SAN DIEGO COUNTY TAXPAYERS EDUCATIONAL FOUNDATION

The Water Project

Phase I: Analysis of Labor Costs at Regional Water Agencies, FY 1999- FY 2009

Part II: San Diego County Water Authority

The San Diego Taxpayers Educational Foundation is a nonprofit public benefit corporation created to research government revenue and expenditure policies affecting taxpayers in San Diego County as well as other public policy issues having a direct bearing on county residents and businesses.

Acknowledgements

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EXECUTIVE SUMMARY

As part of a multi-year effort to better understand the region's long-term, strategic water needs, inform ratepayers about water costs, and provide much-needed oversight of local water districts, the San Diego Taxpayers Educational Foundation (SDTEF) will issue occasional reports on water-related topics. The first phase of this effort is a study of labor costs at the county's various water districts covering fiscal years (FY) 1999 to 2009. With this project, SDTEF is seeking to identify the major components that contribute to total employee labor costs, both immediate and long-term, funded and unfunded.

The first report (released on November 1, 2011and available at www.sdcta.org) focused solely on labor costs at the Metropolitan Water District of Southern California (also Metropolitan, the Met, the District, or MWD), the larger of two regional water wholesalers. This analysis examines labor costs at the other wholesaler, the San Diego County Water Authority (also the County Water Authority, the Authority, or CWA). A future report will concentrate on the numerous independent water agencies and city-managed water departments within the county that provide water directly to ratepayers.

KEY FINDINGS

- The Total Annual Labor Cost for CWA, as of FY 2009, was over $40 million.[1] This marks an increase of 85% since FY 1999. The estimated labor cost per employee was $147,000, or an increase of 24% since FY 1999.

- Annual salary and benefit costs both nearly doubled between FY 1999 and FY 2009. For the period covered, the number of employees at the Authority increased by nearly 50%.[2]

[1]Unless otherwise indicated, all numbers in this report are adjusted for inflation (2010 dollars) using the United States Department of Labor's Bureau of Labor Statistics Urban Consumer CPI for San Diego. All calculations are based on those adjusted numbers.
[2]The Water Authority's workforce grew 49 percent between 1999 and 2009 to support new water reliability programs and the peak planning and construction period for its $3.5 billion Capital Improvement Program. In June 2011, the Authority announced it would eliminate 31.33 full-time equivalent positions by the end of its FY 2012/13 budget period and an additional 4.42 positions by Fiscal Year 2014. "Water Authority Approves $1.42 Billion Budget for Fiscal Years 2012 and 2013." http://www.sdcwa.org/water-authority-approves-142-billion-budget-fiscal-years-2012-and-2013.

- ❋ The Total Labor-Related Unfunded Liability for CWA as of FY 2009 was $43 million. The Authority had no labor-related liability between FY 1999 and FY 2002. Between FY 2003 and FY 2009, however, the Authority's total unfunded liability increased by over $35 million.

- ❋ The value of a typical pension and retiree healthcare benefit paid out to a CWA employee who retires at age 55 amounts to nearly $1.4 million over his/her retirement.

- ❋ The Authority began the period under review without a pension liability and ended with an unfunded pension liability of $40 million. This liability represents the largest portion (93%) of CWA's FY 2009 Total Labor-Related Liability.

- ❋ The Authority offers retiree health benefits to employees (and their spouses) with as few as five years service beginning at age 55 (the earliest age at which they can retire). This benefit is offered until both the employee and spouse turn 65 and can amount to as much as $3,840 annually. This benefit is in addition to annual pension payments.

- ❋ For the period covered, CWA paid 7% of its employees' required 8% pension contribution.[3] In FY 2005, it began counting this payment as compensated salary, thereby increasing its pension costs.

- ❋ The cost of the "**pick-up**"[4] increased by 78% between FY 1999 and FY 2009.

[3]As of July 1, 2011 CWA employees pay 4.5 percent of their salaries to partially fund their pensions. This is an increase from the one percent they previously paid but well below the eight percent they are required to pay. The County Water Authority continues to pay the difference. San Diego County Water Authority. Comprehensive Annual Financial Report, Fiscal Year Ended June 30, 2010. P 61.
http://www.sdcwa.org/sites/default/files/files/finance-investor/CAFR2010.pdf
[4]Definitions for words in bold are provided in the Glossary.

INTRODUCTION

FOREWORD

Years of drought, concerns over future supplies of water from Northern California, mandated conservation, debates over water recycling, delays in desalination efforts, and increased conflict between MWD and CWA, are just some of the issues causing many in San Diego County, both residents and business operators alike, to question the future dependability of the region's water resources.

At the same time, increasing public employee labor costs, particularly as they relate to pensions and other retirement benefits, have become the locus of government reform efforts in our state and county. While most public attention focuses on state and municipal employees, it is important to remember that numerous other agencies and government entities operate throughout the county. Among these are the 24 districts[5] that supply water directly to the county's three million residents and the water wholesalers that supply water to them.

These concerns are being raised against a backdrop of numerous local rate hikes occurring at the retail-level. As might be expected, the cause of these increases is being placed at the feet of the region's two water wholesalers, the San Diego County Water Authority and the Metropolitan Water District of Southern California, the latter being the water supplier for most of Southern California. In spring of 2010, MWD approved a rate hike of 7.5 % that began January 2011. An equivalent increase is scheduled for 2012.[6]

For its part, citing MWD rate increases and debt service costs, CWA raised rates 11.3 % in June 2010[7] and by 7.7 % in June 2011.[8] The Authority also deferred $68 million in capital expenditures until 2014, a move that is expected to temporarily reduce costs between $17 and $22 per acre-foot.[9]

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[5] Of CWA's 24 member agencies, one is Camp Pendleton, which is excluded from this project. Another, the Sweetwater Authority, is actually a joint powers public agency created by the South Bay Irrigation District and National City.

[6] Metropolitan Water District of Southern California. "Minutes, Regular Meeting of the Board of Directors." April 13, 2010. PP. 6-8.

[7] San Diego County Water Authority. "Water Authority Adopts 11.3 Percent Treated Water Rate Increase for 2011." Jun 24, 2010. http://www.sdcwa.org/water-authority-adopts-113-percent-treated-water-rate-increase-2011

[8] San Diego County Water Authority. "Water Authority Approves $1.42 Billion Budget for Fiscal Years 2012 and 2013." Jun 23, 2011. http://www.sdcwa.org/water-authority-approves-142-billion-budget-fiscal-years-2012-and-2013. Rate hikes apply to treated water.

[9] "Water Authority Defers Three Additional Capital Projects Until July 2014." San Diego County Water Authority. http://www.sdcwa.org/water-authority-defers-three-additional-capital-projects-until-july-2014

The intent of this phase of the project ("Phase I: Analysis of Labor Costs at Regional Water Agencies, FY 1999- FY 2009), is to give ratepayers a comprehensive picture of labor costs related to the supply and delivery of water in San Diego County by providing not only a dollar figure for total annual labor costs and liabilities at each water agency but also the various elements that make up those costs and liabilities. These unfunded liabilities run into the tens—and even hundreds—of millions of dollars. While labor costs and liabilities alone do not account for recent rate hikes, they deserve scrutiny nonetheless as they are potential opportunities for ratepayer savings.

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BACKGROUND

REGIONAL ROLE OF THE COUNTY WATER AUTHORITY

Founded in 1944, the San Diego County Water Authority is a water wholesaler. It does not provide water services directly to consumers but to water retailers. Its member agencies include six cities, five water districts, three irrigation districts, eight municipal water districts, one public utility district, and one federal agency.[10]

The Water Authority gets most of its water from MWD (62% of total supplies in Calendar Year 2009)[11], which, in turn, gets its water from the Colorado River and the California State Water Project (the Sierra Nevada watershed via the Sacramento-San Joaquin River Delta estuary). The Authority also receives a significant portion of its water from a long-term water transfer agreement with the Imperial Irrigation District in Imperial County and conservation projects such as the lining of the All American and Coachella Canals, also in the Imperial Valley.

The Authority maintains five major water pipelines, one reservoir and oversees regional water management efforts relating to water supply, water quality, conservation, and emergency preparedness, among others.

PENSIONS

The Water Authority belongs to the **California Public Employees Retirement System (CalPERS)** and offers its employees a **defined benefit pension plan** that specifies the amount to be paid when an employee retires. This benefit, paid largely by the employer, is guaranteed for the life of the retiree and his/her spouse, regardless of the performance of the securities in which the pension contributions have been invested. Any deficiencies must be made up with public (i.e., ratepayer or taxpayer) money. This is in contrast to a **defined contribution pension plan** in which an employee contributes to a plan, such as a 401(k), with no risk to the employer (for definitions, please see sidebar on page 12 or in the Glossary).

[10] San Diego County Water Authority. Comprehensive Annual Financial Report, Fiscal Year Ended June 30, 2010. P 2. http://www.sdcwa.org/sites/default/files/files/finance-investor/CAFR2010.pdf

[11] Ibid, P 6.

Pension payments are determined using a benefit formula. For **miscellaneous employees**, public agencies have five formulae from which to choose. In the case of CWA, the formula for most employees is 2.5% with a minimum retirement age of 55, or 2.5% at 55.[12]

CalPERS Retirement Benefit Forumlas

2% @ 60	
2% @ 55	
2.5% @ 55	← CWA
2.7% @ 55	
3% @ 60	

To determine exactly how much a public employee would receive in annual pension benefits upon retirement, the following calculation is used:

Annual Pension Benefit

=

Years of Service

(The number of years an employee has worked at CWA.)

x

Final Compensation

(The average of the final 12-month compensation period.)

x

Benefit Factor

(A multiplier applied to each year of service, in CWA's case 2.5%.)

To illustrate: A retiring 55-year-old employee who worked 20 years and whose average compensation over his/her last 12 months of employment was $95,593[13] would receive $47,796 in his/her first year of retirement (20 x $95,593 x 0.025). This would be supplemented by an annual **Cost of Living Adjustment (COLA)** of 3%.[14]

Assuming, as CalPERS **actuaries** have recommended, that a 55-year-old employee will live until age 84,[15] after 29 years, with the COLA factored in, the annual pension benefit would be $109,354. This figure does not include Social Security payments, for which CWA retirees are also eligible.[16]

[12] A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service. CalPERS Annual Valuation Report as of June 30, 2009, Appendix B. Issued Dec 2010.

[13] The average annual salary for employees ages 55-59 with 20-25 years of service according to CalPERS Annual Valuation Report as of June 30, 2009, P. 24. Issued Dec 2010. Unless otherwise noted, all dollar figures in "Pensions" section are nominal.

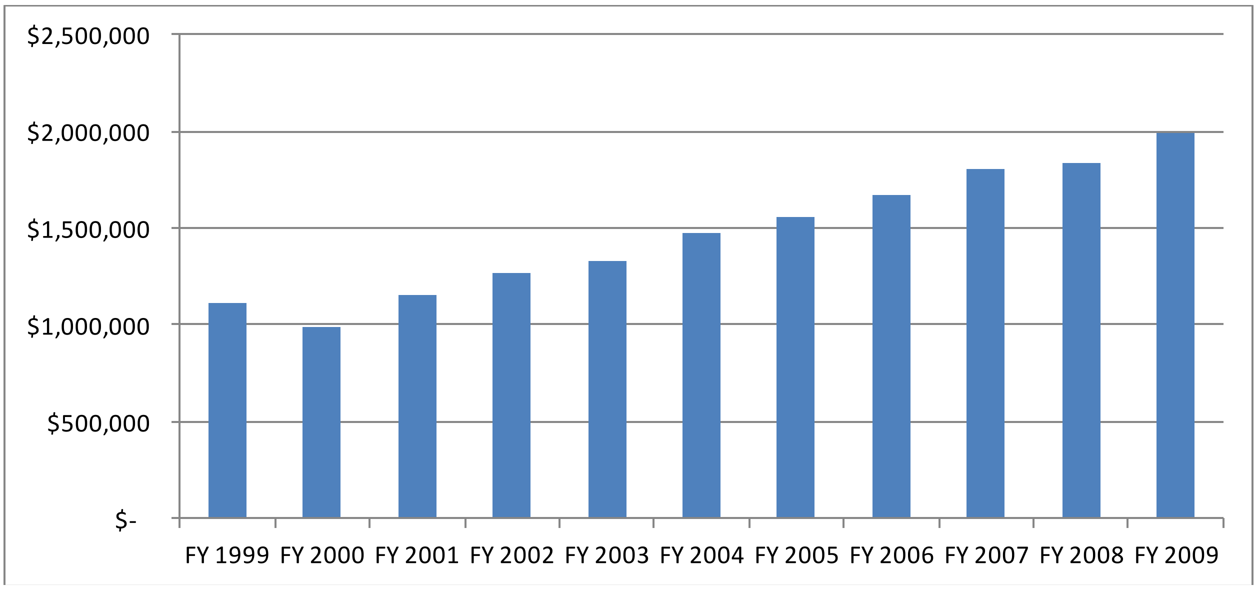
[14] CalPERS. "Miscellaneous Plan of The San Diego County Water Authority. Annual Valuation Report as of June 30, 2009." Oct 2010. Appendix B-1. Multiple MOUs between CWA and employee bargaining units.

[15] CalPERS Actuarial Office. "CalPERS Experience Study: 1997 to 2007. Apr 2010. P. 27-29. Life expectancy used for calculations is rounded average for men (82.3) and women (85.3).

[16] CalPERS. "Miscellaneous Plan of The San Diego County Water Authority. Annual Valuation Report as of June 30, 2009." Oct 2010. Appendix B-1.

A benefit that further increases the final pension payment is the practice of the employer picking up the portion of an employee's salary that the employee is required to pay towards his/her own retirement (the **normal employee contribution rate)** and counting it as additional compensation. The technical name for this payment is the **Employer Paid Member Contribution (EPMC)**. It is also referred to as the "pick-up**.**" In the case of most CWA employees, the employee contribution is eight percent of base salary. Until recently, CWA picked up seven percent of the total. The cost of the "pick-up" increased by 78% between FY 1999 and FY 2009.

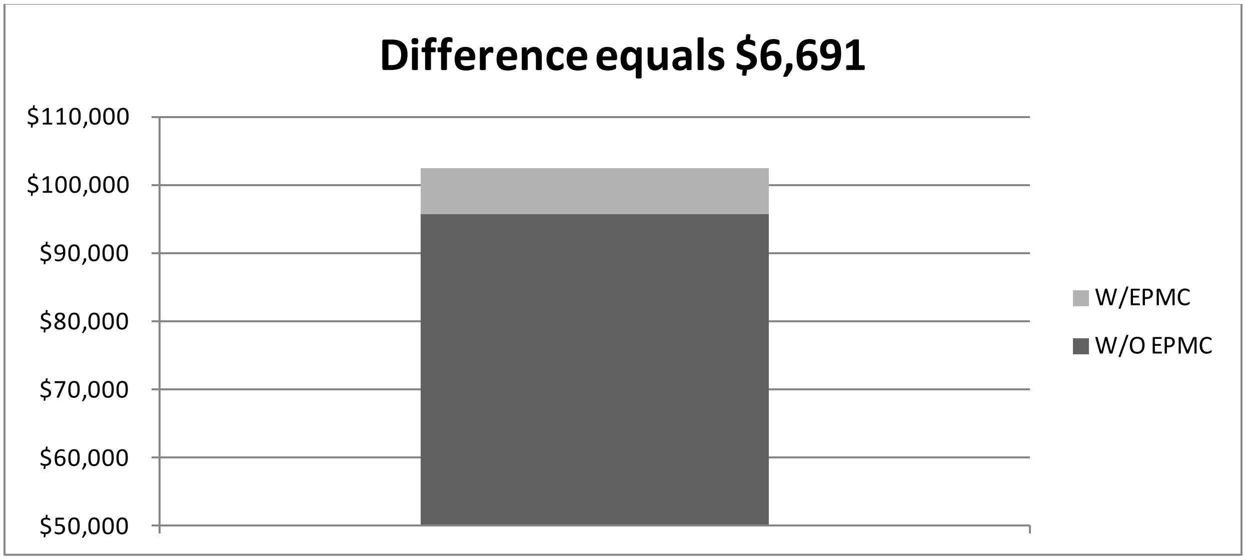
Figure 1: CWA "Pick-Up" of Employee Pension Contributions (EPMC) (2010 Dollars)



Not only does this practice save employees from having to pay retirement costs out of pocket, but, if the employer reports the contribution as "increased compensation"[17]—which CWA has since 2005—the amount is added to the final compensation figure used to calculate retirement benefits.

[17]Multiple MOUs between CWA and employee bargaining units.

Figure 2: Final Compensation for Retirement



In the case of our hypothetical worker, this benefit would add $6,691 to the final compensation (Figure 2) and $3,346 to the annual pension payment in the first year of retirement.[18] With both the COLA and the pick-up factored in, at the end of 29 years, the annual pension benefit would be $117,009.

To pay for the pension benefit, employers make contributions to CalPERS. The **employer contribution rate** is determined by actuaries and includes the **normal cost** plus a payment on the **amortization** of the **unfunded liability**, expressed as a percentage of payroll. The employer contribution rate is then multiplied by the **annual covered payroll**. The resulting figure is called the **Annual Required Contribution** (**ARC**).

An unfunded liability is created when actual experience does not match the assumptions used—requiring the respective agency to participate in a payment plan to make up the difference. There are many reasons why an agency may have an unfunded liability. These include such factors as anemic investment returns and demographic changes.[19] It should be noted that if CalPERS's forecasting is incorrect and retirement costs exceed MWD's ability to pay, the responsibility for paying the difference would fall on ratepayers.

Employer Contribution Rate: Required contribution of employers into the pension system. Based on a percentage of payroll. It is typically made up of the normal cost of a system and the payment on the amortization of unfunded liability.

Normal Cost: The cost of service for all active employees in the fiscal year.

Unfunded Liability: Shortfall due to demographic changes, actuarial assumptions not equaling actual experience, and higher or lower than expected investment returns. This is amortized and included as a payment within the employer contribution rate.

Annual Required Contribution (ARC): Contribution required to the pension system based upon payroll and actuarial assumptions. It is determined by multiplying the employer contribution rate by the annual covered payroll.

[18] It should be noted that both payment of the EPMC and counting it as additional compensation are common practices at many municipalities and public agencies, not just CWA.

[19] Much of the background on pension funding was obtained from San Diego County Taxpayers Association. "San Diego Pension Plans. Phase 1: CalPERS Contracted Municipalities." Oct 7, 2009. http://www.sdcta.org/Uploads/Documents/Press%20Release%20and%20Phase%20I%20Pension%20Report,%2010-7-09_1.pdf

While most of the discussion about outstanding obligations focuses on pensions, **Other Post Employment Benefits** (**OPEB**) are gaining increased attention. In the case of CWA and most other public agencies, the OPEB refers exclusively to retiree healthcare benefits.

The Water Authority has established a single-employer defined benefit retiree healthcare plan to administer this benefit, which is available to employees who retire directly from CWA at age 55 with five years of service. Retirees receive a monthly cash subsidy of up to $200—or $320 for both them and their spouses—until age 65, although special allowance is made for younger spouses (who will continue to receive a monthly cash subsidy of up to $160 until they turn 65). Surviving spouses remain eligible for the benefit.[20] Referring back to our hypothetical worker, assuming he/she is married, the OPEB benefit could be worth as much as $3,840 annually.

Most public agencies, CWA included, have funded their OPEB obligation on a **pay-as-you-go (paygo)** basis. In other words, they pay for the benefit after employees retire rather than as the benefit is earned. In accordance with a relatively new ruling from the **Governmental Accounting Standards Board (GASB)**,[21] beginning in FY 2007, CWA and other similarly-sized public agencies were required to report the true, actuarial costs of retiree healthcare benefits in their annual financial statements, just as they do for pensions—not just their paygo costs. Unlike pensions, however, public agencies are not required to pay the OPEB**'s** Annual Required Contribution (ARC), which, as in the case of pensions is made up of both **normal costs** and additional payment toward the unfunded liability.[22] As a result, many government entities that offer retiree healthcare benefits have sizable unfunded OPEB liabilities.

[20] San Diego County Water Authority. Comprehensive Annual Financial Report, Fiscal Year Ended June 30, 2010. P 64. http://www.sdcwa.org/sites/default/files/files/finance-investor/CAFR2010.pdf

[21] Government Accounting Standards Board. "Summary of Statement No. 45: Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions." Jun 2004. http://www.gasb.org/st/summary/gstsm45.html

[22] The background on OPEBs comes in part from: San Diego County Taxpayers Association. "Retiree Healthcare '101.'" Apr 22, 2010. http://www.sdcta.org/Uploads/Documents/Backgrounder%204-22-2010,%20JG.pdf

Providing ratepayers with a more complete understanding of the true value of the pension benefit our hypothetical retiree would receive (as detailed above) requires a calculation that shows the value of the benefit over time, if the benefit were paid for today. This can be achieved by determining what the annual pension and OPEB benefits would be worth in today's dollars (referred to as the Net Present Value) assuming a given rate of return on investment over a period of time, in this case 29 years.[23] Doing so results in the following outcome:

NET PRESENT VALUE OF TYPICAL PENSION/OPEB BENEFIT FOR HYPOTHETICAL CWA EMPLOYEE (AND SPOUSE)*:

$1.4 million

(Not including survivor's benefits, Social Security or deferred compensation/matching contributions)

*Retired at age 55 with final compensation of average salary ($95,593) plus 7% pick-up ($6,691), annual COLA of 3%, and OPEB ($3840 annually until age 65) with life expectancy of 84 years.

Again, it should be stressed that this figure does not represent CWA's pension cost per employee but the estimated current dollar value of the lifetime pension benefit for a CWA employee meeting the selected criteria (age, years of service, final compensation, marital status, life expectancy) and subject to existing pension elements (benefit factor, EPMC, COLA, OPEB).

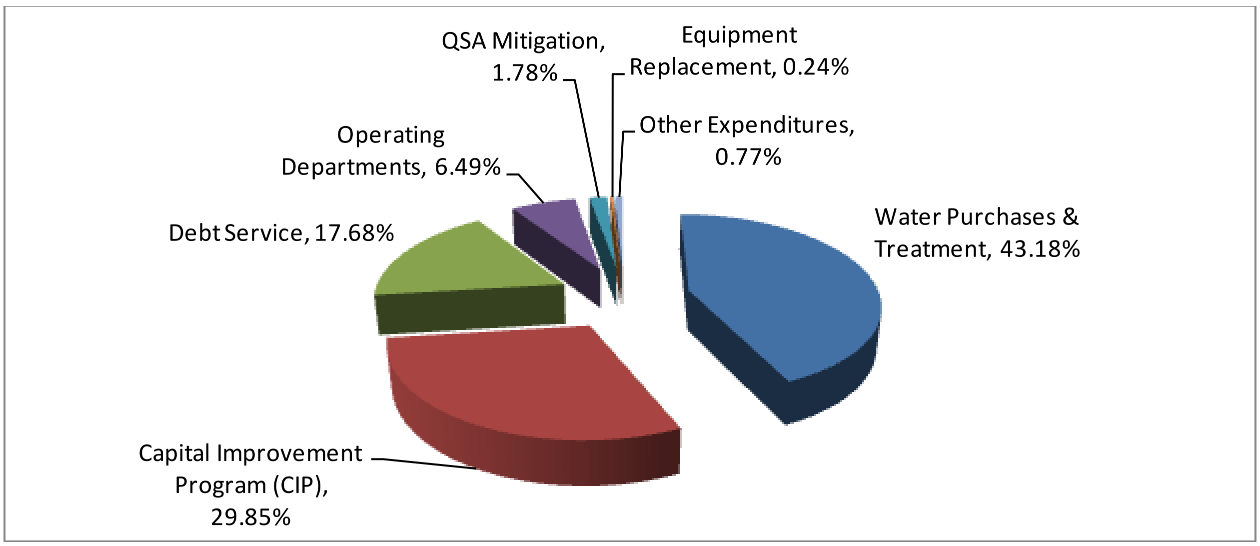
[23] The Net Present Value of the pension benefit is calculated using a 30-year U.S. Treasury bond rate of return of 3.32% (as of Sept 2, 2011). This is the standard rate of return for calculating the value of a stream of payment and is considered "risk free" (as opposed to rates of return based on riskier investment vehicles, such as stocks). This calculation further assumes that both employee and spouse would turn 65, and pass away, in the same year. The total cost of the pension benefit would be higher if the spouse were younger and/or lived longer. CalPERS's long-term assumed rate of return is 7.75 percent. See Appendix for formula.

FACTORS CONTRIBUTING TO WATER COSTS

There are many factors that determine the price ratepayers pay for water. The region depends heavily on water imported from the Colorado River and the California State Water Project. The Water Authority secures that water from the Metropolitan Water District (48%), although it also purchases an additional 13% of Colorado River water from the Imperial Irrigation District (IID).[24]

It logically follows that a major portion of CWA's expenditures (also called Uses of Funds) are directly related to the various costs passed on by the Met. This fact is reflected in CWA's Water Purchases and Treatment expenditure which accounted for over 40% of its expenditures (Figure 3) of $1.3 billion, or over $550 million in FYs 2010 and 2011.[25] This figure includes various supply charges and credits for conservation programs applied against the cost of water purchased.

Figure 3: CWA Expenditures, FYs 2010/11 (estimated)



Source: San Diego County Water Authority. "General Manager's Recommended Multi-Year Budget, Fiscal Years 2012 and 2013." P. 28. Jun 2011.

It also includes charges for transporting water from IID to the Authority. These charges have become a major source of contention between the two agencies. In June 2010, CWA filed a lawsuit arguing that MWD was combining its costs for purchasing water from the State Water Project with the costs of transporting IID water to San Diego County, thereby adding tens of millions of dollars annually to regional water costs.[26] That case is still before the courts.

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[24] San Diego County Water Authority. "Water Issues Update." Apr 21, 2011. P. 14. Powerpoint.

[25] Information for this section was taken from CWA's budget for FYs 2012 and 2013. All dollar figures for this section are nominal. http://www.sdcwa.org/sites/default/files/files/finance-investor/budget-recommended-2012-13.pdf

[26] San Diego County Water Authority. "Water Authority Board Approves Filing a Lawsuit Against Metropolitan Water District Challenging Illegal Water Rates." June 2010. http://www.sdcwa.org/water-authority-board-approves-filing-lawsuit-against%E2%80%A8-metropolitan-water-district-challenging-illeg

Other factors that influence aggregate costs of water are:

Capital Improvements: Beginning in the late-1980s, CWA began an effort to become more independent from MWD by diversifying the county's water supplies. At the heart of this endeavor is a 30-year capital improvement program, finalized in 2004, with a projected lifetime cost of $3 billion. Capital expenditures in FYs 2010 and 2011 were over $380 million.[27]

Debt Service: This increased commitment to achieving independence from the Met through capital projects has led to the need for more bonds. The result has been increased service on debt (principal plus interest) amounting to about 20% of the Authority's operating expenses. Payments on existing debt will range between $130 and $148 million every fiscal year between FY 2012 and FY 2034, when they are projected to decrease significantly.[28]

Operating Departments: Also called the Operating Budget. Includes annual labor costs (salaries and benefits, including annual pension and OPEB costs) and accounted for $83 million of CWA's $1.3 billion in expenditures for FY 2010 and FY 2011, or 6.5 percent of total. (A breakdown of the Operating Budget is provided in Figure 4.)

QSA Mitigation: As part of the Quantification Settlement Agreement—the 2003 deal between the San Diego County Water Authority, Coachella Valley Water District, and the Imperial Irrigation District to transfer water from agricultural to urban uses—the Water Authority must provide funding for environmental and socioeconomic mitigation in the Imperial Valley. The cost for mitigation in the FY 2010 and FY 2011 was $22 million.

Supply Shortage: Because of reallocation of supplies to Arizona and Nevada, the MWD, and consequently CWA, will receive less of the relatively cheaper water from the Colorado River that it has relied on for decades. At the same time, supplies from the State Water Project are in jeopardy because of environmental concerns. Both developments will increase water costs.[29]

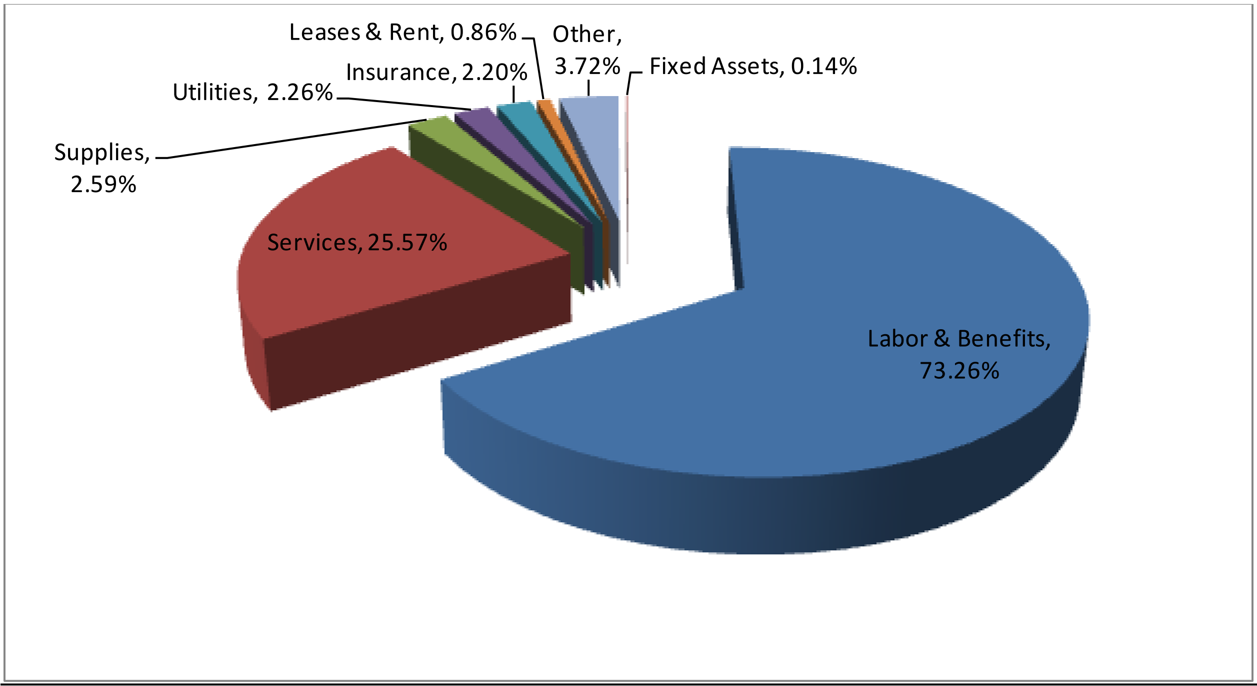
Reduced Water Use: Water conservation can lead to increased rates for water because debt for capital improvement projects and operating costs must be spread over fewer gallons of water.

[27] San Diego County Grand Jury 2010/2011. "San Diego County Water Rates: High Today, Higher Tomorrow." May 31, 2011. P . 2. http://media.signonsandiego.com/news/documents/2011/05/31/WaterRatesFinalReport.pdf

[28] San Diego County Water Authority. "General Manager's Recommended Multi-Year Budget, Fiscal Years 2012 and 2013." P. 30. Jun 2011.

[29] San Diego County Grand Jury 2010/2011. "San Diego County Water Rates: High Today, Higher Tomorrow." May 31, 2011. P. 2. http://media.signonsandiego.com/news/documents/2011/05/31/WaterRatesFinalReport.pdf

Figure 4: CWA Operating Budget, FYs 2010/11 (estimated)



Source: San Diego County Water Authority. "General Manager's Recommended Multi-Year Budget, Fiscal Years 2012 and 2013." P. 19. Jun 2011.

The Authority's Operating Budget (also called the Operating Departments Budget) includes annual labor costs and accounted for \$83 million[30] of CWA's \$1.3 billion in expenditures for FYs 2010 and 2011, or 6% of total expenditures. Labor and Benefits were 73% of the Operating Budget. Labor and benefits accounted for over \$60 million, or 5% of its total expenditures (Figure 3).

[30] Including deduction for capitalized overhead.

METHODOLOGY

This study was designed to calculate a single dollar figure for the annual labor costs of the San Diego County Water Authority as well as to determine outstanding labor-related liabilities for any given year. The information included in the study focuses on fiscal years 1999 through 2009 and was gathered from Comprehensive Annual Financial Reports (CAFR), financial statements, annual valuation reports supplied by CalPERS, memoranda of understanding between CWA and various **bargaining units**, and other information supplied by the water district. The Authority had the opportunity to review the data used for this report prior to its release and offer corrections for our consideration, all of which were adopted.

The decision to look at FY 1999 through FY 2009 was made for a number of reasons. In addition to being the most recent, and therefore most relevant years, we wanted a broad timeframe in order to identify relevant trends. Fiscal Years 2010 and 2011 were excluded from this study because CalPERS's estimates of unfunded pension liabilities are unavailable (there is a two-year lag on such estimates).

The formulas for total annual labor costs and labor-related liabilities are as follows:

Total Annual Labor Cost = Salaries + Benefits

Annual salary and benefit figures were provided to us by the San Diego County Water Authority. Salaries include Compensated Absences (vacation and sick leave), compensatory time, and overtime. Benefits include payroll taxes (FICA), deferred compensation matching contributions, medical/dental/vision/disability/life insurance, incentive awards, various allowances (for tools, clothing, automobile, cell phones, computer purchases, and meals) and reimbursements (tuition), unemployment insurance, and workers' compensation. They also include annual pension and retiree healthcare costs. They also include labor costs for capital improvement projects.

Total Labor-Related Unfunded Liability

=

OPEB Unfunded Liability + Pension Unfunded Liability

The second formula applies to unfunded liabilities. The OPEB and pension unfunded liabilities have been described above ("Pensions"). Unfunded liabilities are cumulative (i.e., they roll over year to year). An unfunded liability is not like a conventional debt. Unlike annual labor costs, it does not need to be paid in any one year. As CalPERS explains, it is an "abstract accounting number that can go up or down significantly over a relatively short period of time, depending on the state of the overall economy and the health of the financial markets."[31]

Another liability is that of Compensated Absences, also commonly referred to as unused vacation and sick days. Because it is a funded liability, we have excluded the benefit from this formula, but it is important to note that the Compensated Absences liability increased by a third between FY 1999 and FY 2009. This is likely the result of CWA's policy (common at government agencies) of allowing employees to accumulate earned but unused vacation benefits up to a maximum of 50 days (75 days for management), which can be redeemed upon retirement.[32] This category also includes Terminal Pay Plan benefits for CWA employees.[33]

[31] CalPERS. "Local Elected Official Toolkit Pension Funding and Retiree Health Benefits Funding." March 2011. http://www.calpers.ca.gov/eip-docs/about/pubs/employer/er-pubs/misc-pubs/local-toolkit.pdf

[32] San Diego County Water Authority. "Comprehensive Annual Financial Report, Fiscal Year Ended June 30, 2010." Dec. 9, 2010. P. 33.

[33] In 2007, CWA created this defined benefit pension plan to reduce costs related to earned leave (i.e., unused sick and vacation days) at retirement. All TPP contributions are paid by CWA and are managed by a trustee. CWA is not liable for any loses to the fund. The costs for the program are included with compensated absences as a long-term liability and therefore are not added separately to labor-related liabilities.

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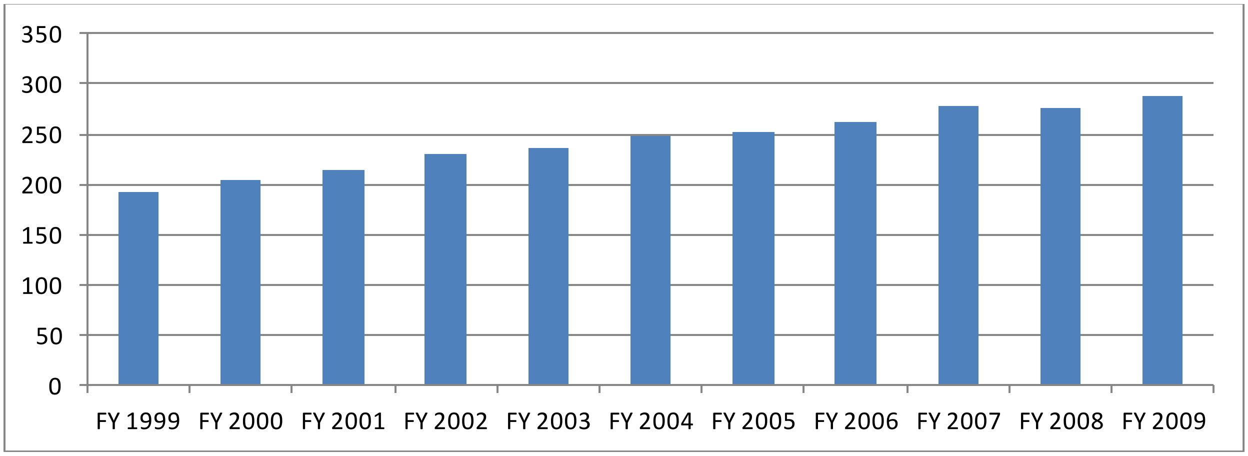
SECTION 1: ANNUAL LABOR COSTS

Calculating annual labor costs can be difficult because salary supplements and benefits for public employees are much more extensive than they are for private sector workers. On the benefit-side, these include not only standard features, such as healthcare, but, in the case of CWA, additional incentives such as tuition reimbursement, clothing allowances, tool allowances, and a computer purchase program.

In addition to salaries and benefits, annual labor costs also include yearly contributions that must be paid to cover future pension liabilities**.** These contributions include Employer Paid Member Contributions (EPMC) payments made by employers to cover pension contributions that are actually supposed to be made by employees,[34] as well as the actuarially required pension payments as determined by CalPERS (the ARC).

Many water districts, including CWA, also provide their employees with health benefits after they retire. In the case of CWA, these benefits extend to qualified dependents as well. Other Post Employment Benefits (OPEB) are financed on a paygo basis, which means the true costs of this benefit are consistently underfunded each year.

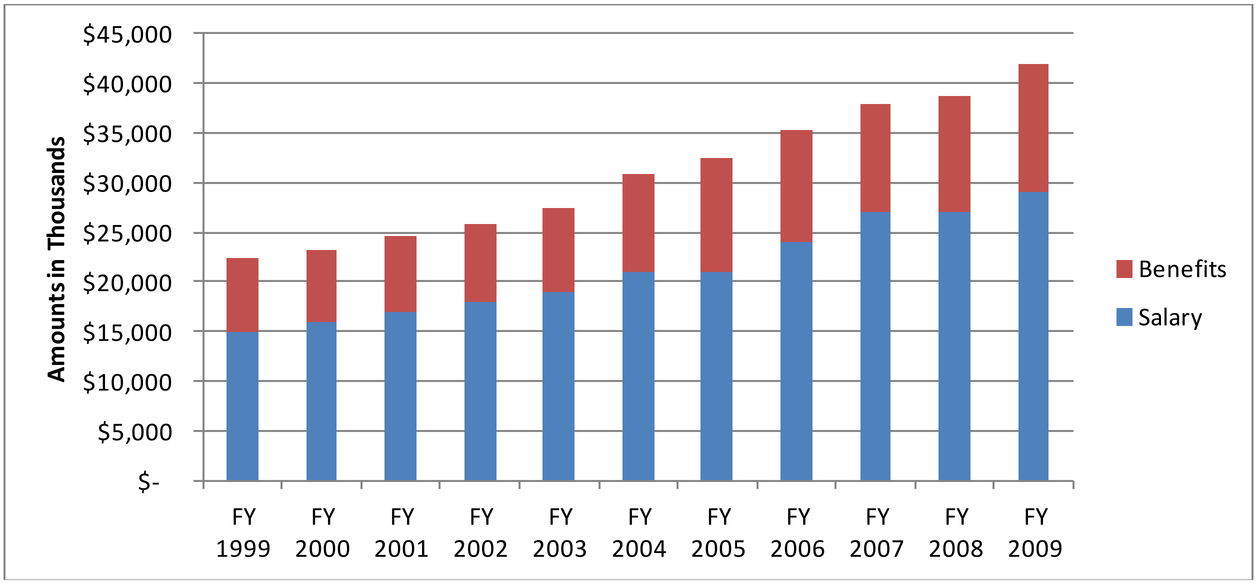
Figure 5: CWA Full Time Equivalent (FTE) Employees



Annual labor costs are also related to the size of an organization's workforce. The Authority increased its workforce by nearly 50% between FY 1999 and FY 2009, from 193 **Full-Time Equivalent** (**FTE**) employees to 286.5.

[34]CWA employees are required to contribute eight percent of their salaries to pay for a portion of their pensions. Until 2010, CWA picked up seven percent of that.

Figure 6: Annual Labor Cost by Category (2010 Dollars)

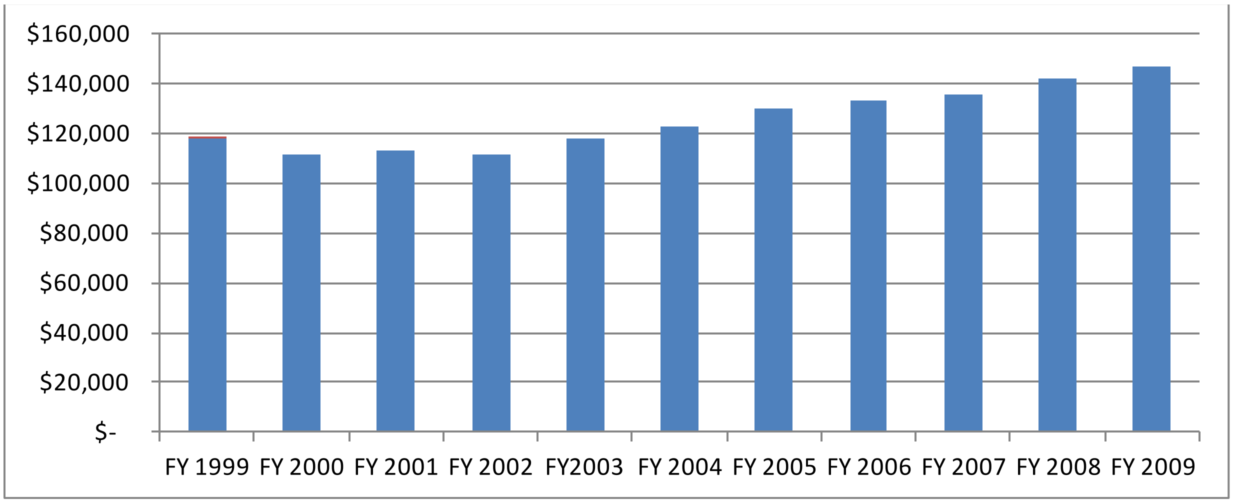


As Figure 6 shows, CWA's Total Annual Labor Cost was nearly twice as large in FY 2009 ($42 million) than it was in FY 1999 ($23 million), an increase of 85%. Again, the Total Labor Cost represents the dollar amount that CWA spends each year on salaries, benefits (including annual pension and retiree healthcare benefit payments), matching contributions, and labor costs for its capital projects.

Total salaries increased by 91% between FY 1999 and FY 2009 ($15.4 million to $29.3 million) but remained relatively flat as a proportion of total costs (67% to 69%). Over that same time, benefit costs increased from $7.5 million to $13 million, or 74%. As a proportion of total costs, however, they too remained relatively flat (33% to 31%).

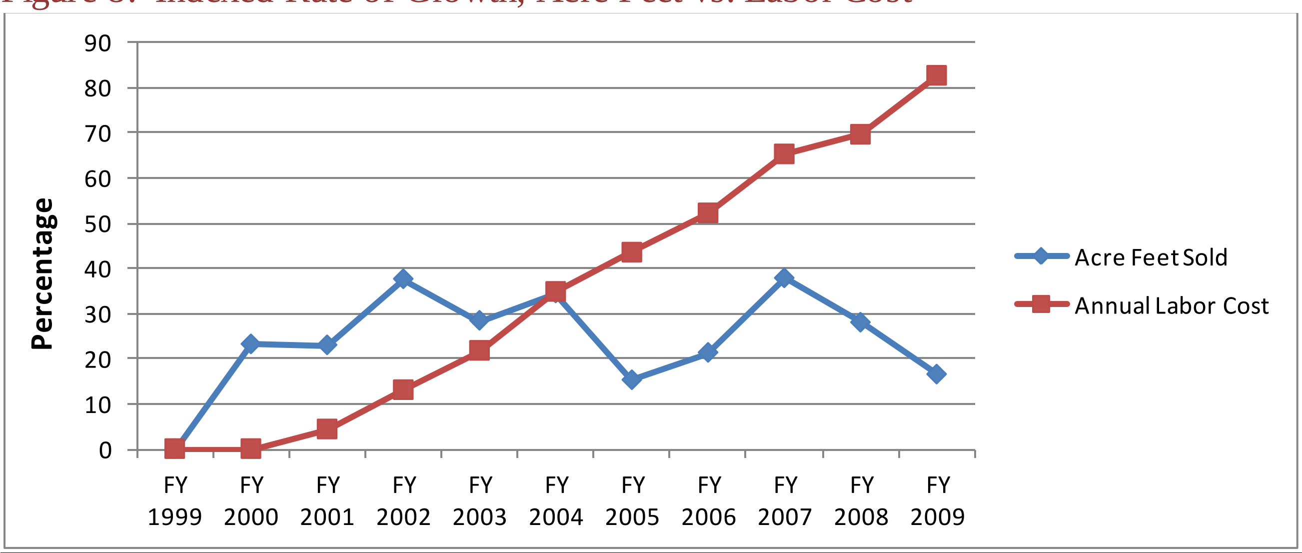
The two figures below further illustrate the increase in labor costs at the water authority:

Figure 7: Annual Labor Cost per Full Time Equivalent (FTE) Employee (2010 Dollars)



The overall increase in labor costs produced an increase in costs per employee of 24% between FY 1999 and FY 2009. As of FY 2009, that amounted to $147,000 per worker. [35]

Figure 8: Indexed Rate of Growth, Acre Feet vs. Labor Cost



This increase in labor costs is more pronounced when compared to the amount of **acre feet** sold by CWA to it member agencies, the Authority's primary business activity. In FY 2004, the growth in the Total Annual Labor Cost began a trajectory that far outpaced growth in the number of acre feet sold by CWA. While the volume of water sold in FY 2009 was only slightly more than it had been in FY 1999 (an increase of 79,000 A/F), labor costs increased unabated.

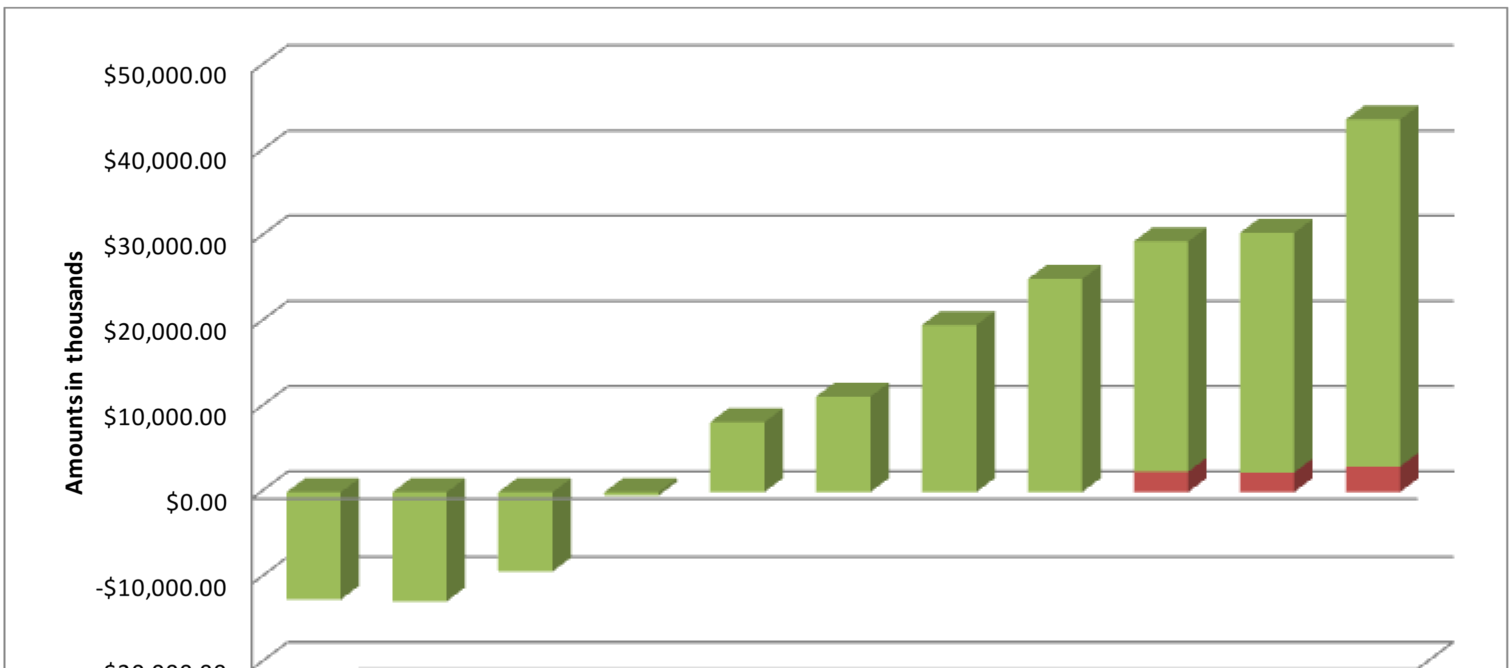
[35] This number is slightly inflated because it includes paygo costs for retiree healthcare, which benefit former employees.

SECTION 2: LABOR-RELATED UNFUNDED LIABILITY

For as helpful as they are in understanding CWA's labor outlays, annual labor costs alone, even when they include yearly pension and retiree healthcare payments, do not provide a complete picture of all the labor-related financial obligations public agencies must meet. In addition to yearly labor costs, there exist unfunded, long-term liabilities that must be paid, primarily to retirees, albeit over a longer time horizon.

For most public agencies, the most substantial liability is its pension benefit. The unfunded portion of this liability is the outstanding dollar amount that will be needed to fund the retirements of current and former employees. A typically smaller (but growing) liability is that for retiree healthcare. Accounting rules issued in 2004 (**GASB 45**) required government agencies that provide OPEBs, such as healthcare for retirees and their dependents, make information about the unfunded portion of the benefit available in 2007. That information has been included in determining the labor-related liability.

Figure 9: Labor-Related Unfunded Liability by Category, FY 1999 - FY 2009 (2010 Dollars)



	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Pension UAAL	$(12,600)	$(12,800)	$(9,300)	$(400)	$8,200	$11,200	$19,600	$25,000	$27,000	$28,100	$40,700
OPEB UAAL									$2,400	$2,300	$3,000

The Authority began the period under review in a very strong position in regard to its liabilities, particularly its pension liability, which between FY 1999 and FY 2002 was actually counted as an "excess" asset. That changed in 2002, when the value of CWA's excess assets in CalPERS dropped considerably (from $12.6 million in FY 1999 to $400,000 in FY 2002).

The growth in the Authority's labor-related liability was driven almost completely by its unfunded pension liability, which stood at over $40 million in FY 2009, or nearly 90% of its Total Labor-Related Liability for that fiscal year.[36] Between FY 2003 and FY 2009, the Authority's Total Labor-Related Liability increased from $8.2 million to $43.7 million.

As noted above, CWA was also not required to report its unfunded OPEB liability until 2007.[37] Although the unfunded OPEB is small relative to the unfunded pension liability ($3 million in FY 2009), the potential for growth in the future is difficult to determine.

[36]Unfunded liability figures for FY 2010 and FY 2011 are not available.

[37] The unfunded OPEB liability existed prior to FY 2005 but was unreported in financial documentation provided to the public.

RECOMMENDATIONS

The results of this analysis clearly show that, like many other public agencies, labor costs at the San Diego County Water Authority, both annual and long-term, increased dramatically during the decade of the 2000s. As a result, the Authority is now belatedly cutting staff, eliminating matching contributions, delaying capital improvement projects, and requiring employees to pay more (although not all) of their retirement costs.

Those actions are admirable, but they fail to address the factors that are driving the Authority's long-term pension costs. The following measures are needed to truly curb labor costs at the Authority:

> Pension Formula: Considering that CWA employees receive Social Security and can contribute to a deferred compensation program (and received matching contributions for money they contributed to that program until 2010), the authority should reduce its pension formula from 2.5% at 55 to 1.5% @ 65 for new employees.[38] Doing so will contribute greatly to reducing its long-term pension liability.
>
> Eliminate EPMC: Throughout the period covered in this study, the Authority has paid 7% of the 8% employees are required to contribute to help finance their retirements. Although CWA is now requiring all employees to pay 4.5%—reducing its obligation to 3.5%—considering the massive increase in labor costs between FY 1999 and FY 2009, CWA should eliminate this salary supplement completely.
>
> Stop treating EPMC as increased compensation: The EPMC also contributes to long-term pension liabilities. Beginning in 2005, CWA allowed retiring employees to count the EPMC as compensation, thereby increasing the final salary figure used to determine a retiree's pension benefit by thousands of dollars. This benefit needlessly inflates the already generous retirement package received by CWA retirees and should be eliminated.

[38] CalPERS. "Optional Benefits Listing." Pg. 16. http://www.calpers.ca.gov/eip-docs/employer/program-services/retirement/contract-info/optional-benefits/optional-benefits-listing-2011.pdf#page=20

Reform OPEB: Retired CWA employees—and their spouses—are also entitled to retiree healthcare benefits until they turn 65. This is an extremely generous benefit that further increases the Authority's long-term liabilities. In 2007, CWA contemplated a defined contribution plan to replace its retiree healthcare defined benefit[39] but has made no progress toward doing so.[40] The Authority should insist that such a reform be adopted in the next round of labor negotiations and enroll in the California Employers' Retiree Benefit Trust (CERBT) or some other prefunding trust fund.

Financial Reporting: While the Authority's financial reporting is thorough, it fails, as does the reporting of most public agencies, to provide specific details about its labor costs, necessitating reports such as this one. Aggregate numbers, while helpful, do not give the public sufficient information. Such a level of detail is not required by law, but would allow ratepayers to better understand the public institutions that serve them and hold them accountable.

[39]Multiple MOUs.

[40] E-mail response from Eric Sandler, Director of Finance, CWA. May 20, 2011.

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Glossary of Terms

Acre Foot: A unit of measure equivalent to 325,851.4 gallons of water, which roughly meets the needs of two average families in and around the home for one year.

Actuary: A person professionally trained in the technical and mathematical aspects of insurance and pensions. The actuary estimates how much money must be contributed to a pension fund each year in order to support the benefits that will become payable in the future.

Amortize: The provision to pay a debt (in the case of pensions, the Unfunded Liability) over a period of time.

Annual Covered Payroll: Payroll eligible for pension benefits; the employer contribution rate is shown as a percentage of the annual covered payroll.

Annual Pension Cost (APC): The Annual Required Contribution plus the Employer Paid Member Contribution.

Annual Required Contribution (ARC): Contribution required to the pension system based upon payroll and actuarial assumptions. It is determined by multiplying the employer contribution rate by the annual covered payroll. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal pension costs each year and amortize any unfunded actuarial liabilities over a defined period, usually 20 years.

Bargaining Unit: Specific group of employees represented by one authorized union or association for purposes of collective bargaining.

CalPERS: California Public Employees' Retirement System, established in 1931. CalPERS offers a defined benefit pension plan for contracted public agencies.

Cost of Living Adjustments (COLA): An annual adjustment in wages (in this case, pension benefits) to offset a decrease in purchasing power as measured by a Consumer Price Index.

Defined Benefit Pension Plan: A pension plan in which employees and employers make annual contributions into a plan that defines the level of benefit received at retirement.

Defined Contribution Pension Plan: A pension plan in which contributions are specified at a fixed dollar or percentage amount. The benefits of these plans are based upon contributions and investment earnings.

Employer Paid Member Contribution: Share of the required employee CalPERS contribution rate that is picked up by the employer. Also called the "pick-up.

Full-Time Equivalent: Ratio of the total number of paid hours during a period (part time, full time, contracted) by the number of working hours in that period.

GASB: Governmental Accounting Standards Board; provides accounting standards for local and state government reporting.

GASB 45: The rule issue by GASB in 2004 requiring municipalities and other public agencies to account for OPEB costs and unfunded liabilities. Available at: http://www.gasb.org/st/summary/gstsm45.html

Miscellaneous Employee: Employees not classified as public safety (police officers, firefighters, etc.)

Normal Cost: The cost of service for all active employees in a fiscal year.

Normal Employee Contribution Rate: Amount employee is required by CalPERS to contribute into the system. It is based on the pension benefit formula.

Other Post Employment Benefits (OPEB): Benefits paid out after retirement commences, such as retiree healthcare and life insurance.

Pay-as-you-go (paygo): Refers to the practice of paying OPEB liabilities after eligible employees have retired rather than as they are accrued.

Pick up: Share of the normal employee contribution rate or cost that is picked up by the employer. Also called the Employee Paid Member Contribution (EPMC).

Unfunded Actuarial Accrued Liability (UAAL): Shortfall or excess in pension or benefit obligations due to demographic changes, unrealized actuarial assumptions, and higher or lower than expected investment returns. Also called an unfunded liability.

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Appendices

Appendix A: Aggregate data (Nominal and 2010 dollars)

NOMINAL					Total Annual Labor Cost		TLRUF Unfunded Liability	
Year	Annual FTE	AF Sold	Annual EPMC	Annual Compensated Absences Liability	Annual Labor Costs	Annual Benefit Costs*	OPEB UAAL	Pension UAAL
FY 99	193.00	479,000	786,584	2,132,000	10,818,330	5,280,366		(8,835,386)
FY 00	205.00	590,000	734,000	2,485,000	11,636,930	5,410,614		(9,503,982)
FY 01	215.00	589,000	901,000	2,873,000	12,887,727	5,959,417		(7,256,119)
FY 02	231.00	659,000	1,019,000	3,319,000	14,555,403	6,364,358		(298,599)
FY 03	235.50	615,000	1,117,000	3,813,000	16,115,511	7,043,175		6,847,694
FY 04	249.00	644,000	1,279,596	4,227,000	18,056,361	8,576,039		9,686,114
FY 05	252.00	552,000	1,397,758	4,654,654	19,127,069	10,353,611		17,653,124
FY 06	262.25	581,000	1,553,625	4,910,531	21,927,674	10,492,230		23,260,280
FY 07	278.75	660,000	1,720,200	5,397,939	25,750,944	10,349,526	2,316,000	25,707,440
FY 08	275.50	613,000	1,813,538	5,232,786	27,002,851	11,635,269	2,316,000	27,719,904
FY 09	288.00	558,000	1,967,727	6,192,003	28,946,563	12,874,419	2,997,000	40,148,677

*Includes annual pension and OPEB (retiree healthcare) costs.

REAL			Total Annual labor Cost		TLRUF Unfunded Liability	
Year	EPMC Costs	Annual Compensated Absences Liability	Annual Labor Costs	Annual Benefit Costs	OPEB UAAL	Pension UAAL
FY 99	$ 1,117,350	$ 3,028,526	$ 15,367,538	$ 7,500,809		(12,550,748)
FY 00	$ 985,616	$ 3,336,860	$ 15,626,080	$ 7,265,377		(12,761,955)
FY 01	$ 1,156,711	$ 3,688,379	$ 16,545,361	$ 7,650,744		(9,315,460)
FY 02	$ 1,263,910	$ 4,116,700	$ 18,053,701	$ 7,893,991		(370,365)
FY 03	$ 1,335,525	$ 4,558,959	$ 19,268,280	$ 8,421,071		8,187,347
FY 04	$ 1,476,009	$ 4,875,829	$ 20,827,945	$ 9,892,429		11,172,896
FY 05	$ 1,555,300	$ 5,179,284	$ 21,282,896	$ 11,520,575		19,642,822
FY 06	$ 1,671,894	$ 5,284,343	$ 23,596,907	$ 11,290,946		25,030,957
FY 07	$ 1,809,889	$ 5,679,381	$ 27,093,569	$ 10,889,139	$ 2,436,754	27,047,797
FY 08	$ 1,837,220	$ 5,301,117	$ 27,355,459	$ 11,787,205	$ 2,346,243	28,081,876
FY 09	$ 1,993,669	$ 6,273,636	$ 29,328,184	$ 13,044,151	$ 3,036,511	40,677,983

APPENDIX B: PENSION NET PRESENT VALUE FORMULA

Net Present Value of CWA Pension Benefit					
	Discount Rate	**Years**	**COLA**	**Initial Payout**	**NPV**
Pension Benefit	0.0332	29	0.03	$ 47,796	$1,284,964.07
Pension Benefit w/ Pickup	0.0332	29	0.03	$ 51,142	$1,374,919.09
OPEB Benefit	0.0332	10	0	$ 3,840	$32,227.48
NPV Calculation (NPV of annual growing annuity):					
NPV= [Initial Payout/(Discount Rate-COLA)]*{1-[(1+COLA)/(1+Discount Rate)]^Years}					

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APPENDIX C: INDEXED RATE OF GROWTH FORMULA (ACRE FEET VS. LABOR COSTS)

			% of Growth	
Year	**AF Sold**	**Annual Labor Cost**	**Acre Feet Sold**	**Annual Labor Cost**
FY 1999	479,000	$ 23,000,000	0	0
FY 2000	590,000	$ 23,000,000	23.17327766	0
FY 2001	589,000	$ 24,000,000	22.96450939	4.347826087
FY 2002	659,000	$ 26,000,000	37.5782881	13.04347826
FY 2003	615,000	$ 28,000,000	28.39248434	21.73913043
FY 2004	644,000	$ 31,000,000	34.44676409	34.7826087
FY 2005	552,000	$ 33,000,000	15.24008351	43.47826087
FY 2006	581,000	$ 35,000,000	21.29436326	52.17391304
FY 2007	660,000	$ 38,000,000	37.78705637	65.2173913
FY 2008	613,000	$ 39,000,000	27.97494781	69.56521739
FY 2009	558,000	$ 42,000,000	16.49269311	82.60869565
Formula				
Base year (FY 1999) = 100				
Year-to-year growth = (year/base year) *100-100				

Appendix D: MWD/CWA Comparison

	CWA	MWD
FTE % change, FY 1999-FY 2009	50%	9%
Annual Labor Cost per FTE, FY 2009	$147,000	$149,000
Cost per FTE % change, FY 1999-FY 2009	24%	32%
Retirement Benefit Formula	2.5% @ 55	2% @ 55
Employee Contribution Rate	8%	7%
Employer Paid Member Contribution (EPMC)	7%	7%
EPMC % change, FY 1999-FY 2009	78%	434%
The average annual salary for employees ages 55-59 with 20-25 years of service	$95,593	$114,157
Retirement COLA	3%	2%
Social Security	Yes	No
Net Present Value of Pension	$1.4 mil	$1.1 mil
Operating Budget as % of total Expenditures	6%	20%
Labor and Benefits as % of Operating Budget	73%	63%
Labor and Benefits as % of total Expenditures	5%	13%
Compensated Absences % increase, FY 1999-FY 2009	33%	82%
Annual Labor Cost % change, FY 1999-FY 2009	85%	33%
Funded Ratio (% of pension liability covered by assets) as of 2009	69.70%	87.10%