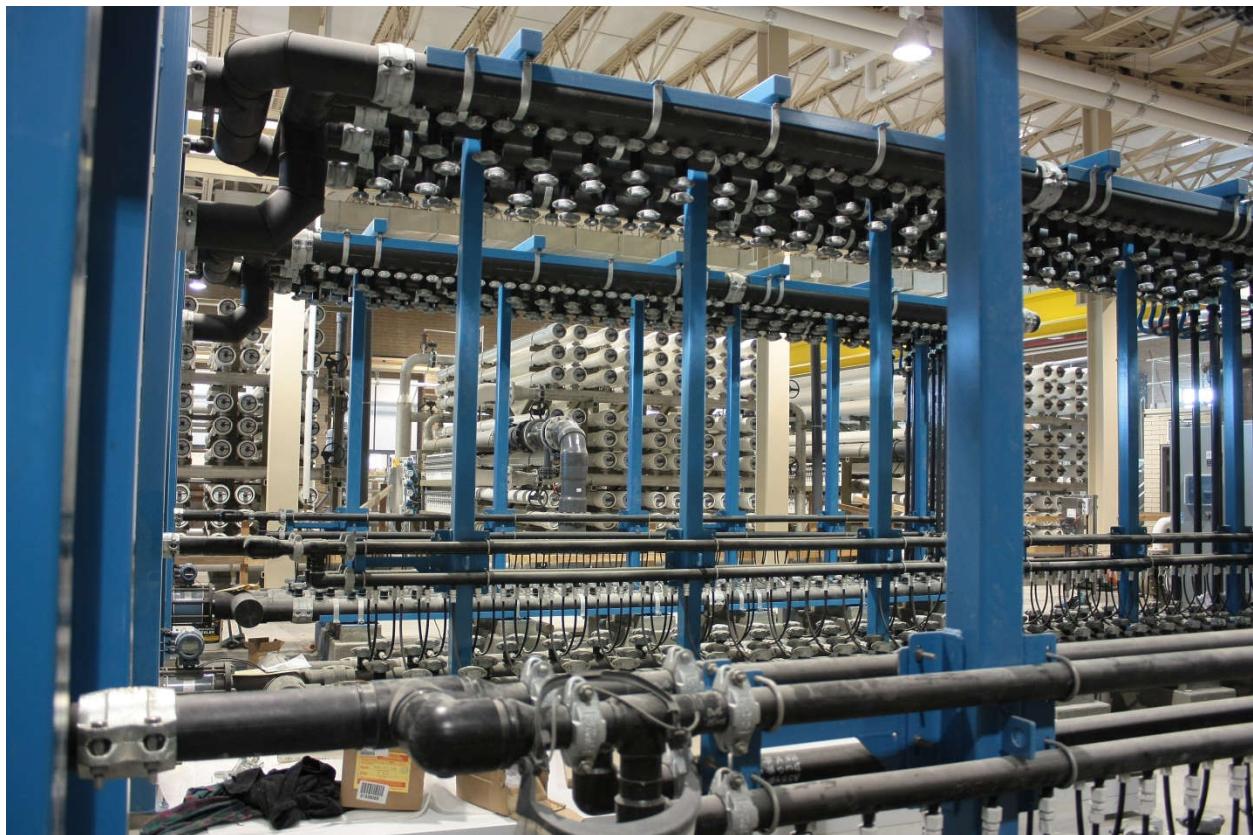
8.9 Budgetary Control

ACWWA's Finance Department prepares interim financial statements with comparison to budget on a monthly basis for review by the Board.

8.10 Contacting ACWWA's Finance Department

This financial report is designed to provide the Board, customers, creditors and investors with a general overview of the Authority's financial condition. Should you have any questions regarding the content of this document, please contact ACWWA at (303) 790-4830.

EXECUTIVE SUMMARY



9. Executive Summary

The 2017 Budget for ACWWA includes both operating and non-operating components. It was prepared by ACWWA's Finance Department in accordance with Generally Accepted Accounting Principles (GAAP) and State of Colorado budgetary requirements. We believe the data presented is accurate in all material respects and is presented in a manner designed to fairly set forth the financial position of ACWWA.

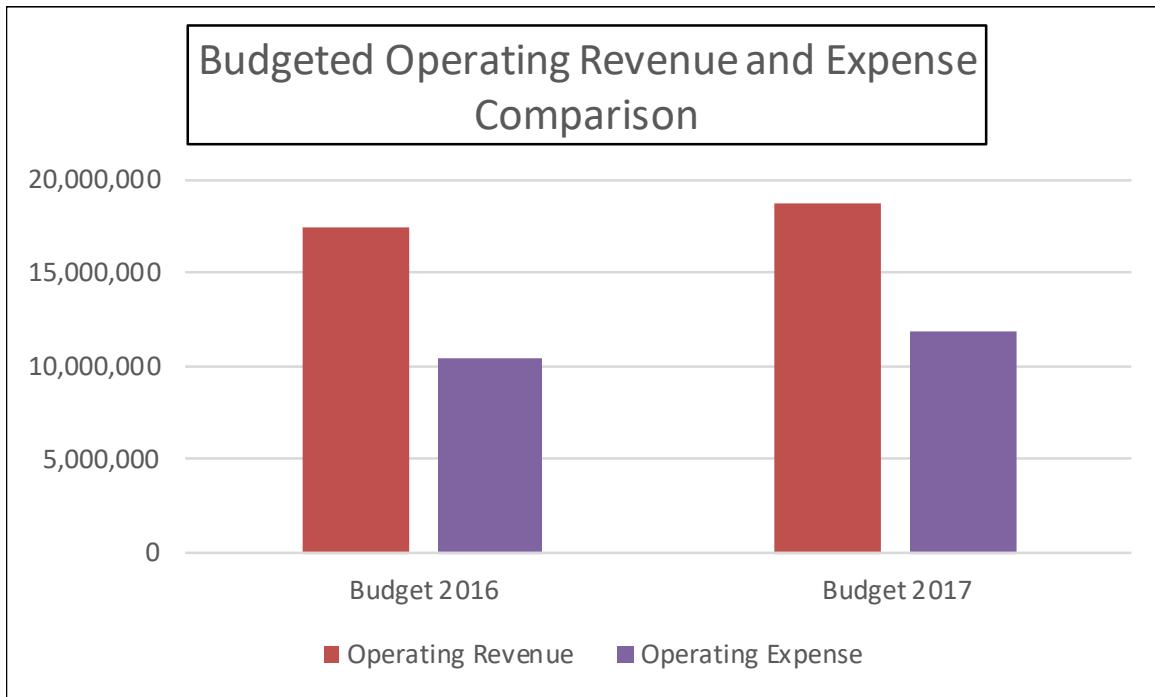
ACWWA has one fund, a general fund, and distinguishes operating revenues and expenditures from non-operating items. Operating revenues and expenditures generally result from providing services and delivering water in connection with the ongoing operations. The principal operating revenues of the Authority are charges to customers for services. Operating expenditures include the cost of providing services, administrative expenses, and depreciation on capital assets. All revenues and expenditures not meeting this definition are reported as non-operating revenues and expenditures.

9.1 Significant Budgetary Items and Trends

The 2017 budget provides funds for the minimum level of expense needed to operate ACWWA in order to provide effective service to ratepayers, maintain the current infrastructure, and add the necessary capital improvements to ensure future operations. ACWWA conducted a cost of service study in 2015 to ensure that rates are adequate to fund current operations as well as current and future capital improvements. As the infrastructure ages, continued investment in the system will be needed to keep it functioning at a high level. Key components of the 2017 budget include:

- Water rate increase of 2%;
- Wastewater rate increase of 2%;
- Water tap fee increase 2%; wastewater tap fee increase of 2% for a combined tap fee increase of 2%;
- Operating revenue of \$18.8 million;
- Operating expenses of \$12.0 million;
- Non-operating revenue of \$10.5 million, primarily from tap fees;
- Non-operating expenditures of \$19.9 million comprised mainly of debt service payments of \$10.2 million and capital spending of \$9.7 million, including \$2.4 million in capital costs that are being carried over to 2017 after being budgeted for in prior years;
- ACWWA is able to fund necessary capital improvements through 2019 without incurring new debt; however, a bond issue may be necessary around 2020 to pay for system improvements.

9.2 Operating Budget



Operating Budget 2016 vs. 2017

Operating Revenue

Operating revenue is projected to be \$18.8 million in 2017, about the same as estimated 2016 revenue. From May through September of 2016, the Arapahoe County area received only 6.81" of precipitation, compared to 13.87" and 10.82" during the same period in 2015 and 2014, respectively. The lack of moisture in 2016 contributed to irrigation revenue that is projected to be 43.6% above budgeted revenue. Thus, assuming that 2017 will have average precipitation, a 2% increase in water and sewer charges, and an expected 3% growth in accounts will likely be offset by decreases in consumption compared to 2016. For consumption-related revenue projections (water charges, irrigation charges, and wastewater charges), 2015 actual results were escalated for account growth and rate increase rather than using 2016 revenue as the basis for the budget.

Water Charges

Water charges revenue is forecasted to increase \$169 thousand, or 2.0% from 2016 to 2017. Water revenue is expected to decrease from 2016 levels as noted above, while fee revenue will increase through account growth and a modest rate increase.

Sewer Charges

Based on 2015 results escalated for account growth and rate increases, wastewater revenue is expected to decrease slightly from estimated 2016 revenue, by \$267 thousand, or 4.7%.

Fire Lines

Fire line stand-by revenue is anticipated to increase by 2% in 2017.

Irrigation Revenue

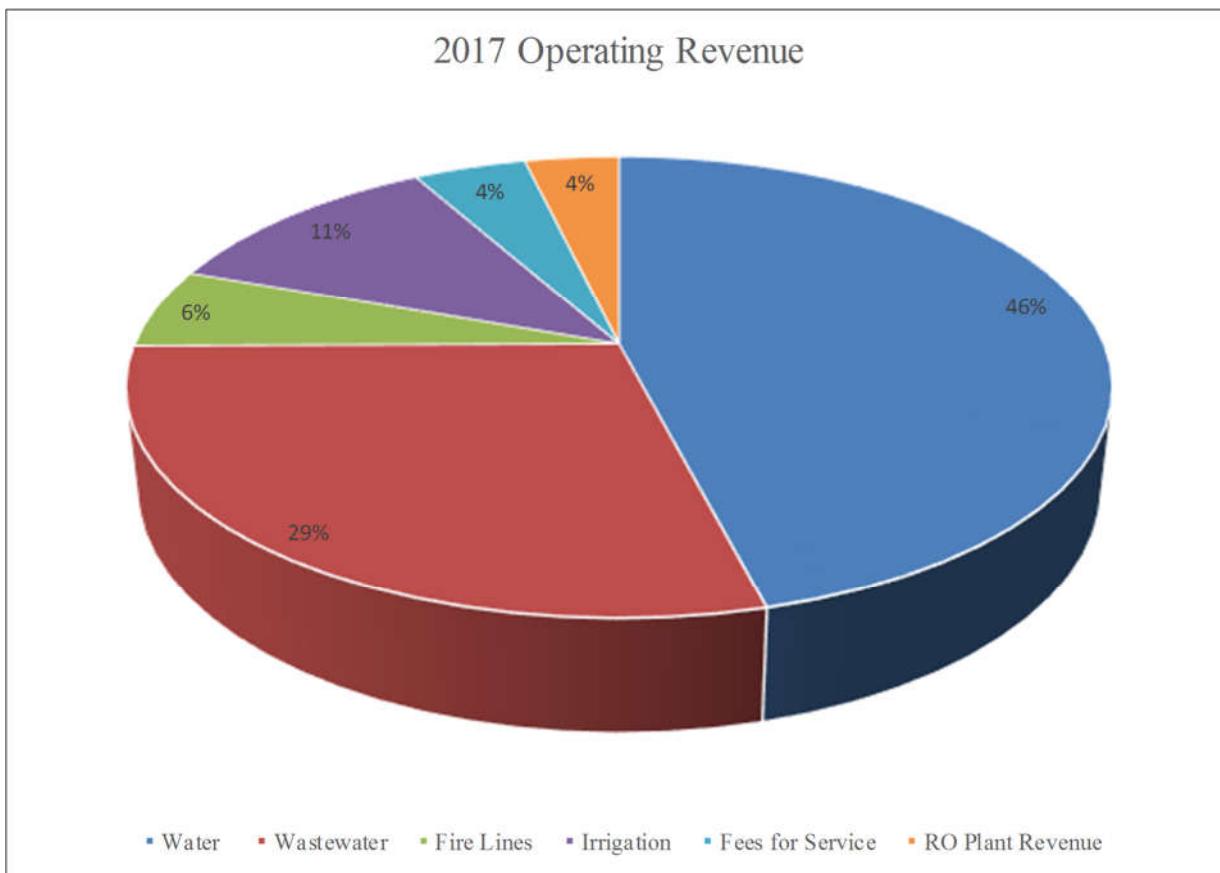
As noted above, 2016's irrigation season has been abnormally dry, resulting in revenue that is 43.6% above budget. The budget for 2017 is based on an average-precipitation year, and reflects a decrease of \$332 thousand, or 13.5% from 2016 projected revenue.

Fees for Service

Fees for service are budgeted to increase slightly in 2017, by \$14 thousand, or 1.6%.

RO Plant Revenue

RO Plant revenue is the reimbursement of the Joint Water Purification Plant (JWPP) operating expenses by Cottonwood Water and Sanitation District for their share of costs, and is directly offset in Operational Expenses. The cost of operating the JWPP is expected to increase in 2017, as the plant begins running as a blended RO/microfiltration plant. RO Plant revenue is budgeted to increase \$396 thousand, or 56.9% and will be offset by operating expenses of the same amount.



Operating Expenses

The 2017 operating expense budget reflects a 15.2% overall increase from 2016 budgeted operating expenses. Operating expenses of \$12.0 million are budgeted to be \$1.9 million higher than estimated 2016 expenses of \$10.0 million. The main factors driving this increase are the increased costs of operating the JWPP as a blended RO/microfiltration plant in 2017, as well as projected increases in system repairs and maintenance and operational costs. The blended operations at the JWPP will generate higher repair and maintenance costs, as well as increases in utilities, professional services, and chemical expenses.

Office Expenses

The budget for 2017 office expenses includes a 3% estimated increase in year-over-year costs, as well as the reclassification of some costs previously reported in other categories, resulting in an overall increase of \$22 thousand, or 8.6%.

Salaries and Benefits

The 2017 salaries and benefits budget reflects an increase of 1.8% from the 2016 budget and includes 37 FTE for the entire year, with an additional one FTE beginning in April 2017 for a total of 37.75 FTE. Increased growth and activity in ACWWA's service area necessitates adding an operator at the Lone Tree Creek Water Reuse Facility (LTCWRF), and the addition of a GIS specialist in the second quarter will allow ACWWA to reduce its utilization of outside contractors. The budget also includes a 3.5% overall salary adjustment. Board actions in 2015 and 2016 to manage ACWWA's funding of employee retirement benefits and health insurance costs will result in benefits savings for 2017, although these savings are partially offset by a 3.0% increase in health care premiums.

Salaries and benefit expense are expended by department as listed below

Water operations includes 10 direct FTEs who are responsible for:

- operations and maintenance of the water distribution system which consists of wells, pumps, piping, valves, tanks, Chambers Reservoir and meter vaults;
- water treatment and compliance testing to meet the standards of the Safe Drinking Water Act;
- flushing and special projects such as the enhanced water main cleaning (ice pigging) that ACWWA undertook in 2016 and will continue in 2017;
- reading and inspecting meters, including construction hydrant meters;
- operations and maintenance of the JWPP RO plant;
- operations and maintenance of the collections system, including lift stations, sewer lines, and pretreatment; and
- responding to customer service questions and issues.

Wastewater operations includes five direct FTEs who perform the following:

- operations and maintenance of the Lone Tree Creek Water Reuse Facility, which treats wastewater to comply with federal and state regulations prior to discharge in Cherry Creek Reservoir;
- laboratory testing to ensure compliance with all regulations;
- operations and maintenance of the non-potable water system.

Administration: includes 22.75 FTEs in 2017 who are responsible for the following:

- the general management of ACWWA, including implementation of board policies;
- financial management including financial reporting, budgeting, cash collections and disbursements;
- customer service and billing activities;
- human resources administration;
- procurement activities;
- information technology administration;
- engineering services and activities, including capital projects management, water resources management, and GIS coordination;
- development services;
- operations management including the overall management of the water and wastewater systems and maintenance operations;
- inspections and construction management; and
- maintenance of the plants, buildings, and equipment.

Insurance

General liability, property, and workers' compensation insurance premiums are expected to increase an average of 5% from 2016 levels in 2017.

Legal Fees

Legal fees are projected to increase 17.0% compared to the 2016 budget, primarily due to work on the Chambers Reservoir issues and other matters under litigation.

Professional Fees

The 2017 budget includes an increase of \$50,000, or 6.8% over 2016 estimated costs, which is largely for water rights protection.

Repairs and Maintenance

The repairs and maintenance budget of \$1.4 million reflects an increase of \$548 thousand over 2016 estimated expenses and includes \$100,000 for additional enhanced water main cleaning in

2017, which will contribute to improving water quality. The budget also includes funds to repair filters and underdrains at LTCWRF, and reflects the higher costs expected for the operation of the JWPP as a blended RO/microfiltration plant. JWPP repairs and maintenance expense is budgeted to increase \$277 thousand over 2016 estimated expenses.

Operational Expenses

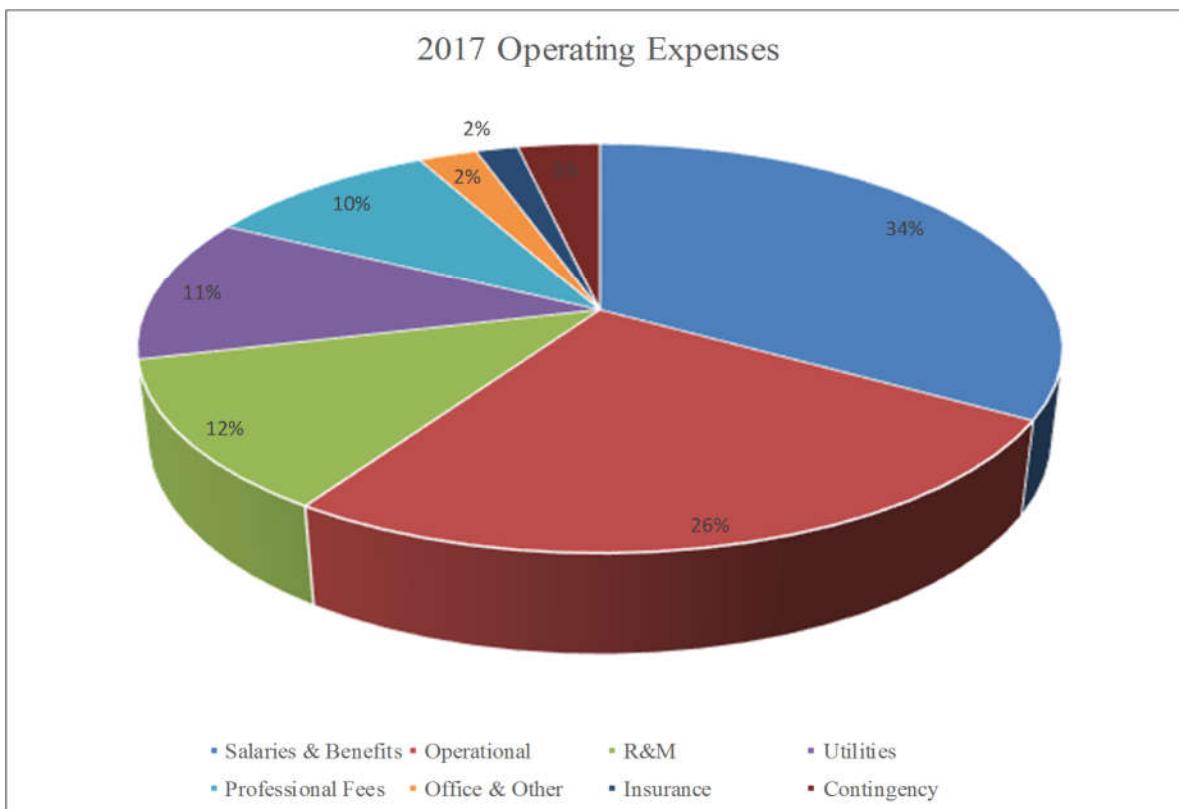
Under operational expenses, the cost of treatment for the ACWWA Flow water supply is projected to increase \$262 thousand, or 30.8% next year. This category also includes CWSD's \$692 thousand share of the JWPP expenses, which is offset by a corresponding revenue amount. ACWWA's cost to operate the JWPP as a blended plant will increase in areas such as chemicals and lab expenses. Operational expenses are budgeted to be \$3.0 million, an increase of \$828 thousand over 2016 estimated costs.

Other Supplies and Expense

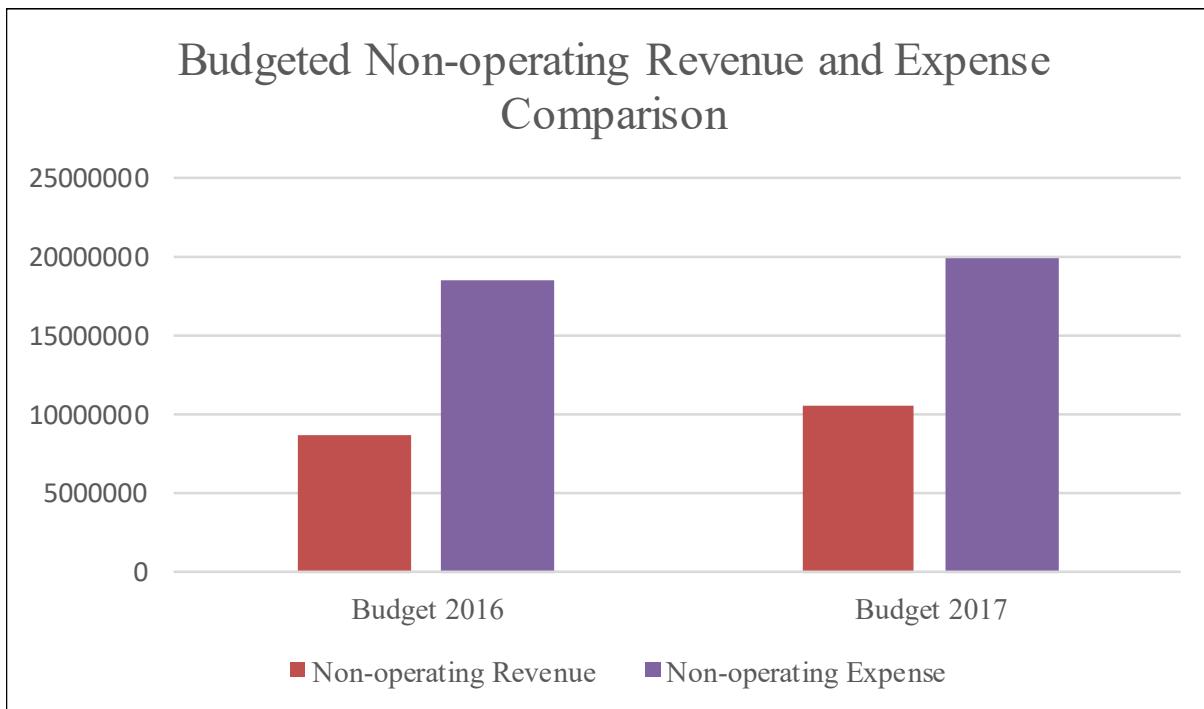
There are no increases budgeted in this category.

Contingency

A contingency budget of \$400,000 was included to fund unanticipated expenses such as major emergency system repairs. ACWWA has experienced several major line breaks in the third and fourth quarters of 2016 that have been quite costly to repair. As the water and wastewater systems infrastructure age, line breaks and other issues will become more common, even with a robust preventive maintenance program such as ACWWA's.



9.3 Non-operating Budget



Non-operating Revenue:

Non-operating revenue, comprised primarily of tap fees, is budgeted to increase \$281 thousand, or 2.7% from estimated 2016 revenue.

Interest Income

In 2016, ACWWA diversified its investments into a money-market fund and public fund certificates of deposit (CDARSTM), increasing investment earnings by \$27 thousand, or 237% over 2015. Earnings are expected to increase \$14 thousand, or 36.5% with a full year in the higher-return vehicles.

Miscellaneous Revenue

The Build America Bonds (BABS) interest subsidy is the main component of miscellaneous revenue, and is calculated as a percentage of interest expense. The interest expense on the 2009 bonds is lower in 2017, resulting in a smaller subsidy.

Tap Fees and Contributions

Both water and wastewater tap sales are anticipated to be strong again in 2017 as the service area continues to build out, and are budgeted to increase 3.5% (\$287 thousand) over estimated 2016 sales.

Non-operating Expenses

Non-operating expenses are budgeted to increase approximately \$5.0 million, or 33.9%, over 2016 estimated expenditures because of \$9.7 million in capital spending, including \$2.4 million carried forward from 2016.

Debt Service

Debt service is expected to decrease \$46 thousand, or 0.4% in 2017, following the 2016 refunding of the 2006 bonds. ACWWA will realize greater interest rate savings from the refunding in years 2018 – 2022, seeing interest payments reduced by about \$550 thousand in each of those years, and \$45-50 thousand per year from 2023 through the end of the bond issue in 2033.

Capital Outlay

Of the \$9.6 million capital budgeted for 2017, \$2.4 million is carried over from the 2016 capital budget for projects that were approved and budgeted for in prior years, but that have not yet been completed. These projects are funded from prior year reserves. The 2017 budget for new capital projects is \$7.2 million, and includes \$1.35 million for the reconversion of JWPP to a blended RO/microfiltration plant, \$2.4 million for ACWWA's share of the deep injection well at the ECCV RO plant, \$1 million for water rights adjudication, and \$900 thousand for the ACWWA Flow connecting main. A detailed list of 2017 capital projects can be found in Section 10.

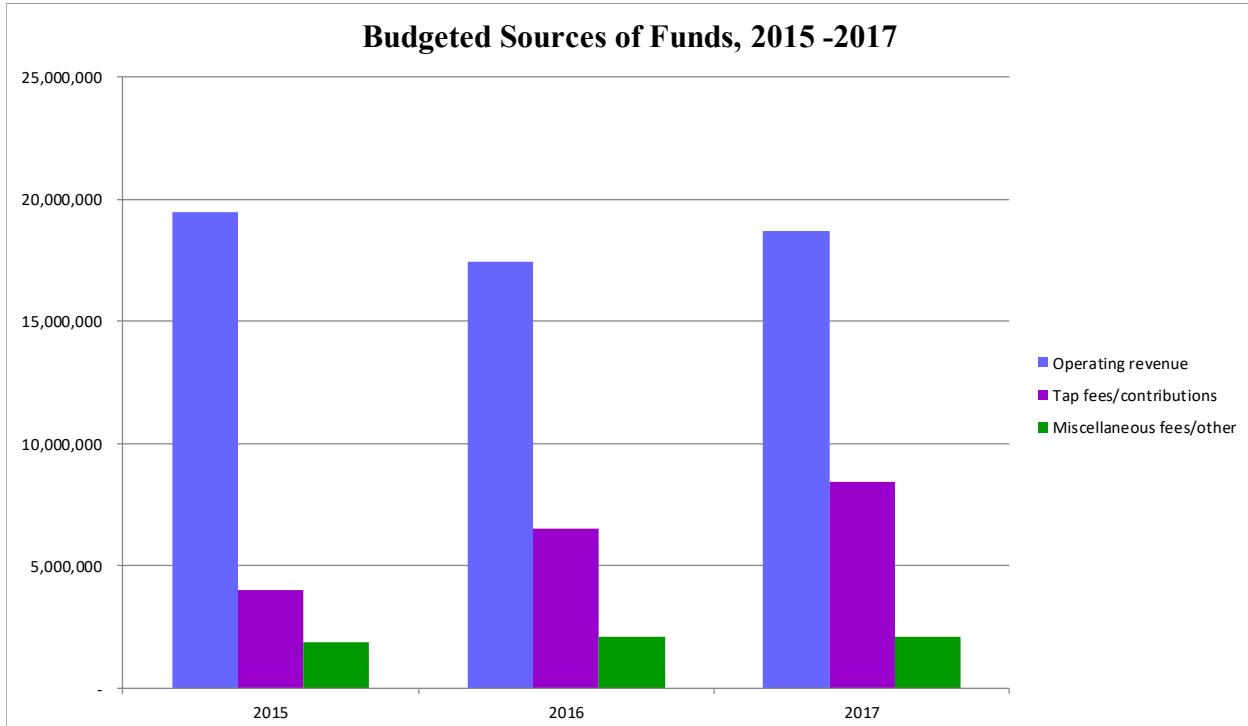
9.4 Long-range Financial Plan

In late 2015, ACWWA engaged Carollo Engineers to conduct a cost of service study that was finalized in the first quarter of 2016. Carollo also developed a financial plan for ACWWA based on the 20-year capital plan. ACWWA will utilize this plan and the financial model provided by Carollo to forecast revenues and expenses for five and ten year periods to determine revenue requirements and to estimate when debt financing will be needed to fund capital improvements.

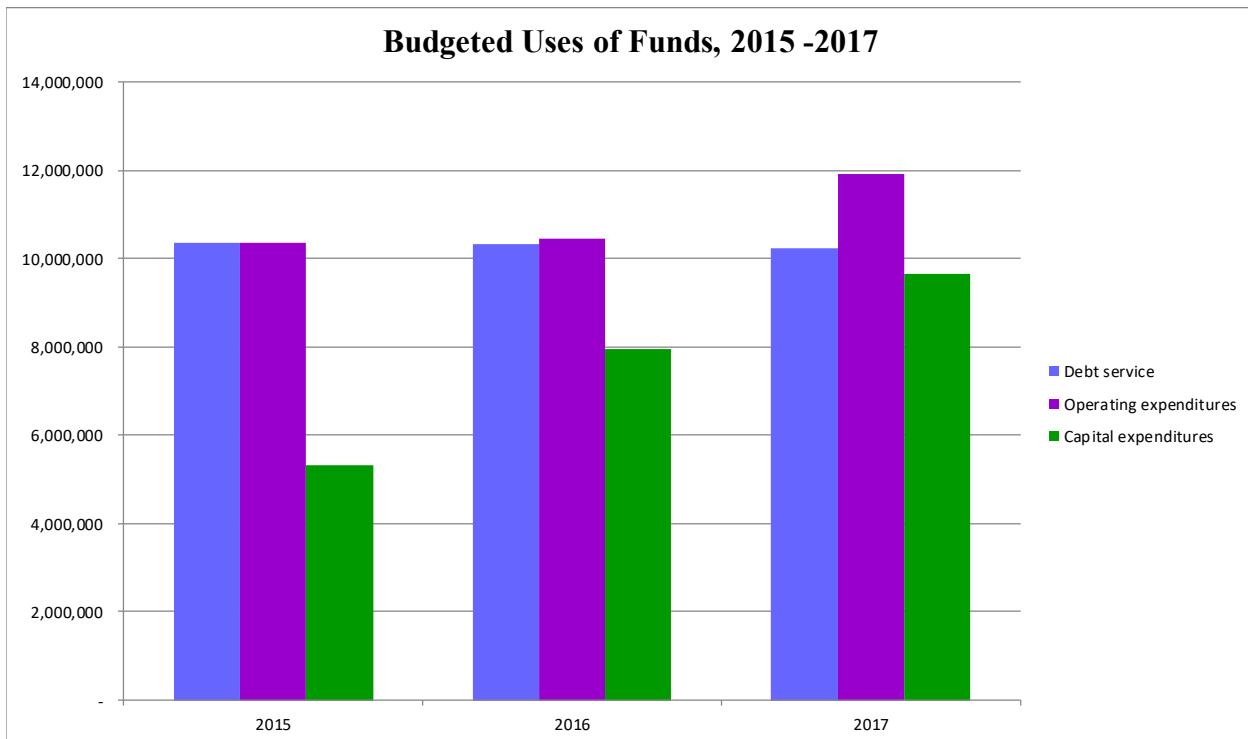
Based on financial trends through mid-2015, Carollo projected that ACWWA would need to raise water and wastewater rates 3% and 2%, respectively, each year to fund operations and projected capital needs. ACWWA does not have taxing powers and thus must fund capital projects through a combination of cash provided by rates and fees, and debt financing.

Because of higher than anticipated tap sales and irrigation water revenue in 2016, ACWWA's water rate increase in 2017 is 2% rather than the expected 3%. Wastewater rates will also increase 2% for 2017. Revenue in 2016 is forecasted to exceed budget by 12.8% and expenses are estimated to be under budget by 14.9%, resulting in a favorable budget variance of approximately \$7.0 million. The financial plan prepared by Carollo projected that ACWWA would need to issue debt in 2020 to fund \$18.8 million in capital improvements needed that year; however, the better than expected results in 2016 could mitigate the need for additional debt. ACWWA plans to update the financial model with 2016 actual and 2017 projected revenues and expenses, and will prepare a new long-range forecast at that time.

9.5 Sources and Uses of Funds (Budgeted)



Budgeted Sources of Funds 2015 – 2017



Budgeted Uses of Funds 2015 -2017

10. 2017 Capital Improvements Program

ACWWA's Capital Improvements Program (CIP) is a key component of the budget, as it identifies the critical projects required to ensure ACWWA can meet the needs of its customers. The major projects in the 2017 capital improvement budget are listed in this section.

Projects have been ranked by priority as follows:

Priority 1 Projects:

Priority 1 projects are near-term needs that are date-driven (IGA or Regulatory) or reliability concerns, and should be implemented within the next calendar year.

Priority 2 Projects:

Priority 2 projects are required within a short time frame (within two years), but are not required immediately. Some Priority 2 Projects are included on the 2017 CIP and are identified below.

Priority 3 Projects:

Priority 3 projects are identified items that are not needed immediately. These include items that require further refinement or study prior to inclusion for Budget adoption. No Priority 3 Projects are included in the 2017 CIP.

Priority 1 Projects:

ACWWA Flow Adjudication Costs:

This includes the anticipated 2017 adjudication costs for the ACWWA Flow project. These are legal and engineering support fees to complete the applications for the change of water rights from agricultural use to municipal use. There are currently two ACWWA Flow change cases being heard in 2016; the Weldon Valley case was in January and the New Cache la Poudre case in October. Other cases that are not slated for trial but will require adjudication efforts in 2017 include Western Mutual, Fort Morgan, and Larimer Weld. The estimated adjudication costs for 2017 are \$1,000,000. This line item does not affect the operating budget at this time; however, as more of the ACWWA Flow water is needed, ACWWA's water treatment costs will increase.

Injection Well No. 2 at the East Cherry Creek Valley (ECCV) Reverse Osmosis (RO) Facility:

This project is to fund ACWWA's portion of the new RO brine concentrate injection well for the ECCV Water Treatment Plan. This well is part of the brine disposal system, and is the second well for injection of the treated RO reject water. It is necessary to provide continuous operation of the RO facility, which delivers ACWWA 2.25 million gallons per day of treated water. The design, engineering, and initial construction are scheduled

to take place in 2016, with completion of the well in 2017. The 2016 budget includes ACWWA's share of the 2016 costs for the drilling and testing of the injection well. The 2017 budget is for the design and construction of the transmission pipeline and the high-pressure injection pump station. The estimated cost for the 2017 effort is \$2,400,000. Once this project is complete, ACWWA's water treatment costs will increase based on its pro rata share of the RO operating costs.

ACWWA Flow Project – ACWWA Connecting Main project – Piney Creek and Liverpool Metro Open space crossing to East Euclid Street:

This extension of the newly installed 24" pipeline along Arapahoe Road will take the pipeline to the area of East Euclid and Liverpool Streets. It will cross through the Liverpool Metro District Open Space area and under Piney Creek. The timing of this section of the pipeline was accelerated because of the inclusion of the pipe construction to coincide with the Urban Drainage and Flood Control District (UDFCD) and SEMSWA's joint project to stabilize this stretch of Piney Creek. By joining the project, ACWWA should realize some cost savings and partnering will help to minimize the disturbance in this area. The pipeline crossing in this area is a transmission-only pipeline that will help ACWWA achieve the full 2.25 MGD flow for the ACWWA Flow project. The design began in 2016, and the construction costs are estimated to be \$900,000 in 2017. This project will not impact the operating budget until such time as repairs may be needed.

Chambers Pump Station – Grading and Erosion Control Improvements

ACWWA's Chambers Reservoir requires a number of fixes to the existing grading and erosion control measures to prevent further degradation of the interior slopes of the reservoir. Review by the State Engineer's Office (SEO) identified a number of concerns that require correction. The repairs will be taken care of during the proposed Chambers Reservoir reconstruction efforts that are being negotiated at this time. These long-term solutions to the drainage and erosion control measures are estimated to cost \$35,000 in 2017. This project will not impact ACWWA's operating budget.

ACWWA Flow Project Development

ACWWA has multiple consultants working on the support of the design, modeling and development of the entire ACWWA Flow project. This effort is to develop an operational model to ensure the delivery of the 4,400 acre-feet of average yield water rights and will help with the project water delivery on an annual basis. The project modelling development will assist the current and future planning. The 2017 estimated costs for this project are \$80,000, and it will not impact the operating budget.

Joint Water Purification Plant (JWPP) – RO Reconversion Project

Options for converting the JWPP back to the reverse osmosis (RO) water treatment process are currently being evaluated. This is a joint project with Cottonwood Water and Sanitation District (CWSD) and ACWWA. The reconversion of the JWPP to a blended

treatment of reverse osmosis and microfiltration, along with a proposed selenium treatment process, is being proposed. The current agreement with CWSD provides for ACWWA, if in agreement with the proposed processes, to fund up to \$1.5M toward the design and construction of the reconversion process. In 2016, the ACWWA Board authorized \$150,000 toward this amount. This amount will be carried forward into 2017, and along with the 2017 budgeted amount of \$1.35M for the agreed-upon total of \$1.5 million. Once the reconversion is completed, operating costs for the plant are projected to increase approximately 57%, and this is accounted for in the 2017 budget.

JWPP – RO Reconversion Project – ACWWA Review Costs

As part of the agreement with CWSD, ACWWA will review the process and provide comments prior to committing any monies for the construction. The review will be funded by ACWWA and includes a consultant review of the proposed treatment methods, review of the proposed RO plant modifications and the review of the proposed operating costs. The estimated cost for the review is \$100,000. This project has no direct impact on the operating budget.

Integrated Master Plan:

An update to the existing Master Plan is required due to the changes to the various water supplies and treatment systems that are occurring within the ACWWA supply and distribution system. These changes to treatment processes and water supplies will impact the water quality delivered through the ACWWA distribution system and for the overall ACWWA water balance. The estimated cost for this project is \$125,000. This project does not have a direct impact on the operating budget; however, changes to the water supply system may impact future operating budgets.

Water Development Project – Cherry Creek Project Water Authority (CCPWA):

This project is to support the development of ACWWA's assets in the Cherry Creek Project Water Authority (CCPWA). ACWWA's assets in the CCPWA are valued at approximately \$7M. This estimated cost for this 2017 project is \$116,000, and it will not impact the operating budget.

LTCWRF Emergency Pond Liner Replacement

This item is for replacement of the existing emergency pond liner. The emergency pond provides storage of raw sewage and other processed waste for a short time period in the event of a plant disruption in order to prevent a discharge condition that may violate the discharge permit. The existing liner has degraded and is not appropriate for the temporary holding of any processed wastewaters at this time. This estimated cost for 2017 is \$150,000. This project will not directly impact the operating budget, but is needed to prevent potential fines and penalties in the future.

LTCWRF Lab Building Roof Repairs:

The roof and building drainage system for the LTC WRF laboratory building requires repair and replacement. The existing roof has had a problem with leaks and has been

patched, but now needs to be replaced to prevent further water intrusion. This is budgeted at \$25,000, and will impact the operating budget by eliminating building repairs that would be needed if the roof is not replaced.

Priority 2 Projects:

Chambers Reservoir Pumps Station – Jockey Pump and Controls:

This will fund a new, smaller pump installation and revisions for the Chambers Reservoir area to improve delivery capabilities for the current non-potable water distribution system. The pump station will be modified to accept this new smaller pump for initial pumping of water from Chambers Reservoir beginning in 2018. This project is budgeted at \$250,000, and will have minimal impact on the operating budget for 2017.

Water Storage Tanks/Facilities – Security System Upgrades:

ACWWA is in the process of evaluating the security all facilities, with assistance from the Arapahoe County Sheriff's Office. The results of the facility evaluations will determine the need for security improvements and upgrades to protect all of ACWWA's facilities. This project is budgeted for \$50,000, and can positively impact the operating budget by taking advantage of available discounts and rebates from ACWWA's insurance carrier.

LTC WRF – Surge Return Piping:

Extension of the surge return piping will increase the effective size of the tankage containing in-house reprocessed water to better manage high flow events. The extension will also allow TriCon filter and adsorption clarifier deep-cleaning waste to be effectively treated in the emergency storage pond and then will not require additional chemical addition for pH neutralization. This will cost approximately \$20,000, and can positively impact the operating budget through reduced chemical costs.

Unallocated Projects Budget

The unallocated projects budget amount is based on previous budget years and the expenses incurred those years for unexpected project costs, as well as for renewal and replacement of capital equipment. The budget for unallocated projects is \$400,000.

CAPITAL EQUIPMENT - 2017

JWPP – Finished Water Pumps Control System Replacement

The operation of the JWPP has resulted in the need for a replacement of a key component of the treated water delivery system. The finished water pumps have been operating in manner that has created many stops and starts of the pumps during the delivery of the potable water to ACWWA's distribution system. This created an early replacement cycle for the Variable Frequency Drives (VFDs) for two of the finished water delivery pumps. The replacement of these VFDs is considered a requirement due to the impending

operation of the JWPP as a blended RO and MF treatment facility. The estimated cost for 2017 is \$80,000. This project should not impact the operating budget.

LTC WRF AWT Filter Backflow System Compressor:

The operation of the AWT filter units at LTC WRF incorporate an air and water backwash system. The compressor to supply the air during the backwash cycle has been operating since the initial construction, and now requires replacement. The estimated cost for the positive displacement blower is \$6,000, and will not impact the operating budget.

FINANCIAL SUMMARIES AND NOTES



11. Board Summary Forecasted 2017 Combined Operations

ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY
BOARD SUMMARY
FORECASTED 2017 BUDGET
WITH 2015 ACTUAL AND 2016 ESTIMATED
For the Years Ended and Ending December 31

	ACTUAL 12/31/15	BUDGET 2016	ESTIMATED 2016	PROPOSED 2017
BEGINNING FUNDS AVAILABLE	\$ 33,098,613	\$ 33,331,888	\$ 33,218,058	\$ 37,365,612
REVENUES				
Operating revenues:				
Water Charges	7,899,732	8,048,986	8,463,272	8,632,563
Sewer Charges	5,024,264	5,401,273	5,668,700	5,401,709
Fire Lines	1,020,027	1,065,476	1,038,178	1,058,942
Irrigation	1,931,167	1,713,875	2,461,290	2,129,610
Fees for Services	662,315	743,285	863,989	877,508
RO Plant Revenue	312,956	441,063	296,100	692,084
Total operating revenues	16,850,460	17,413,958	18,791,530	18,792,417
Non-operating revenues:				
Interest Income	11,316	30,000	38,105	52,000
Miscellaneous Revenue	2,151,234	2,100,079	2,050,364	2,030,328
Tap Fees and Contributions	3,356,598	6,530,205	8,139,442	8,426,598
Total non-operating revenues	5,519,148	8,660,284	10,227,911	10,508,927
Total revenues	22,369,608	26,074,242	29,019,441	29,301,343
Total funds available	55,468,221	59,406,130	62,237,499	66,666,955
EXPENDITURES				
Office Expense	251,339	307,990	250,235	271,795
Salaries and Benefits	3,538,392	3,831,946	3,726,190	3,901,825
Insurance	166,304	175,732	195,083	204,837
Legal	496,556	306,000	294,280	358,000
Professional Fees	818,669	626,000	731,700	781,494
Repairs and Maintenance	765,944	1,037,617	841,771	1,389,993
Operational	1,545,314	2,326,822	2,194,405	3,022,363
Utilities	1,275,350	1,276,125	1,194,220	1,373,558
Contract Services	134,121	147,000	192,639	261,453
Bad Debt Expense	235	500	500	500
Other Supplies and Expense	106,854	14,400	14,400	14,400
General Contingency	-	400,000	400,000	400,000
Total operating expenditures	9,099,079	10,450,131	10,035,423	11,980,218
Non-operating expenses:				
Debt Service	9,636,204	10,329,624	10,275,677	10,229,901
Reserve Funding - LTCWRF Funding	-	288,000	-	-
Reserve Funding - RO Plant	-	12,667	-	-
Capital Outlay - New	3,514,880	5,235,000	4,560,789	7,241,000
Carry forward capital		2,700,000		2,397,000
Total non-operating expenditures	13,151,084	18,565,291	14,836,465	19,867,901
Total expenditures and transfers out requiring appropriation	22,250,163	29,015,422	24,871,888	31,848,119
ENDING FUNDS AVAILABLE	\$ 33,218,058	\$ 30,390,708	\$ 37,365,612	\$ 34,818,836
DEBT SERVICE RESERVE	\$ 7,672,717	\$ 7,675,000	\$ 7,672,710	\$ 7,675,000
LTC CAPITAL RESERVE	2,014,774	2,000,000	2,400,000	3,000,000
TOTAL RESERVE	\$ 9,687,491	\$ 9,675,000	\$ 10,072,710	\$ 10,675,000

¹ The projected change in ending funds available for 2017 of \$(2,546,776) includes \$2,397,000 of carry-forward capital that was funded in prior years and will be paid from reserves. Net of the carry-forward capital amount, the change in ending funds available is \$(149,776).

12. Board Summary Forecasted 2017 Budget Water Operations

ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY
WATER OPERATIONS
FORECASTED 2017 BUDGET AS PROPOSED
WITH 2015 ACTUAL AND 2016 ESTIMATED
For the Years Ended and Ending December 31

ACTUAL 12/31/15	BUDGET 2016	ESTIMATED 2016	PROPOSED 2017
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REVENUES

Operating revenues:			
Water Charges	7,899,732	8,048,986	8,463,272
Fire Lines	1,020,027	1,065,476	1,038,178
Irrigation	1,931,167	1,713,875	2,461,290
Fees for Services	266,420	318,480	427,721
RO Plant Revenue	312,956	441,063	296,100
			692,084
Total operating revenues	11,430,301	11,587,880	12,686,562
			12,951,864

EXPENSES

Operating expenses:			
Office Expense	212,367	256,763	192,833
Salaries and Benefits	2,175,682	2,393,675	2,291,748
Insurance	127,030	91,191	76,511
Legal	425,400	226,200	245,280
Professional Fees	604,128	513,040	523,811
Repairs and Maintenance	455,776	647,059	550,369
Operational	1,168,506	1,920,921	1,706,791
Utilities	784,803	739,498	697,740
Contract Services	4,951	8,640	16,600
Bad Debt Expense	169	360	360
Other Supplies and Expense	7,992	10,368	10,368
Contingency	-	288,000	288,000
			288,000
Total operating expenditures	5,966,806	7,095,716	6,600,411
			8,418,204
Operating Income (not including depreciation)	5,463,495	4,492,164	6,086,151
			4,533,660

Non-operating revenues:			
Interest Income	8,147	21,600	27,436
Miscellaneous Revenue	2,137,017	2,093,750	2,046,592
Tap Fees and Contributions	2,752,955	4,579,805	5,634,556
			6,624,918
Total non-operating revenues	4,898,120	6,695,155	7,708,584
			8,689,671

Non-operating expenses:			
Reserve Funding - RO Plant	-	12,667	-
Debt Service	8,313,913	8,949,460	8,895,512
Capital Outlay	3,163,392	3,720,200	1,629,592
Capital Outlay - Carryforward		2,700,000	2,700,000
			2,397,000
Total non-operating expenses	11,477,305	15,382,327	13,225,104
			18,242,226

NET INCOME (not including depreciation)	\$ (1,115,690)	\$ (4,195,007)	\$ 569,631	\$ (5,018,895)
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13. Board Summary Forecasted 2017 Sewer Operations

ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY
SEWER OPERATIONS
FORECASTED 2017 BUDGET AS PROPOSED
WITH 2015 ACTUAL AND 2016 ESTIMATED
For the Years Ended and Ending December 31

ACTUAL 12/31/15	BUDGET 2016	ESTIMATED 2016	PROPOSED 2017
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REVENUES

Operating revenues:

Sewer Charges	5,024,264	5,401,273	5,668,700	5,401,709
Fees for Services	395,895	424,805	436,268	438,844
Total operating revenues	5,420,160	5,826,078	6,104,968	5,840,553

EXPENSES

Operating expenses:

Office Expense	38,971	51,227	50,312	56,678
Salaries and Benefits	1,362,711	1,438,271	1,434,442	1,519,440
Insurance	39,274	84,541	92,564	68,763
Legal	71,156	79,800	49,000	66,640
Professional Fees	214,541	112,960	207,889	150,214
Repairs and Maintenance	310,169	390,557	291,402	388,218
Operational	376,808	405,901	487,114	500,952
Utilities	490,547	536,624	496,980	522,313
Contract Services	129,170	138,360	176,039	172,625
Bad Debt Expense	66	140	140	140
Other Supplies and Expense	98,862	4,032	4,032	4,032
Contingency	-	112,000	112,000	112,000
Total operating expenditures	3,132,273	3,354,412	3,401,914	3,562,014

Operating Income (not including depreciation)

2,287,886 2,471,666 2,703,055 2,278,539

Non-operating revenues:

Interest Income	3,168	8,400	10,669	14,560
Miscellaneous Revenue	14,217	6,328	3,772	3,016
Tap Fees and Contributions	603,643	1,950,400	2,504,886	1,801,680
Total non-operating revenues	621,028	1,965,128	2,519,327	1,819,256

Non-operating expenses:

Reserve Funding - LTCWRF Funding	(4,246)	288,000	-	-
Debt Service	1,322,291	1,380,165	1,380,165	1,261,675
Capital Outlay	355,734	1,514,800	231,197	364,000
Carry-forward Capital	-	-	-	-
Total non-operating expenses	1,673,779	3,182,965	1,611,362	1,625,675

NET INCOME (not including depreciation)

\$ 1,235,135 \$ 1,253,830 \$ 3,611,020 \$ 2,472,120

14. Budget Notes

14.1 Revenue

14.1.1 Water Charges

This item includes charges for providing water to residential and commercial customers, a water investment fee, hydrant meter water, and water service fees.

14.1.2 Sewer Charges

Sewer charges include the rates charged to wastewater customers for collecting wastewater, moving it to the LTCWRF, and treating it.

14.1.3 Fire Lines

This item includes the charge to maintain enough water in the system for fire protection standby systems (i.e., sprinkler systems) at all times.

14.1.4 Irrigation

Irrigation includes irrigation water charges for those customers who have separate irrigation meters.

14.1.5 Fees for Services

Fees includes items such as the PID equivalency fee paid by Cottonwood, labor service call fees, hydrant meter rentals, meter inspections, radio read meter fees, and miscellaneous revenue.

14.1.6 RO Plant Revenue

This item reflects the budgeted expense reimbursement to be received from ACWWA's partner in the Joint Water Purification Plant (JWPP). The offsetting expenses are budgeted under the Operational expense category

14.1.7 Interest Income

Interest income is the amount earned by ACWWA on funds held with CoBiz Bank and in public funds certificates of deposit (CDARS™).

14.1.8 Miscellaneous Revenue

This item is primarily comprised of the Build America Bond interest refund.

14.1.9 Tap Fees and Contributions

Fees/contributions include fees for water and sewer tap sales in ACWWA service area, water tap sales in Elkhorn, and sewer taps sales in the Cottonwood district. This also includes the extraterritorial fees charged to Elkhorn Ranch customers.

Tap sales are estimated to be 240 in 2017, with Cottonwood wastewater tap sales projected at 150.

14.2 Expenses

14.2.1 Office Expenses

Office expense includes items such as office supplies and equipment, postage, association dues, unemployment insurance, training and education, and dues and subscriptions.

14.2.2 Salaries and Benefits Expenses

This item includes salaries, health benefits, retirement contributions, tuition reimbursement, service awards and payroll taxes.

14.2.3 Insurance Expenses

This includes insurance for ACWWA's property, plant and equipment as well as workers' compensation insurance.

14.2.4 Legal Fees

Legal fees expense comprises amounts paid to ACWWA's retained counsel, employment counsel, and for water rights protection legal services.

14.2.5 Professional Fees

These are fees paid to outside consultants to perform work that ACWWA does not have either staff with the technical expertise or the capacity to do the work. The primary driver of professional services is engineering fees for the various ACWWA projects. Audit fees are also included here.

14.2.6 Repairs and Maintenance

Repairs and Maintenance includes equipment rental, buildings and equipment maintenance, landscaping, and vehicle expense – fuel, license and registrations, tires, repairs and maintenance. The highest cost items are repairs and maintenance to the water and wastewater systems – line break repairs, valves, meter repair, pumps, etc. As the systems age, it is normal for repairs and maintenance costs to increase.

14.2.7 Operational

This item includes the cost of water from ECCV, the JWPP expenses allocated to ACWWA's partner in the plant, safety expenses, ditch assessments, and staff uniforms.

14.2.8 Utilities

This item includes water, sewer, electricity, gas, telephone, and internet service.

14.2.9 Contract Services

This is the cost for hauling sludge from the wastewater treatment plant.

14.2.10 Bad Debt

This is an estimate for writing off uncollectible accounts.

14.2.11 Other Supplies and Expenses

This line includes Board of Directors expense.

14.2.12 General Contingency

This item provides for unanticipated expenses. While every effort is made to accurately predict costs for the upcoming budget year, it is possible that major water or sewer line breaks or costly equipment failures could occur, and these will be covered by contingency funds.

14.2.13 Debt Service

This line includes principal and interest payments on outstanding bond issues.

14.2.14 Reserve Funding – LTCWRF

This line represents ACWWA's required funding to the LTCWRF capital reserve fund

14.2.15 Reserve Funding – JWPP

This line represents ACWWA's required funding to the JWPP capital reserve fund.

14.2.16 Capital Outlay

This item includes budgeted capital projects and equipment.

15. Budgeted 2017 Capital Outlay

**Arapahoe County Water & Wastewater Authority
Proposed Capital Improvement Program Budget
For the year ending December 31, 2017**

<u>PROPOSED 2017</u>	<u>CIP Projects</u>
<u>Priority 1 Projects</u>	
Adjudication Costs	\$ 1,000,000
RO Plant Injection Wells	2,400,000
2016 & 2017 DI Well No. 2	35,000
ACWWA Flow - Chambers Pump Station - grading erosion control	900,000
ACWWA Flow - Connection to ECCV Main - Phase 2 B	80,000
ACWWA Flow Project Development	116,000
Water Development - CCPWA	125,000
JWPP RO-Reconversion _per CWSA Agreement	1,350,000
JWPP RO-Reconversion _per CWSA Agreement - ACWWA Costs	100,000
Emergency Pond Lining replacement	150,000
WRF Building Improvements	25,000
<u>Priority 1 Subtotal</u>	<u>6,281,000</u>
<u>Prioirty 2 Projects</u>	
ACWWA Flow - Chambers Pump Station and Piping	250,000
Security Upgrades - STORAGE TANK SECURITY UPGRADES	50,000
Surge Return Piping Extension	20,000
<u>Priority 2 Subtotal</u>	<u>320,000</u>
<u>Unallocated Projects Budget</u>	<u>400,000</u>
<u>Total 2017</u>	<u>\$ 7,001,000</u>
<u>Carryforward Projects (from 2016 Budget)</u>	
Storage reservoir	1,900,000
306 case	100,000
JWPP SCADA	57,000
JWPP Reconversion Costs	150,000
Elkhorn SCADA	17,000
Elkhorn vault for new well	123,000
Well-site improvements	50,000
<u>Total carryforward</u>	<u>\$ 2,397,000</u>
Capital Equipment Outlay	240,000
<u>Total 2017 Capital Request</u>	<u>\$ 9,638,000</u>

16. Schedule of Debt Service Requirements to Maturity

ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY

SCHEDULE OF DEBT SERVICE REQUIREMENTS TO MATURITY

December 31, 2016

ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY											
SCHEDULE OF DEBT SERVICE REQUIREMENTS TO MATURITY											
December 31, 2016											
\$18,760,000 Variable Rate			\$91,545,000 Variable Rate			\$5,525,000 Fixed Rate			\$16,475,000 Variable Rate		
Water And Wastewater			Taxable Water And Wastewater			Water And Wastewater			Revenue Refunding Bonds,		
Revenue Bonds, Series 2007			Series 2009A			Revenue Refunding Loan			Revenue Refunding Bonds,		
Dated August 23, 2007			Dated December 8, 2009			Series 2012			Series 2016		
Variable Interest Rate			Variable Interest Rate			Fixed Interest Rate Interest			Dated September 20, 2006		
Principal And Interest			Principal And Interest			Due June 1 and December 1			Variable Interest Rate		
Due December 1			Due December 1			Principal Due December 1			Principal And Interest		
Principal			Interest			Principal			Interest		
Total Debt Service Requirements											
Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2017	570,000	691,675	1,740,000	5,627,599	-	120,327	875,000	605,300	3,185,000	7,044,901	10,229,901
2018	600,000	663,175	1,790,000	5,546,776	1,055,000	120,327	415,000	587,800	3,860,000	6,918,078	10,778,078
2019	630,000	637,675	1,845,000	5,459,155	1,080,000	97,433	420,000	579,500	3,975,000	6,773,763	10,748,763
2020	650,000	608,550	1,915,000	5,364,230	1,110,000	73,997	435,000	566,900	4,110,000	6,613,677	10,723,677
2021	680,000	579,300	1,980,000	5,262,831	1,135,000	49,910	450,000	553,850	4,245,000	6,445,891	10,690,891
2022	710,000	548,700	2,050,000	5,155,020	1,145,000	25,281	465,000	540,350	4,370,000	6,269,351	10,639,351
2023	750,000	515,863	2,120,000	5,040,322	-	-	975,000	526,400	3,845,000	6,082,585	9,927,585
2024	780,000	481,175	2,200,000	4,918,528	-	-	1,015,000	487,400	3,995,000	5,887,103	9,882,103
2025	820,000	445,100	2,285,000	4,788,838	-	-	1,055,000	446,800	4,160,000	5,680,738	9,840,738
2026	860,000	404,100	2,380,000	4,641,913	-	-	1,100,000	404,600	4,340,000	5,450,613	9,790,613
2027	900,000	363,250	2,480,000	4,488,879	-	-	1,140,000	360,600	4,520,000	5,212,729	9,732,729
2028	940,000	320,500	2,585,000	4,329,415	-	-	1,190,000	315,000	4,715,000	4,964,915	9,679,915
2029	990,000	273,500	2,690,000	4,163,199	-	-	1,235,000	267,400	4,915,000	4,704,099	9,619,099
2030	1,040,000	224,000	2,805,000	3,990,232	-	-	1,285,000	218,000	5,130,000	4,432,232	9,562,232
2031	1,090,000	172,000	2,925,000	3,807,066	-	-	1,335,000	166,600	5,350,000	4,145,666	9,495,666
2032	1,145,000	117,500	3,050,000	3,616,063	-	-	1,385,000	113,200	5,580,000	3,846,763	9,426,763
2033	1,205,000	60,250	3,175,000	3,416,898	-	-	1,445,000	57,800	5,825,000	3,534,948	9,359,948
2034	-	-	6,125,000	3,209,571	-	-	-	-	6,125,000	3,209,571	9,334,571
2035	-	-	6,385,000	2,809,608	-	-	-	-	6,385,000	2,809,608	9,194,608
2036	-	-	6,660,000	2,383,090	-	-	-	-	6,660,000	2,383,090	9,043,090
2037	-	-	6,950,000	1,938,202	-	-	-	-	6,950,000	1,938,202	8,888,202
2038	-	-	7,250,000	1,473,942	-	-	-	-	7,250,000	1,473,942	8,723,942
2039	-	-	14,815,000	989,642	-	-	-	-	14,815,000	989,642	15,804,642
Total	\$ 14,360,000	\$ 7,106,313	\$ 88,200,000	\$ 92,421,014	\$ 5,525,000	\$ 487,275	\$ 16,220,000	\$ 6,797,500	\$ 124,305,000	\$ 106,812,102	\$ 231,117,102

17. Historical Rate Tables

Volume charges (per 1,000 gallons)

	Water And Irrigation				Sewer			
	Amount	\$ Increase	% Increase		Amount	\$ Increase	% Increase	
2011	\$ 3.18	\$ 0.15	5.0%	\$ 4.10	\$ -		0.0%	
2012	3.28	0.10	3.1%	4.22	0.12	2.8%		
2013	3.38	0.10	3.0%	4.35	0.13	3.0%		
2014	3.48	0.10	3.0%	4.48	0.13	2.9%		
2015	3.58	0.10	2.9%	4.61	0.13	2.8%		
2016	3.69	0.11	3.1%	4.80	0.19	4.0%		
2017	3.76	0.07	2.0%	4.90	0.10	2.0%		
Average			3.1			2.5		

Service fees

	Water And Irrigation				Sewer			
	Amount	\$ Increase	% Increase		Amount	\$ Increase	% Increase	
2011	\$ 34.72	\$ -	0.0%	\$ 18.20	\$ -		0.0%	
2012	37.55	2.83	8.2%	18.75	0.55	2.9%		
2013	38.68	1.13	3.0%	19.30	0.55	2.8%		
2014	39.84	1.16	3.0%	19.88	0.58	2.9%		
2015	41.04	1.20	3.0%	20.48	0.60	2.9%		
2016	42.27	1.23	3.0%	21.30	0.82	3.8%		
2017	43.12	0.85	2.0%	21.73	0.43	2.0%		
Average			3.2			2.5		

Tap Fees

	Water And Irrigation				Sewer			
	Amount	\$ Increase	% Increase		Amount	\$ Increase	% Increase	
2011	\$ 22,228	\$ 1,028	4.6%	\$ 5,678	\$ 263	4.6%		
2012	23,306	1,078	4.8%	5,950	272	4.6%		
2013	24,000	694	3.0%	6,128	178	2.9%		
2014	24,725	725	3.0%	6,312	184	2.9%		
2015	25,467	742	3.0%	6,501	189	2.9%		
2016	25,690	223	0.9%	7,360	859	11.7%		
2017	26,204	514	2.0%	7,507	147	2.0%		
Average			3.0%			4.5%		

GLOSSARY AND ACRONYMS



18. Glossary of Terms and Acronyms

- Accrual Basis – The basis of accounting under which revenues are recorded when earned and measurable expenditures are recorded as soon as they result in liabilities for benefits received.
- ACWWA – Arapahoe County Water and Wastewater Authority
- ACWWA Flow Project – A renewable water source project.
- Adopted Budget – ACWWA’s adopted budget is the fiscal year’s financial plan that details the Governing Board approved revenues and expenditures.
- Alternate Water Supply – The Alternate Water Supply is a search for new methods to meet current and projected demands for water. These may include aquifer storage and recovery, wastewater reuse projects and the acquisition of water through the purchase of water rights.
- Amendment – An amendment is a change to an adopted budget. It can increase or decrease a fund total.
- Appropriation – An authorization granted by the Governing Board to make expenditures and to incur obligations for specific purposes.
- Aquifer – An aquifer is an underground bed or layer of earth, gravel or porous stone that yields water.
- Aquifer Storage and Recovery – This is the practice of injecting surplus water into an aquifer through wells and then pumping it out as needed.
- Assets – Property owned by ACWWA which has monetary value.
- Audit – The examination of documents, records, reports, systems of internal control, accounting and financial procedures, and other evidence for the purpose of ascertaining fair presentation of financial statements, determining propriety, legality and accuracy of transactions.
- Bond – A written promise, generally under seal, to pay a specified sum of money, called the face value or principal amount, at a fixed time in the future, called the date of maturity, and carrying interest, usually payable periodically.
- Budget – A resource allocation plan for the accomplishment of programs related to established objectives and goals within a definite period.
- Budget Message – The opening section of the budget, which provides the reader with a general summary, and description of the most important aspects of the budget, changes from the current and previous years, and the views and recommendations of management.
- Capital Improvement Plan (CIP) – A plan for capital expenditures to be incurred each year over a fixed period of years to meet the capital needs of ACWWA.

- Capital Outlay – Expenditures which result in the acquisition of or addition to fixed assets. These generally consist of machinery and equipment, furniture and fixtures costing more than \$5,000 with a useful life of more than one year.
- Capital Project – Expenditures which result in the construction of or major improvements to ACWWA’s buildings and infrastructure; generally consist of projects costing more than \$5,000 and lasting more than three years.
- Cash Basis – The basis of accounting under which revenues are recorded when received in cash and expenditures are recorded when paid.
- CWSĐ – Cottonwood Water and Sanitation District
- Debt – An obligation resulting from the borrowing of money or from the purchase of goods and services.
- Debt Service – Cash outlays in the form of debt principal payments, periodic interest payments and related services charges for debt incurred in prior periods.
- Deficit – The excess of expenditures over revenues during a fiscal year.
- Department – An organizational unit such as Water or Wastewater.
- Depreciation – The expiration in the service life of an asset generally attributable to wear and tear through use, lapse of time or obsolescence. Depreciation is generally not budgeted; however, it is accounted for on the financial statements.
- Disbursement – A cash payment for goods or services procured by ACWWA.
- Enterprise – An entity that qualifies under the Taxpayer’s Bill of Rights (TABOR) as being a government-owned business authorized to issue its own revenue bonds and receiving fewer than 10 percent of its annual revenue in grants from all Colorado state and local governments combined.
- Enterprise Fund – A fund established to finance and account for the acquisition, operation, and maintenance of governmental facilities and services, which are entirely or predominantly self-supporting, by user charges.
- Expenditure – Under the accrual basis or modified accrual basis, this term designates the cost of goods delivered or services rendered, whether paid or unpaid. This expression is generally used for governmental type funds.
- Expenses – Charges incurred, whether paid or unpaid for operation, maintenance, and interest, and other charges, which are presumed to benefit the current fiscal period. This expression is generally used for proprietary type funds such as enterprises, trust and agencies.
- Fiscal period – A period of time usually consisting of twelve months. At the end of the fiscal period a governmental unit determines its financial position and the results of its operations. ACWWA’s fiscal period is January 1 to December 31.
- FTE – An FTE is a “Full-Time Equivalent” which is equivalent to one full-time employee who works 40 hours per week for 52 weeks, for a total of 2,080 work hours.

- Fund – A self-balancing accounting entity segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restriction or limitation such as Water and Wastewater.
- Fund Balance – Resources remaining from prior years, which are available to be budgeted in the current year.
- FY – Fiscal Year
- Generally Accepted Accounting Principles (GAAP) – Generally Accepted Accounting Principles are uniform minimum standards and guidelines for financial accounting and reporting. Currently, the Financial Accounting Standards Board (FASB), the Governmental Accounting Standards Board (GASB) and the Federal Accounting Standards Advisory are authorized to establish these principles.
- Gross Revenue – All income and revenues directly or indirectly derived from the operation and use of the System, or any part thereof.
- IWSD – Inverness Water and Sanitation District
- Internal Controls – A plan of organization under which employee's duties are so arranged and records and procedures so designed as to make it possible to protect and exercise effective accounting control over assets, liabilities, revenues and expenditures.
- Long Term Debt – Debt that is legally payable from revenues and backed by the credit of ACWWA.
- MGD – Million gallons per day
- Operating Budget – A budget that applies to all other outlays other than capital projects.
- Operation and Maintenance (O&M) Expenses – All reasonable and necessary current expenses paid or accrued for operating, maintaining, and repairing the System.
- Performance Measures – A performance measure is a specific quantitative measure of work performed, outputs and inputs.
- PID – Public Improvement District. Specifically, the Arapahoe County Water and Wastewater Public Improvement District.
- Program – A group of related activities performed by one or more organizational units for the purpose of accomplishing a function for which the government is responsible.
- Pump Stations – A pump station is a manmade structure that uses a pump to transfer water from one location to another.
- Refunding Bonds – Bonds issued solely to retire bonds already outstanding.
- Reserve – An account which records a portion of the fund balance which must be segregated for some specific use and which is, therefore, not available for other expenditures.

- Resolution – A special or temporary order or decision of the Board of Directors acting as a legislative body. A resolution and a motion have the same force and effect.
- Retained Earnings – The cumulative earnings of an operation that generally have been invested in property, plant and equipment or current assets.
- Revenue – Additions to assets, which do not increase any liability, do not represent the recovery of expenditure, and do not represent the cancellation of certain liabilities.
- Revenue Bonds – Bonds whose principal and interest are payable exclusively from earnings of a public enterprise.
- SDWA – Safe Drinking Water Act
- Surplus – The excess of the assets of a fund over its liabilities or its resources over its disbursements.
- System – All water and wastewater facilities and properties, now owned or hereafter acquired, whether situated within or outside of ACWWA's boundaries.
- TBD – To be determined
- Tap fees – the cost of connecting a home or business to the water and/or wastewater systems.
- Tap equivalent – a mathematical calculation to convert disparate numbers of water and wastewater taps into a single unit of measurement.
- Taxpayer's Bill of Rights (T.A.B.O.R.) – An amendment to the constitution of Colorado enacted in 1992 that limits the powers of governments in Colorado to levy taxes and incur debt. It also sets forth revenue limits for non-enterprise systems. TABOR is found at Article X, Section 20 of the Colorado Constitution.

APPENDIX



FPP.1. Financial Policies and Procedures

FPP.1.1 Basis of Accounting

For budgetary reporting purposes, ACWWA uses the modified accrual basis of accounting and budgeting for its one general fund. For financial reporting purposes, ACWWA utilizes the full accrual basis of accounting.

Under the modified accrual basis of accounting, revenues are recognized when they become measurable and available. “Measurable” means the amount of the transaction can be determined and “available” means collectible with the current period or soon enough thereafter to be used to pay liabilities of the current period. Expenditures are recognized in the accounting period in which the liability is incurred. Non-cash expense items such as depreciation expense for fixed assets and accrued compensated absences are excluded from the budget. All annual appropriations lapse at the end of the fiscal year.

ACWWA operates under one fund for budgetary purposes. However, ACWWA’s departments are categorized in service lines – water and wastewater – for budgetary and financial reporting purposes.

The costs of vacation and sick leave benefits (accrued compensated absences) are expended when payments are made to employees. The liability for all accrued and vested vacation and sick pay benefits, and vested sick leave benefits is recorded as a long-term liability.

FPP.1.2 Revenue Policies

ACWWA estimates revenues conservatively using an objective and analytical approach employing techniques such as reviewing historical trends, current information, and economic indicators to ensure consistency, reliability and reasonableness. ACWWA utilizes a financial model that allows future revenue projections and that can be updated annually to reflect changing conditions. ACWWA’s long-term financial plan assesses long-term financial implications of current and proposed policies and programs. It also serves as a tool to allow staff to deal with financial issues proactively.

- ACWWA shall maintain a diversified and stable revenue base. Existing and potential revenue sources shall be reviewed annually for stability, equity efficiency and capacity to finance future operations.
- An objective, analytical process that recognizes the sensitivity of each revenue source shall be used to estimate revenues.
- Whenever authorized and appropriate, user fees and charges shall be established to recover the full costs of all programs and services.

FPP.1.3 Rates and Charges

Rates and charges are the primary component of ACWWA's revenue. User fees fund the services provided to ACWWA's customers. ACWWA utilizes a cost recovery concept to determine how costs are allocated to classes of customers. The full cost of providing various services is used as the basis for setting rates and fees. The full cost method incorporates both direct and indirect costs, including operations and maintenance, overhead, and charges for the use of capital facilities. Examples of ACWWA's overhead include billing, payroll processing, accounting and administrative services, computer support, office supplies, and other central administrative charges.

ACWWA's Board of Directors established the following guidelines for the user rate and charge setting process:

- Rates and charges are established utilizing a generally accepted cost recovery methodology that is consistent and legally defendable using the following approaches: revenue requirement analysis cost of service analysis, and rate design analysis. ACWWA conducted a rate study in the third quarter of 2015, which is the basis for 2017 rates.
- Rate design shall be reflective of ACWWA's Board of Directors' rate setting objectives.
- Rates shall be set at a level to collect more reliable revenues through a combination of system access charges and low to medium users' commodity rates to meet ACWWA's revenue requirements.
- Rates and charges will be reviewed and updated annually based on factors such as the impact of inflation, other cost increases, and the adequacy of coverage of costs.
- ACWWA must produce revenues sufficient to pay:
 - a minimum of 1.25 times the Annual Debt Service Requirements as required to meet debt coverage covenants of ACWWA's bonds; and
 - the amounts required to be deposited in any reserve or contingency fund created for the payment and security of obligations.
- ACWWA will adjust rates and charges as the Board deems necessary so that net system revenues from such adjusted rates and charges will be sufficient at all times to meet the requirements.

FPP.1.4 Recognition of Revenues

Revenues are recorded when earned. Customers' meters are read and bills are prepared monthly based on billing cycles.

FPP.1.5 Expenditure Policy

ACWWA's expenditures reflect the commitment of the Board of Directors and staff to serve present and future customers reliably. The Board and staff believe that prudent expenditure planning and accountability will ensure fiscal stability. Expenditures are projected conservatively using an objective and analytical approach and employing certain techniques such as the review of historical trends, current information, and economic indicators to ensure consistency, reliability, and reasonableness. ACWWA's financial model allows for future projections of capital and operating expenditures.

FPP.1.6 Disbursements

Disbursement of Authority funds must be for a legitimate purpose and within budgetary limits.

Payment for Authority contracts and purchase orders are contingent on evidence of receipt or acceptance of the specific deliverables.

FPP.1.7 Maintenance of Capital Assets

Maintaining a reliable transmission and distribution system and a sustained capital program are not possible without reliable funding sources. Prudent financial planning is critical to an effective capital improvement program. ACWWA uses a combination of debt financing and “pay as you go” to fund the capital improvement program and maintenance of capital assets. The annual capital improvements cost is estimated by staff and is included in the amount to be funded from rates and charges.

Within the resources available each fiscal year, ACWWA will strive to maintain capital assets and infrastructure at a satisfactory level to protect its investment, to minimize future replacement and maintenance costs, and to maintain service levels.

FPP.1.8 Review of Service Policy

These expenditure policies are used by staff to prompt review of services to see if they are being provided as effectively and efficiently as possible. ACWWA’s review of service policy is designed to accomplish the following:

- Encourage greater efficiency and effectiveness of the delivery of services by sharing resources and coordinating with other public and private organization through partnerships;
- Where possible, utilize technology and productivity advancements that will help reduce or avoid increasing personnel costs;
- Control personnel costs as a proportion of total budget by the more effective use of resources.

FPP.1.9 Cash Management Policies and Practices

ACWWA’s cash management policies strive to:

- maximize ACWWA’s cash position;
- accelerate collections and control disbursements to optimize cash availability;
- meet its financial obligations on a timely basis in order to maintain public trust and productive relations with employees, suppliers, and contractors;
- develop monthly cash flow projections to help formulate investment strategies for the most effective use of resources;
- manage funds in a prudent and diligent manner that meets the criteria of legality, safety, liquidity and yield, in that order of importance.

FPP.1.10 Debt Financing

ACWWA will use debt financing when it is judged to be appropriate based on the long-term capital needs of ACWWA, and the capacity to repay the indebtedness has been evaluated in light of all sources and uses of cash.

ACWWA will only incur long-term debt for the financing of capital improvements that are not expected to recur and are long-lived. Conversely, if the capital requirements are recurring, of relative small scale or are for short-lived improvements, the costs of these improvements will be paid from current revenues.

FPP.1.11 Reserve Funds

ACWWA maintains several reserve funds. In partnership with Inverness Water and Sanitation District (IWSD), maintains a Repair and Replacement Reserve for the Wastewater Treatment Plant of which ACWWA contributes 69.44% and IWSD contributes 30.55%. ACWWA currently contributes \$288,000 to this reserve annually. ACWWA and CWSD maintain a reserve fund for the JWPP to which ACWWA contributes \$12,667 annually. ACWWA is also required by bond covenants to maintain debt service reserves of \$7.6 million.

FPP.1.12 Revenue Bonds

ACWWA does not collect taxes and cannot issue General Obligation Bonds. ACWWA may issue Revenue Bonds secured by a pledge of revenues. Revenue Bonds are limited liability obligations that pledge net revenues of ACWWA to debt service. The net revenue pledge is after payment of all operating costs. The financial markets require coverage ratios of the pledged revenue stream and a covenant to levy rates and fees sufficient to produce net income at some level in excess of debt service.

There may be an additional test required to demonstrate that future revenues will be sufficient to maintain debt service coverage levels after additional bonds are issued. ACWWA will strive to exceed the coverage ratio required by the debt covenants. Annual adjustments to ACWWA's rate structure may be necessary to maintain these coverage ratios.

The credit rating of Revenue Bonds is based on the ability of ACWWA's existing rates to provide sufficient net income to pay debt service, as well as the perceived willingness of ACWWA's Board of Directors to raise rates and fees in accordance with its bond covenants. Past performance also plays a role in evaluating the credit quality of Revenue Bonds, as does the diversity of the customer base.

FPP.1.13 Capital Leases

Capital lease and installment sale agreements shall be considered as an alternative to long-term debt. Although these forms of alternative financing are subject to annual appropriation, they shall be treated as long-term debt until maturity.

ACWWA currently has no Capital Lease Obligations.

FPP.1.14 Long-Term Debt

Long-term debt is defined as bonded indebtedness whose maturity is at least ten years from issue date.

When developing funding strategies for projects; ACWWA will first consider revenues unique to such projects, e.g.; water funds for water projects, and wastewater funds for wastewater projects.

Projects will be funded with Revenue Bonds only if no other revenue source can be utilized.

When appropriate, ACWWA will use long-term debt financing to: achieve an equitable allocation of capital costs/charges between current and future system users, to provide more manageable rates in the near and medium term, and to minimize rate volatility.

For growth-related projects, debt financing will be utilized as needed to better match the cost of anticipated facility needs with timing of expected new connections to the system and spread the costs evenly over time.

Every effort will be made to schedule principal and interest payments so as to avoid fluctuations in debt service requirements and related fluctuations in user fees. Because debt financing involves long-term commitments, the projects that are financed through debt financing will only be those that have a useful life at least equal to the debt amortization period. Therefore, debt financing shall be used only for capital expenditures and not for addressing maintenance items.

A rate review will be conducted when appropriate to ensure predictable and affordable changes to utility system rates. ACWWA will maintain rates to confirm that it meets bond coverage requirements. Exceptions to this strategy may be made by the Governing Board for projects that are mandated by judicial or regulatory bodies, or for emergency situations.

FPP.1.15 Short-Term Debt

User fees should support needed capital improvements on a pay-as-you-go basis to the greatest extent possible. In the event short-term debt financing is required, lease-purchases, operating leases or other debt instruments may be used as a short-term (less than ten years) method of borrowing. This financing may be used for costs such as the purchase of fleet equipment, the renovation or reconstruction of capital assets, specialized types of equipment purchases, communications, and data transmission systems.

ACWWA may utilize short-term borrowing to serve as a bridge for anticipated revenues, construction financing or future bonding capacity.

All proposals for short-term financing will be evaluated on a case-by-case basis with findings presented to the Board prior to authorizing financing. Examples of issues to be addressed in the case-by-case analysis may include, but not necessarily be limited to the following:

- The extent to which the proposed improvement(s) either (a) extend the useful life of the facility(s) by greater than five years or (b) add to the long-term value of the underlying asset by an amount equal to or in excess of the cost of the improvement. Improvements may be one project or a series of projects, when performed as a package, extend the useful life by the required minimum.

- The extent to which a permanent, ongoing additional maintenance commitment is required in order to maintain the value and utility of the financed improvements during the time period in which the financing is outstanding.
- The extent to which an improvement(s) provides a long-term solution to a problem or effectively arrests deterioration which might lead to structural failure, beyond which the process should not have to be repeated if there is appropriate preventative maintenance.
- The extent to which financing spreads the cost of the improvements between present and future users.

FPP.1.16 Debt Authorizations

All long and short-term debt shall require Board authorization prior to issuance. ACWWA has no plans to issue debt in 2017, but does intend to refund the Series 2007 bonds.

FPP.1.16.1 Current Debt Outstanding

In 2006, ACWWA issued \$22,940,000 in Revenue Refunding Bonds. The proceeds from the 2006 Series Bonds were used to refund the Water and Wastewater Revenue Variable Rate Refunding and Improvement Bonds, Series 2003A and the Taxable/Tax-Exempt Water and Wastewater Revenue Variable Rate Refunding Bonds, Series 2003B. The 2006 Series Bonds were refunded on October 4, 2016 by the Series 2016 Water and Wastewater Revenue Refunding Bonds in the amount of \$16,475,000 to take advantage of lower interest rates.

In 2007, ACWWA issued \$18,760,000 in Revenue Refunding Bonds. The proceeds from the 2007 Series Bonds were used to refund the Water and Wastewater Revenue Variable Rate Refunding and Improvement Bonds, Series 2003C and to provide \$10 million of new money to be used for capital projects.

In 2009, ACWWA issued \$91,545,000 in Taxable Water and Wastewater Revenue Direct Pay Build America Bonds and \$5,625,000 in Water and Wastewater Revenue Bonds. The proceeds from the 2009 Series Bonds were used to purchase a renewable water source, infrastructure, and water storage. This project is identified as the ACWWA Flow Project. In 2012, ACWWA refunded the 2009 Series B Bonds.

A summary of outstanding debt is as follows:

- Water and Wastewater Revenue Refunding Bonds, Series 2007 Bonds, original amount \$18,760,000; amount outstanding January 1, 2017 - \$14,360,000
- Taxable Water and Wastewater Revenue Direct Pay Build America Bonds, Series 2009A Bonds, original amount \$91,545,000; amount outstanding January 1, 2017 - \$88,200,000
- Water and Wastewater Revenue Bonds, Series 2012 Bonds, original amount \$5,525,000; amount outstanding January 1, 2017 - \$5,525,000.

- Water and Wastewater Revenue Refunding Bonds, Series 2016 Bonds, original amount \$16,475,000; amount outstanding January 1, 2017 - \$16,220,000.

FPP.1.16.2 Debt Limits

ACWWA is not legally restricted as to the amount of debt that can be issued.

FPP.1.17 Balanced Budget

Colorado statutes and ACWWA's financial policies require an annual budget that is balanced. A balanced budget is one in which the budget has sufficient projected revenues and available resources to equal anticipated expenditures. Throughout the budget development process, projected revenue estimates are updated and compared against proposed expenditures.

ACWWA has developed a series of revenue and expenditure assumptions, based on current and projected economic indicator, and historical trends. Expenditure and revenue collection history for the last two years and information supplied by various departments were used to determine revenue sources and uses.

FPP.1.18 ACWWA's Funds

ACWWA describes a fund as a self-balancing accounting entity segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restriction or limitation such as water or wastewater.

FPP.1.18.1 Funds Available

ACWWA describes funds available as resources remaining from prior years, which are available to be budgeted in the current year.

FPP.1.18.2 Restricted Cash Funds

Restricted cash funds are those that are legally set aside for a particular purpose and cannot be used for any other purpose. These are funds whose use is not at the discretion of the Board. The only restricted cash fund that ACWWA maintains is a debt reserve account which is a requirement of bond covenants.

FPP.1.18.3 Designated Cash Funds

Designated cash funds are general use funds that have been set apart by Board action for a specific purpose. These funds can only be used for those purposes. However, these funds are at the discretion of the Board and can be used for any other purpose by an action of the Board. ACWWA maintains designated funds to provide for the repair and replacement of facilities.

FPP.1.18.4 General Use Cash Fund

General use cash funds are funds that are not restricted or designated. ACWWA maintains a general cash fund to provide cash for operations, debt service, and capital improvements.

FPP.1.18.5 Authority Funds Subject to Appropriation

ACWWA operates as an Enterprise Fund. Enterprise Funds are used to account for operations that are financed and operated in a manner similar to private business enterprises, in that the costs of providing goods or services to the general public are financed through user charges.



Budget Resolution 2016-06

A RESOLUTION SUMMARIZING REVENUES AND EXPENDITURES FOR EACH FUND, ADOPTING A BUDGET, AND APPROPRIATING SUMS OF MONEY TO THE VARIOUS FUNDS IN THE AMOUNTS AND FOR THE PURPOSES SET FORTH HEREIN FOR THE ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY, ARAPAHOE COUNTY, COLORADO, FOR THE CALENDAR YEAR BEGINNING ON THE FIRST DAY OF JANUARY, 2017, AND ENDING ON THE LAST DAY OF DECEMBER 2017.

WHEREAS, the proposed 2017 budget has been submitted to the Board of Directors of the Arapahoe County Water and Wastewater Authority for its consideration; and

WHEREAS, upon due and proper notice, published in the Aurora Sentinel and the Douglas County News Press in accordance with the law, and said proposed budget was open for inspection by the public at a designated place, a public hearing was held on November 18, 2015 and interested persons were given the opportunity to file or register any objections to said proposed budget; and

WHEREAS, whatever increases may have been made in the expenditures, like increases were added to the revenues so that the budget remains in balance, as required by law,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY, ARAPAHOE COUNTY, COLORADO:

Section 1: 2017 Budget Revenues. That the estimated revenues for each fund set out in the budget are accepted and approved.

Section 2: 2017 Budget Expenditures. That the estimated expenditures for each fund set out in the budget are accepted and approved.

Section 3: Designation of Ending Fund Balances as Reserves. That pursuant to Const. Colo. Article X, Section 20, the December 31, 2016, ending fund balance of the Operating Fund, the exact amount to be determined as part of the audit of the December 31, 2016 financial statements, is designated as a general reserve for future contingencies.

Section 4: Adoption of Budget for 2017. That the budget as submitted and if amended, then as amended, is hereby approved and adopted as the budget of the Arapahoe County Water and Wastewater Authority for calendar year 2017.

Section 5: Fiscal Year Spending Limits. That, being fully informed, the Board finds that the foregoing budget does not result in a violation of any applicable fiscal year spending limitation.

Section 6: Appropriations. That the amounts set forth as expenditures and balances remaining, as specifically allocated in the budget are hereby appropriated from the revenue of each fund, to each fund, for the purposes stated and no other.

Section 7: Discretion: The General Manager may exercise discretion in administration of the Operating Budget to respond to changed circumstances, provided that any modification in excess of \$25,000 receives approval by the Board.

ADOPTED AND APPROVED this ____ day of December, 2016.

President

ATTEST:

Secretary