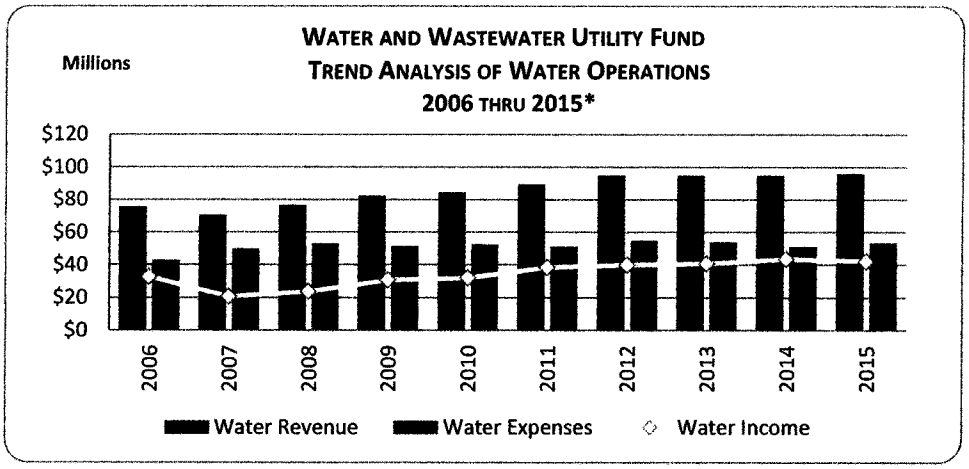
PUBLIC SERVICE BOARD - EL PASO WATER UTILITIES
MUNICPAL DRAINAGE UTILITY FUND

SELECTED OPERATIONS AND STATISTICAL DATA
2009 thru 2015*

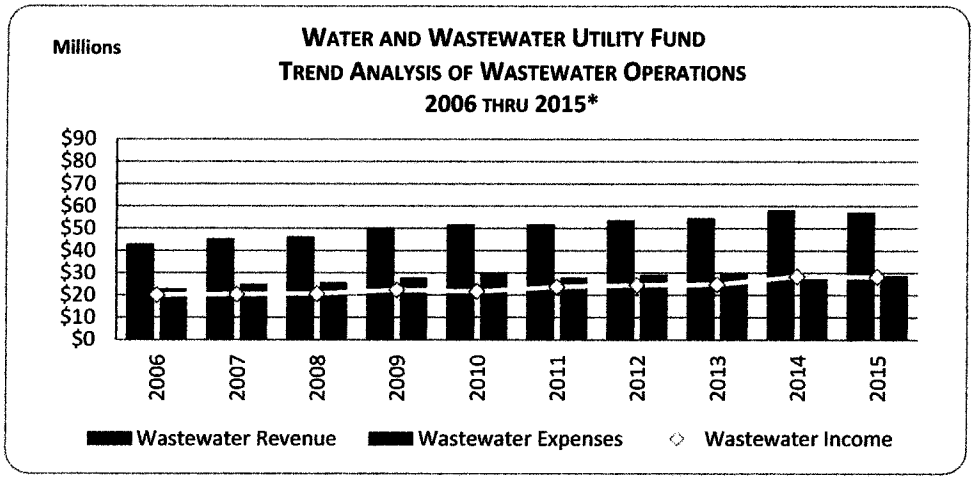
DRAINAGE OPERATIONS	2015	2014	2013	2012	2011	2010	2009
Number of Ponds	361	361	361	361	310	277	277
Acres of Ponds Inventoried	904	904	904	1,020	904	983	983
Acres of Ponds Cleaned	425	82	917	461	650	500	3,429
Number of Dams/Basins	37	37	37	37	32	38	38
Acres of Dams/Basins Inventoried	2,430	2,430	2,430	2,417	2,430	2,390	2,390
Acres of Dams/Basins Cleaned	660	57	463	263	1,200	1,000	1,915
Miles of Channels Inventoried	74	74	74	72	74	68	68
Miles of Channels Cleaned	6	10	27	44	30	15	30
Miles of Agricultural Drains Inventoried	43	43	43	39	43	39	39
Miles of Agricultural Drains Cleaned	17	6	39	17	15	20	25
Miles of Drainage Conduits Inventoried	280	280	146	280	146	100	100
Miles of Drainage Conduits Cleaned	0	2	12	2	15	2	2
Drainage Inlets Inventoried	6,353	6,346	6,094	6,359	6,094	4,100	4,100
Drainage Inlets Cleaned	2	46	373	116	500	100	-

* Fiscal year March 1 thru last day of February of year shown

Note: Municipal Drainage Utility was created and started operations in fiscal year 2009



* Fiscal year March 1 thru last day of February of year shown
Source: Net Operating Revenue - Water & Reclaimed Water, page 111



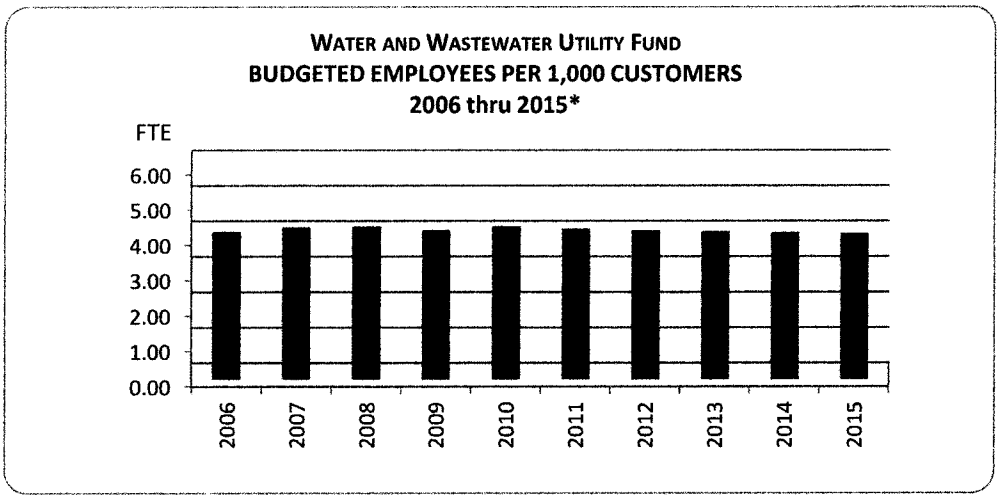
* Fiscal year March 1 thru last day of February of year shown
Source: Net Operating Revenue - Wastewater, page 112

PUBLIC SERVICE BOARD - EL PASO WATER UTILITIES
WATER, WASTEWATER AND MUNICIPAL DRAINAGE UTILITY FUNDS

STAFFING BY DIVISION AND SECTION
Fiscal Year 2015*

		Budgeted FTE's					
	Division/Section	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
Administration	Executive Services	6	15	15	15	14	10
	Legal Services	4	4	4	4	4	4
	Communications	8	2	2	2	2	2
	Human Resources	11	11	8	8	8	8
	Water Resources Management	4	4	4	4	5	5
	Land Management	8	8	7	7	7	7
	$TecH_20$ Learning Center	10	10	10	10	10	10
	Total Division	**51**	**54**	**50**	**50**	**50**	**46**
Technical Services	Technical Services	6	5	4	4	3	3
	Water/Wastewater Engineering	15	15	14	14	14	14
	Planning and Development	33	32	32	32	33	34
	Project Management	8	8	8	8	8	6
	Stormwater Engineering	0	0	6	6	6	6
	Asset Management	0	0	0	0	0	1
	Total Division	**62**	**60**	**64**	**64**	**64**	**64**
Financial & Support Services	Finance	4	3	3	3	3	3
	Property and Treasury Management	15	14	14	13	13	13
	Customer Service	102	102	101	98	96	96
	Accounting	13	13	13	14	14	14
	Purchasing	10	10	10	9	9	9
	Meter Repair Shop	11	11	11	11	11	11
	Warehouse	8	9	9	9	9	9
	Total Division	**163**	**162**	**161**	**157**	**155**	**155**
Information Services	Information Services	30	27	26	24	24	24
	Instrumentation and Control	29	26	25	14	13	13
	Total Division	**59**	**53**	**51**	**38**	**37**	**37**
Operations (Water System)	Water Division Office	3	3	3	3	3	3
	Well Production	43	43	44	43	43	43
	Robertson/Umbenhauer Water Treatment Plant	20	20	20	20	20	20
	Water Distribution	98	98	96	96	96	96
	Jonathan W. Rogers Water Treatment Plant	18	18	18	18	18	19
	Upper Valley Water Treatment Plant	15	15	15	15	15	15
	Kay Bailey Hutchison Desalination Plant	14	14	14	14	14	14
	Total Division	**211**	**211**	**210**	**209**	**209**	**210**
Operations (Wastewater System)	Wastewater Division Office	5	5	5	5	5	5
	Wastewater Lift Stations	18	18	18	20	20	20
	Wastewater Collection System Maintenance	33	33	33	33	33	31
	Northwest Wastewater Treatment Plant	15	15	15	17	17	17
	Haskell R. Street Wastewater Treatment Plant	30	30	30	32	32	32
	Roberto R. Bustamante Wastewater Treatment Plant	29	29	29	31	31	31
	Fred Hervey Water Reclamation Plant	28	28	28	30	30	30
	Wastewater System Repair & Construction	20	20	20	20	20	20
	Total Division	**178**	**178**	**178**	**188**	**188**	**186**
Operations (Operations Support)	Operations Management	4	3	3	3	3	4
	Environmental Compliance/Industrial Pretreatment	10	10	10	10	11	11
	Laboratory Services	30	30	30	29	29	28
	Reclaimed Water System	1.5	1.5	1.5	1.5	1.5	1.5
	Biosolids Management	0.5	0.5	0.5	0.5	0.5	0.5
	Total Division	**46**	**45**	**45**	**44**	**45**	**45**
Operations (Equipment & Facilities Maintenance)	Fleet Maintenance	22.3	22.3	21.3	21.3	21.3	21.3
	Heavy Equipment Operations	42.3	42.3	42.3	42.3	42.3	41.3
	Facilities Maintenance	18.3	18.3	18.3	17.3	17.3	19.3
	Total Division	**83**	**83**	**82**	**81**	**81**	**82**
WATER AND WASTEWATER UTILITY'S TOTAL BUDGETED REQUIREMENTS		**853**	**846**	**841**	**831**	**829**	**825**
Stormwater	Stormwater	52	58	58	58	58	59
	Stormwater Engineering	7	6	0	0	0	0
	Stormwater Environmental Compliance	7	0	0	0	0	0
	Total Division	**66**	**64**	**58**	**58**	**58**	**59**

* Fiscal year March 1 thru last day of February of year shown



* Fiscal year March 1 thru last day of February of year shown

Budgeted Employees per 1,000 Customers Data			
Year	**FTE***	**Year**	**FTE**
2006	3.9	2011	4.0
2007	4.0	2012	3.9
2008	4.1	2013	3.9
2009	4.0	2014	3.9
2010	4.1	2015	3.9

* FTE=full time equivalent

Attachment No. 4

El Paso Water Utilities Public Service Board's 2015-2016 Annual Budget

ANNUAL BUDGET

EL PASO WATER UTILITIES

PUBLIC SERVICE BOARD

FISCAL YEAR 2015-2016

Dr. Richard T. Schoephoerster
Chair

Christopher A. Antcliff
Member

Ruth Katherine Brennand
Vice Chair

Henry Gallardo
Member

Terri Garcia
Secretary-Treasurer

Bradley Roe
Member

Oscar Leeser
Mayor,
City of El Paso

EXECUTIVE STAFF

John E. Balliew, P.E.
President & CEO

Marcela Navarrete, C.P.A.
Vice President
Strategic Financial & Management Services

R. Alan Shubert, P.E.
Vice President
Operations & Technical Service

Robert D. Andron, J.D.
General Counsel

Fernando Rico, P.E.
Utility Chief Operations Officer

Gilbert Trejo, P.E.
Utility Chief Technical Officer

Arturo Duran
Chief Financial Officer

Georgette Webber
Executive Secretary

FINANCIAL & SUPPORT SERVICES STAFF

Jeff Tepsick
Fiscal Operations Manager

Tolu Oladimeji
Rate Analyst

Ana M. Pucella
Budget Specialist

EL PASO WATER UTILITIES PUBLIC SERVICE BOARD

El Paso Water Utilities Fiscal Year 2015-16 Budget
TABLE OF CONTENTS

HOW TO MAKE THE MOST OF THIS DOCUMENT

This budget book is intended to provide a clear, understandable financial plan that can be used by the rate paying citizens of the City of El Paso, including the Public Service Board. Inside is a guide for the operating activities for Fiscal Year 2015-16 (March 1, 2015 to February 29, 2016) as well as a cash flow summary of all capital improvement projects, broken down as follows:

Introduction:	Message from the President and CEO, Government Finance Officers Association Distinguished Budget Presentation Award
Community and Utility Profile:	Summary of El Paso Water Utilities service area system
Strategic Plan:	Summary of Public Service Board's guiding plans
Financial Policies:	Summary of the Water and Wastewater Utility's financial policies
Financial Plan:	Fiscal year 2015-16 budget overview of the Water and Wastewater Utility
Capital Improvements:	Summary and project-by-project description of all design, planning, and construction projects intended to create, maintain, or improve Water and Wastewater Utility assets
Operating Budget Detail:	Explicit presentation of each of the Water and Wastewater Utility's subcomponent business units, including FY 2015-16 approved budgeted appropriations, major accomplishments from the previous fiscal year, objectives for FY 2015-16, section's integrated strategic planning map, and quantifiable performance measures to ensure these goals and objectives are being met
Stormwater Utility:	Review of the goals and objectives for FY2015-16, the detail operational budget and the capital improvement budget
Statistical:	Ten year summary of selected financial water, wastewater, and stormwater system data
Appendix:	Glossary of key terms, an index of acronyms and a detailed schedule of EPWU operating and maintenance budget account classifications

Any additional financial, legal, or other policy information, or for complete copies of the Annual Budget, Annual Report, Comprehensive Annual Financial Report, Rules and Regulations, or other documents may be requested directly from the Utility by calling (915) 594-5548 or (915) 594-5501 [fax (915) 594-5699] or by writing the Utility at:

El Paso Water Utilities/Public Service Board
Post Office Box 511 Department 4D
El Paso, Texas 79961-0511

or visit at:

www.epwu.org

EL PASO WATER UTILITIES
PUBLIC SERVICE BOARD

December 10, 2014

Dr. Richard Schoephoerster, Chair
Ruth Katherine Brennand, Vice Chair
Dr. David Nemir, Secretary-Treasurer
Hon. Oscar Leeser, Mayor, City of El Paso
Christopher A. Antcliff, Member
Terri Garcia, Member
Henry Gallardo, Member

Dear Public Service Board Members:

Submitted for your approval is the Fiscal Year 2015-2016 Water, Wastewater and Reclaimed Water combined operating and capital budget totaling $332.010 million. The detail operating and capital budgets have been presented to you for your input, review, and guidance in the public budget workshop held on November 17, 2014. The budget has been adjusted based on direction from the Board and is consistent with the Board's Strategic Plan.

Water, Wastewater and Reclaimed Water Operations Budget

The $88.435 million operating budget for FY 2015-16 is $5.890 million more than the previous year's budget. This year's budget reflects an increase of $2.610 million in the cost of river water the Utility purchases from the El Paso County Water Improvement District #1. The increase is due to the expected increased water allotment for 2015 of 35,000 acre feet. In addition, chemicals are budgeted at $376,000 more and electricity expense at $921, 000 more than the prior fiscal year. An increase of $608,000 in personnel costs is due to normal salary adjustments and additional cost to fund 11 new positions.

Major impacts on the operating budget are summarized in the following table:

Water, Wastewater and Reclaimed Water Operating and Maintenance Budget
FY 2015-2016
Major Changes from FY 14-15

Description	$ +/-	Cumulative % Increase
FY 14-15 Net Operating Budget	$82,545,000	
FY 15-16		
+ Increase in maintenance costs	$183,100	0.22%
+ Increase in surface water cost	$2,610,000	3.16%
+ Increase in chemical costs	$376,000	0.46%
+ Increase in personnel costs	$608,300	0.74%
+ Increase in utilities cost	$1,058,100	1.28%
+ All other accounts	$1,054,500	1.28%
Net Change to FY 2014-15 Operating and Maintenance Budget	$5,890,000	7.14%
Total FY 2015-16 Operating and Maintenance Budget	**$88,435,000**	

Water, Wastewater and Reclaimed Water Capital Budget

The capital budget of $171.430 million, which includes $1.867 million for capital equipment addresses water and wastewater infrastructure needs as it relates to rehabilitation, reliability, growth and water supply as identified and prioritized through a rigorous capital planning process.

The largest single budget item is $50.000 million for the proposed purchase of water rights land in Hudspeth County to be funded with low interest bonds issued through the Texas Water Development Board under the Drinking Water State Revolving Fund as a Source Water Protection project. Other projects budgeted for next fiscal year include: $14.063 million to continue with the multi-year project needed to install emergency backup generators at numerous locations throughout the city, $6.120 million for drilling and equipping six new wells located in the east and northeast areas of the city and $14.171 million to construct five storage tanks to serve the northeast, central and eastside areas of the city. In addition, the Utility budgeted $5.251 million for infrastructure costs related to a near importation project and $2.130 million for an advanced purified water pilot plant to produce drinking water. The pilot plant operation and testing program coupled with continued negotiations with TCEQ will set the operating conditions and processes for the full scale facility. Major wastewater projects for next year include $2.175 million for odor control improvements at the Northwest and Haskell Wastewater Treatment Plants and $3.300 million for the Upper Valley Outfall Relocation project to relocate approximately 27,000 LF of sanitary sewer line.

The proposed capital budget allows the Utility to maintain a reliable water and wastewater system while improving and expanding the system to meet the needs of a growing community.

Above average rainfall and a milder summer contributed to a projected water demand in 2014 of 130 gallons per capita per day (gpcd). The 130 gpcd meets the goal the Utility had set for year 2020. The Mesilla and Hueco Bolson modeling continues to be enhanced and both bolsons are being pumped at sustainable levels.

The proposed FY 2015-16 operating and capital budget of $332.010 million is summarized as follows:

Water, Wastewater and Reclaimed Water Sources and Uses of Funds ($ in millions)	
Funding Sources	
Water Revenues	$120.679
Wastewater Revenues	62.461
Reclaimed Water Revenues	3.051
Interest Income	0.318
Bond Construction Funds and Commercial Paper	98.000
City Franchise Fee	3.550
Fund Balance and Other Misc. Revenues	43.951
Total Funding Sources	**$332.010**

Water, Wastewater and Reclaimed Water Sources and Uses of Funds ($ in millions)	
Use of Funds	
Operations and Maintenance	$88.435
Capital Projects and Equipment	171.430
Debt Service and Reserve Funds	54.230
Payment to City in Lieu of Taxes	12.153
City Franchise Fee	3.550
Contingencies	2.212
Total Use of Funds	**$332.010**

Water, Wastewater and Reclaimed Water Financial Planning and Rate Impacts

We will continue to aggressively seek grant funding and low interest loans to finance identified capital improvements to mitigate future rate increases. The budget includes an anticipated $3.000 million in land sales and $2.850 million in impact and annexation fees to partially fund growth capital projects. The Utility continues to work with the City, TXDOT and other public agencies including school districts, to evaluate the impact of providing services to newly developed areas including land held by the PSB. The PSB charges annexation fees for land being annexed into the City that the Utility will have to provide service to in the future. These annexation fees help recover the cost of the capital infrastructure needed to provide service to those areas. City Council adopted impact fees in May 2009, which are assessed on new development in the West, Northeast and Eastside service areas and will help the Utility to recover some of the cost of the capital infrastructure needed to provide service in those areas. In fiscal year 2014-15 the fifth year of the impact fee program, the Utility in conjunction with city staff completed the evaluation and proposed changes to the Impact Fee CIP, land use assumptions and service areas fees as required by state statute. This evaluation and proposed changes were presented to the PSB, the Capital Improvements Advisory Committee (CIAC) and City Council for approval. City Council approved the Impact Fee CIP and land use assumptions but didn't approve the proposed service areas fees increase. The impact fees will be evaluated by City Council next fiscal years for possible changes.

Interest rates on the Utility's commercial paper notes currently at 0.06% continue to be very attractive; therefore the Utility will continue to use commercial paper over the next year for interim construction financing. The Utility took advantage of low interest rates and on December 4, 2014 sold $131.650 million of bonds that included $108.815 million to refund six prior bond issues and provided a Net Present Value Savings of $10.276 million.

An 8 percent water, sewer and reclaimed water revenue increase adjustment is requested for this fiscal year to accomplish all the operating and capital projects. The Utility's rates continue to be very competitive as seen in the surveys presented to you during the budget meetings.

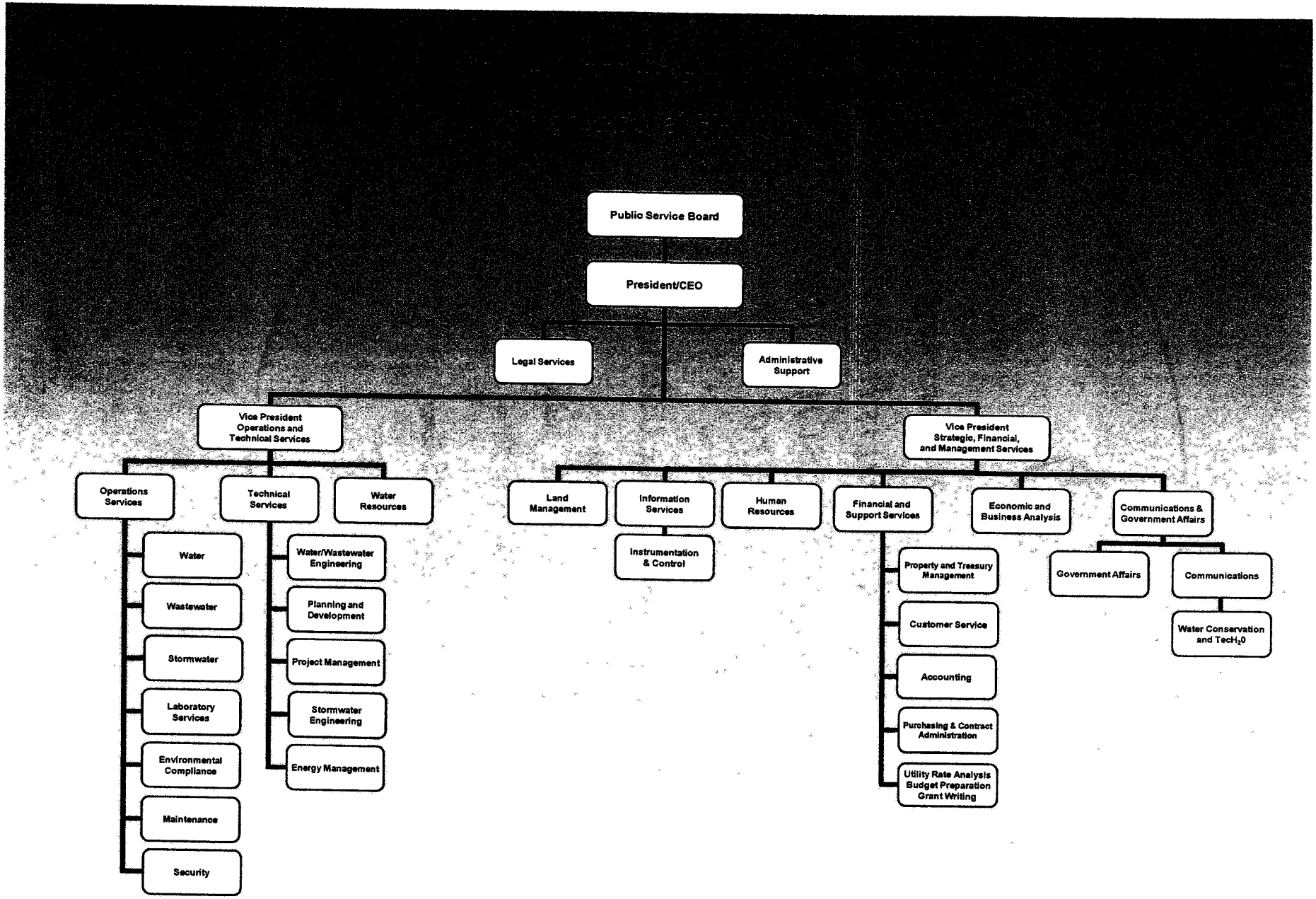
Summary

The five-year financial plans for all Utilities are included in the appendix and are intended to be used as a financial planning tool as we address the future water, wastewater and reclaimed water needs of this community.

In summary, approving the FY 2015-2016 budget will allow this Utility to continue initiatives to meet the water, wastewater and reclaimed water needs of this community both in the short term and in the future. The proposed budget is consistent with the Board's adopted strategic plan, and provides for adequate funding to meet the Public Service Board's goals and objectives, which include adopting a fiscally responsible budget.

Sincerely,

John E. Balliew, P.E.
President and CEO


Public Service Board
President/CEO
Legal Services
Administrative Support
Vice President Operations and Technical Services
Vice President Strategic, Financial, and Management Services
Operations Services
Technical Services
Water Resources
Land Management
Information Services
Human Resources
Financial and Support Services
Economic and Business Analysis
Communications & Government Affairs
Water
Wastewater
Stormwater
Laboratory Services
Environmental Compliance
Maintenance
Security
Water/Wastewater Engineering
Planning and Development
Project Management
Stormwater Engineering
Energy Management
Instrumentation & Control
Property and Treasury Management
Customer Service
Accounting
Purchasing & Contract Administration
Utility Rate Analysis
Budget Preparation
Grant Writing
Government Affairs
Communications
Water Conservation and TecH2O

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

El Paso Water Utilities

Texas

For the Fiscal Year Beginning

March 1, 2014

Executive Director

SERVICE AREA

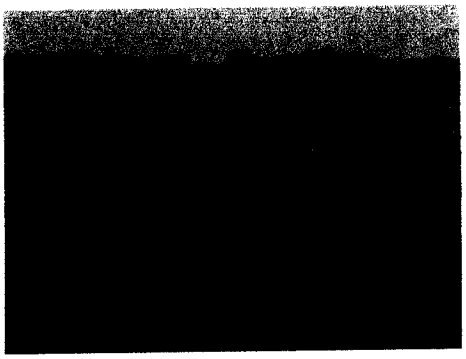
GEOGRAPHY, HISTORY & CLIMATE

The City of El Paso, the sociopolitical center of El Paso County and of West Texas, has a distinct culture, climate, and supply of resources that makes water consumption unique among similar municipalities in the desert southwest of the United States. El Paso is located in the northern extreme of the Chihuahuan desert, and lies on the frontier of three states, two countries, and three diverse water supplies. The upper Rio Grande valley forms a natural crossing between the Chihuahuan Mountains to the south and the Franklin Mountains (the southern edge of the Rocky Mountains) to the north. The region, consisting of El Paso, Texas; Ciudad Juárez, Mexico; and Las Cruces, New Mexico, is home to slightly more than two million people.

The City's name can be traced to the Spanish *El Paso Del Norte*, or the "pass of the north." During the 16th Century, Conquistadors such as Alvar Nuñez Cabeza de Vaca, Francisco Vásquez de Coronado, and Don Antonio de Espejo passed through the area in the name of the Spanish crown, but typically were met with resistance by the local natives. Most explorers passed right on through, looking for the fabulously rich "Seven Cities of Ciboloa",

and chasing legends of lost gold. In 1998, the City marked the quadricentennial celebration of one who stayed, marking the 400th anniversary of Don Juan de Oñate's crossing of the Paso del Norte and forming the first permanent settlement in the area. That year the El Paso settlers marked the first Thanksgiving in North America, some 23 years before the better-known feasts in Massachusetts in 1621. When the feasting ended, Oñate took possession of all lands watered by the Rio Grande. Onate's El Paso would become a major

metropolis in Texas three centuries later. The nickname of "The Sun City" is well earned, as El Paso enjoys an average daily temperature of almost 70° and over 300 days of sunshine each year. It plays host to the annual Sun Bowl college football game second only to the Rose Bowl as the oldest continuous bowl game as well as a college basketball tournament and parade also associated with the Sun Bowl. Low humidity and an average annual rainfall of eight inches help to make the Sun City a twelve-month-a-year attraction. One of only two counties of the 254 in the state of Texas located in the Mountain Time zone, El Paso is actually representative of several topographies. The Rocky Mountains reach their southern end in the area. The City's average elevation is 3,762 feet above sea level, climbing as high as 7,200 feet. The nearly 250 square miles of incorporated land is part of the junction between Mexico, New Mexico, and Texas and also includes lush farmland along the Rio Grande. The river has actually been tamed from its historical might. Called the Rio Bravo in Mexico, the Rio Grande's origin is snowmelt from Colorado and New Mexico. It is the natural boundary between the United States and Mexico from El Paso to the Gulf of Mexico. To help settle a dispute over who gets to use its water, the federal government eventually intervened. On December 2, 1905, Secretary of the Interior Ethan A. Hitchcock authorized the Rio Grande Project. In conjunction with the formation of quasi-governmental water districts in southern New Mexico and in El Paso County, ground was broken on the biggest project of its kind to date—to build a series of dams and canals over hundreds of miles.



Running linear to the Rio Grande River in New Mexico and Texas with a maximum width of 4.5 miles, the Project extends 165 miles north and forty miles southeast of El Paso, Texas. The water system for this narrow oasis features the three hundred foot tall Elephant Butte Dam and its smaller companion Caballo Dam, six diversion dams, 141 miles of canals, 462 miles of laterals, 457 miles of drains, and a hydroelectric plant. The Rio Grande flows through narrow gorges requiring diversion and canal systems for three valleys: the Rincón, Mesilla, and El Paso. This necklace of fertility blankets 178,000 acres in Doña Ana, Sierra and Socorro Counties in south central New Mexico and the City and County of El Paso. Sixty percent of Project lands are in New Mexico and the remaining 40 percent are in Texas. Supplemental drainage provides water for 18,000 acres in the Hudspeth County (Texas) Conservation and Reclamation District. Subsequent agreements between the United

States and Mexico solved not only the Mexican allotment but also a disputed piece of territory in central El Paso.[1]

DEMOGRAPHICS AND SOCIOECONOMIC

El Paso is currently the sixth largest city in Texas and the 19th largest city in the United States. El Paso County has an estimated population of over 850,000 people with another 1.4 million in El Paso's sister city of Juarez, Mexico. With a population of over 220,000 in Southern New Mexico, the El Paso region constitutes the largest international border community in the world. With expansion of Ft. Bliss, an additional 200,000 new residents will live in the El Paso region by the year 2025.

***Major Employers** (excluding retail & government)*

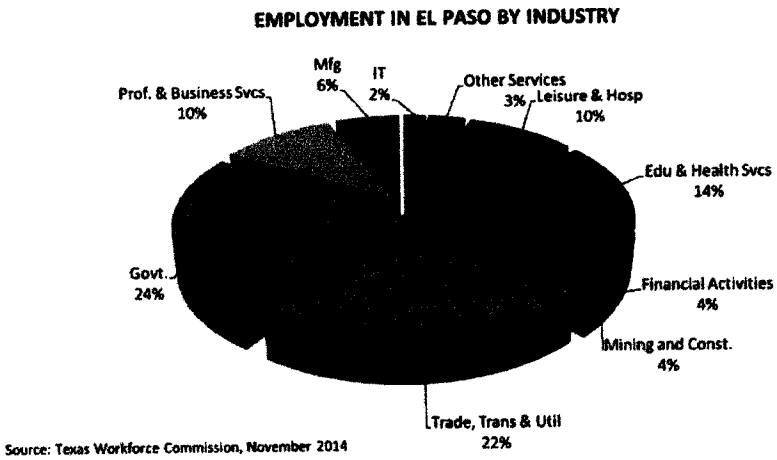
T & T Staff Management L.P.
University Medical Center
Dish Network
Alorica
Texas Tech University Health Sciences Center
GC Services
RM Personnel
Del Sol Medical Center
Automatic Data Processing, Inc.
El Paso Electric Company
OSP Group LLC
Las Palmas Medical Center
West Customer Management Group
Union Pacific Railroad Co. Inc.
Datamark
Coca-Cola Enterprises
Western Refining

Source: Hoovers database, verified by City of El Paso, Economic & International Development, November 2014

The El Paso Tri-State region is the fifth largest manufacturing center in North America. In 2012, *maquiladoras* in Cd. Juarez employed over 250,000 workers, representing over 20 percent of the total maquila jobs in Mexico. With more than 40 industrial parks and over 70 Fortune 500 companies with a presence in Ciudad Juarez, roughly 25 percent of Mexico's total production sharing output is manufactured in our sister city. The success of the maquila program has allowed the El Paso region to gain a globally competitive advantage in the manufacturing industry. The maquiladora industry is highly dependent on the strength of U.S industrial production, which began to cool down in the latter half of 2008. As a result, the Juarez maquiladora association's payroll expansion slowed for the subsequent years. However, since then, a substantial improvement has emerged and brought maquiladora employment levels close to the peak employment figures seen in summer of 2007.

[1] Autobee, Robert. "The Rio Grande Project." United States Department of the Interior, Bureau of Reclamation. Denver, CO (1994). p. 2.

The El Paso economy is slowly transitioning into new industries with less dependence on the traditional manufacturing and industrial sectors. According to Forbes Magazine, El Paso ranked among one of the best cities for income growth in the past five years and in the that time, incomes for college graduates have steadily grown more than any other major metropolitan area. Pay has increased for educated El Pasoans who are taking advantage of increased job opportunities in the higher income earning areas in the public sector. Altogether, the El Paso economy gained over 5,900 jobs during the year, representing an annual growth rate of 2.0% as the local economy continues to grow. El Paso has four international ports-of-entry bordering Cd. Juarez, Chihuahua and one international airport with a Foreign Trade Zone located adjacent to the airport. Twenty-five percent of all trade between Mexico and the U.S. travels through the El Paso ports-of-entry. The future of manufacturing in El Paso will likely arise from the attraction of research and development opportunities created by significant events in military and healthcare that will change the dynamics of the regional economy.



Source: Texas Workforce Commission, November 2014

BRAC Expansion

Due to the Base Realignment and Closure (BRAC) decisions made in 2005, El Paso is embarking on a very significant period of growth. In 2013, Fort Bliss realized a net increase of over 37,000 active duty personnel – the largest net gain from any military installation in America. The Army projected approximately 16,000 spouses and 21,000 children will accompany these personnel as they transition to El Paso. An investment of over $5.0 billion for construction projects will support the 300% base population increase by 2015. The long term economic impact over the next few years is estimated at $7.4 billion, an increase of nearly 15% in El Paso's gross regional product for the El Paso area.

Fort Bliss is the first military post in the nation to be designated a Center for Renewable Energy, which means more federal funding and private sector investment which could total to more than $400 million for the local economy. By 2017, Ft. Bliss will utilize solar power,

geothermal power and a waste-to-energy facility. These renewable sources of energy could provide enough power for the base to operate completely independent of the local power grid.

The University of Texas at El Paso

El Paso is home to the University of Texas at El Paso (UTEP), the second oldest member of the University of Texas System. It was founded in 1913 and became part of the U.T. system in 1919. The UTEP campus is located on the foothills of the southern tip of the Rocky Mountains, and its architecture is derived from the temples in the Himalayan kingdom of Bhutan. UTEP offers 70 bachelors and 76 master degree programs along with 20 doctoral programs. UTEP's enrollment has steadily increased for eight straight years and in the fall of 2014, enrollment surpassed the 23,000 student mark for the first time in its history.

In the latest annual graduate program rankings for Hispanics, Hispanic Business magazine ranked the UTEP graduate business program second and the graduate engineering program third among all U.S. colleges and universities. As the nation's only major research university serving a student population that is predominantly Mexican-American, UTEP has also been named one of the top five Hispanic serving institutions to receive federal research money, according to the National Science Foundation (NSF).

With over $70 million in annual research spending, UTEP is dedicated to becoming one of Texas' next national research (Tier One) universities. It is a designation that will boost the region's economy and quality of life, while offering a wealth of opportunities for undergraduate and graduate students. To this end, the campus is transforming as UTEP makes unprecedented investments in its research and academic infrastructure.

The Paul L. Foster School of Medicine

The Paul L. Foster School of Medicine is the first four-year medical school on the U.S./Mexico border and is the second new medical school in the country in 25 years. The estimated economic impact of the school is expected to improve the local economy by $1.31 billion by the end of 2013. The medical school, part of the Texas Tech University system,

received over 2,500 student applications for only 40 positions. The first class of students began classes during the 2009 fall semester. In the coming years, the medical school will be among the catalysts for achieving first-rate medical care in the region, training more physicians and delivering quality health care to El Pasoans.

In addition to a strong, diverse economic base, in 2014 El Paso was ranked as one of the safest large cities in the United States with a population of over 500,000, according to the Morgan Quitno Corporation. El Paso has been ranked in the 2nd or 3rd spot of Safest Cities since 1997 and in 2011 ranked as the safest city. The overall crime rate has continued to decrease in recent years, despite the city's consistent growth. El Paso is also one of the most affordable major cities in the U.S. According to the American Chamber of Commerce Research Association (ACCRA), the cost of living in El Paso is approximately 91.6% of the national average in 2014, a favorable ranking compared to most cities in the Southwest region and most cities of similar size and demographics nationally.

In 2010, El Paso was named as a 2010 All-America City. The All-America City Award, given to ten communities each year by the National Civic League, is considered the "Nobel Prize" of city awards. The award recognizes neighborhoods, villages, towns, cities, counties and metro regions for outstanding civic accomplishments. To win, communities have to demonstrate an ability to address serious challenges with innovative, grassroots strategies that promote civic engagement and cooperation between the public, private and nonprofit sectors.

The city of El Paso's redevelopment and revitalization efforts of Downtown El Paso have gained national recognition. In July of 2008 the Wall Street Journal recognized El Paso's redevelopment efforts in an article titled "Success Stories – A look at seven places that took different approaches to economic development and came out ahead." With more than $204 million invested in Downtown by the public and private sector, there are over 14 major projects underway. The relocation of the Triple A baseball team from the San Diego Padres farm club to El Paso, called for the building of a downtown baseball stadium completed in the spring of 2014. The Chihuahuas began playing in the spring of 2014.

Growth is evident in all parts of El Paso. The city has experienced healthy growth in the challenging economic environment and this will remain the case during the next year. The university and military base are two examples of multi-billion dollar expansion that have already started and will carry on through 2015.

UTILITY

HISTORY OF EL PASO WATER UTILITIES

Although the utility has been around in some fashion or another for as long as the City of El Paso has, it was not until 1952, when the **Public Service Board (PSB**) was created, that **El Paso Water Utilities (EPWU)** took its present form. With the leadership and foresight of Mayor Fred Hervey to address El Paso's water demands and make water issues as apolitical as possible, the Public Service Board was created through city ordinance. El Paso City Ordinance No. 752, adopted May 22, 1952, established a five-member board of trustees known as the "Public Service Board" which was given the complete management and control of the city's water system. The ordinance was later amended to increase the size of the board to seven members. The board of trustees consists of the Mayor of the City of El Paso and six residents of El Paso County, Texas. With the exception of the Mayor, all other trustees are appointed by the City Council and serve staggered four-year terms. The PSB meets the second Wednesday of each month, except during holiday seasons, at the Utility's administrative office.

For financial reporting purposes, the El Paso Water Utilities is considered a component unit of the City of El Paso. The PSB operates and manages EPWU on behalf of the City of El Paso. It adopts an annual combined operating, capital, and debt service budget with associated rates and fees for services; and also issues updates to its Rules and Regulations, which have the force of law. The Utility does not issue *ad valorem* property taxes against an assessed valuation (2012) of over $30 billion. Instead, the PSB recovers the cost of providing water and sewer services primarily through user charges. The Utility endeavors to provide the highest quality water and sewer services to its customers at the most reasonable cost it can. As part of the mission and vision statements of the Board, the Utility strives to balance customer needs with proper resource and financial management as well as regional leadership.

SOURCE OF SUPPLY

El Paso uses **ground water and surface water for its potable supply.** In 2014 the city produced about 115,500 acre-feet per year of potable water for its customers. The ground water sources—underground aquifers tapped by wells—included the Hueco **Bolson** which supplied 58% of total demand and the Mesilla Bolson 22%. *Bolson* is Spanish for

"pocket." 20% was supplied by surface water from the Rio Grande. El Paso also uses reclaimed water to supply non-potable demands. Over 8,000 acre-feet per year of reclaimed water is used for non-potable demands including turf irrigation and industrial uses. The groundwater capacity is approximately 164 **million gallons per day (MGD)** including desalinated brackish groundwater, and surface water capacity is 100 MGD. The amount of surface water that is available each year is variable depending drought conditions. In the event of limited surface water, due to drought conditions, the city will pump more groundwater from its wells. Historically, the Utility relied heavily on groundwater because it can be pumped virtually at drinking water quality standards, whereas river water requires treatment to remove sediment, naturally occurring organic matter, and other compounds. But because ground water supplies are invariably finite, the PSB has engaged a multi-pronged solution to address and ensure El Paso's future water supply. The PSB owns land in the County for the purposes of water rights, and currently leases additional acres, also for the purposes of water rights. In addition, the Utility has third party agreements with the El Paso County Water Improvement District #1 and the Bureau of Reclamation that allows for the purchase of additional surface water to supply the Jonathan Rogers **Water Treatment Plant (WTP)**. In addition, the Utility has built a **desalination** plant in east El Paso. This desalination plant, which is a joint project with Fort Bliss, is designed to treat brackish groundwater. It can produce 27.5 mgd of potable water and is currently treating about 4 mgd.

WATER CONSERVATION

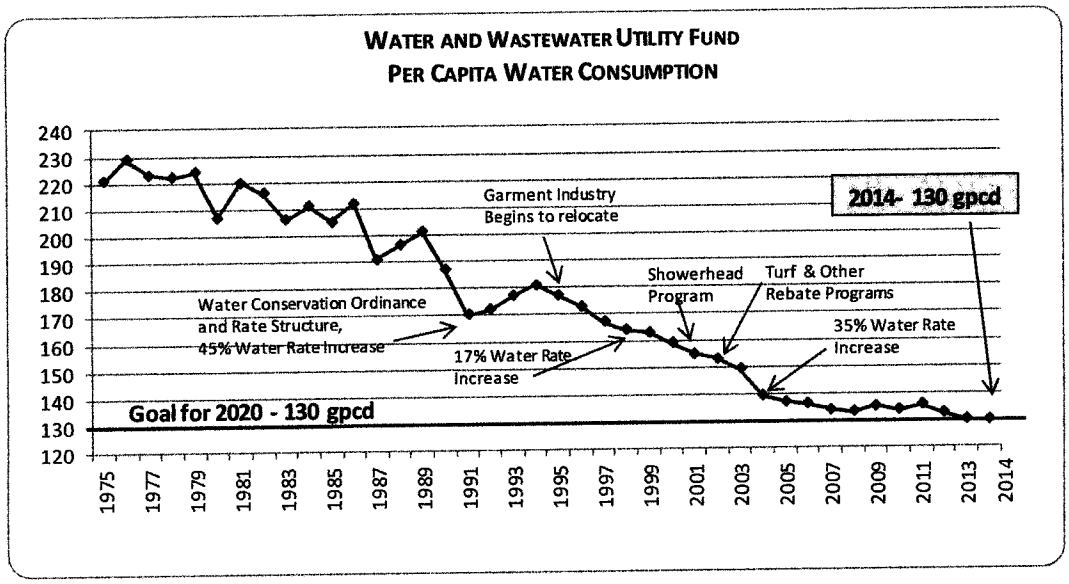
With its sunny days and mild temperatures, El Paso is truly a desert oasis. But because rainfall averages only 8 inches per year, water conservation is essential to the city's economy, environment and quality of life.

Water Use

El Paso is located in the Chihuahuan Desert and water use fluctuates with the weather; it peaks in the summer when days are typically long, hot and dry. Weather also affects surface water flows, which provided only 20 percent of the municipal water supply in 2014. The surface water treated in El Paso comes primarily from snowmelt runoff in southern Colorado and northern New Mexico. It is stored in the Elephant Butte Reservoir and released during the irrigation season. However, wind, above-average temperatures and below-average precipitation can reduce runoff. This affects the amount of water stored in the reservoir and available to EPWU. In 2014 due to the continued river drought the Utility

was allotted only 24,000 acre feet of river water compared to an average year when over 60,000 acre feet is treated.

Groundwater was El Paso's primary source of supply for many decades, and heavy pumping led to declining groundwater levels in many areas of the Hueco Bolson. With finite water resources and a growing population, EPWU began an aggressive water conservation program in 1991. The objective was to reduce water consumption from 200 gallons per capita per day (gpcd) to 160 gpcd by the end of 2000.



EPWU combined education, enforcement and incentives to teach El Pasoans to conserve water, and consumption had fallen to 159 gpcd by December 2000. The new target, 140 gpcd by 2010, was surpassed in 2004, and the goal now is to achieve overall per capita water consumption of 130 gpcd by 2020 which was achieved in 2013. Per capita consumption for 2014 was also 130 gpcd.

Water Conservation Ordinance

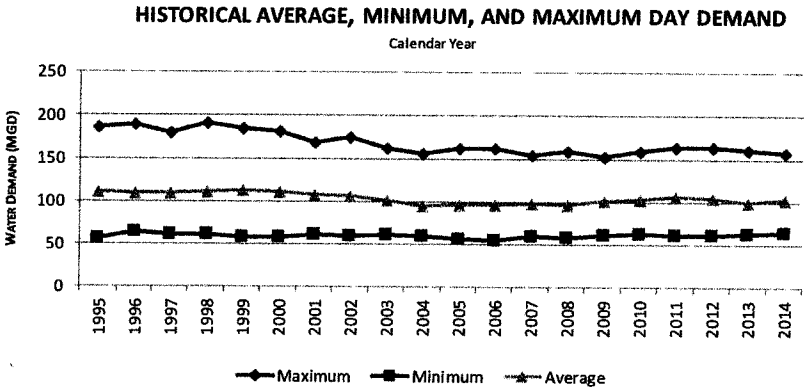
In 1991, the City Council adopted the Water Conservation Ordinance, which makes wasting water a violation. The plumbing code was also changed to require the installation of low-flow models for all new indoor plumbing fixtures, including showerheads, faucet aerators, and toilets.

The Water Conservation Ordinance states that:

- Landscaped areas can be watered up to three times a week throughout the year based on even/odd addresses. Water flowing into streets or rights-of-way is prohibited.

- From April 1 through September 30, outdoor watering is prohibited from 10 a.m. to 6 p.m.
- Using a hose to wash sidewalks, driveways, patios, and other non-porous surfaces is prohibited except when eliminating dangerous conditions.
- Violations are a Class C misdemeanor, and citations are punishable by fines of up to $500 plus court costs.

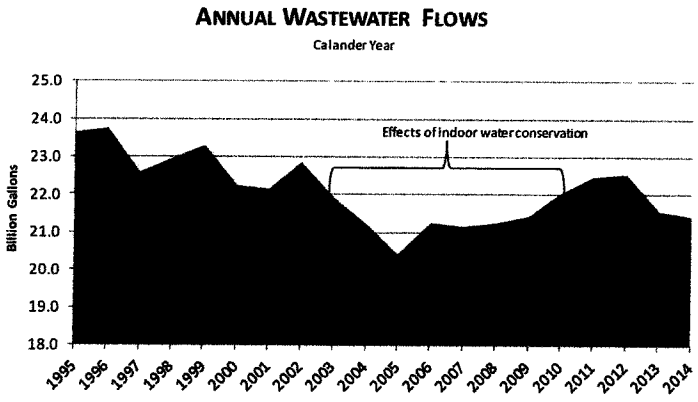
In 1995, the city established landscape requirements for commercial properties, including water conservation restrictions and beautification guidelines. Additional updates in 2001 prohibited sprinkler-irrigated turf areas in parkways and added tougher enforcement language. Landscape requirements for commercial properties can be found under Title 18 – Building and Construction, Chapter 18.46 Landscape and Chapter 18.47 Irrigation Systems.



Incentives

Every effort has been made to send positive messages and offer meaningful incentives through the Water Conservation Department. EPWU also adopted the recommendations of its Public Working Committee, a group of dedicated individuals who worked closely with staff to evaluate the potential savings of new water conservation programs.

The Cash for Your Commode rebate program offered an incentive to customers who replaced higher-flow toilets with low-flow models. Over 53,700 toilets were replaced. Subsequent programs included distributing free showerheads and collaborating with El Paso Electric Co. to offer rebates for water-efficient



clothes washing machines and central refrigerated air systems. A popular turf replacement rebate program paid customers for replacing established grass with low-water-use landscaping, and EPWU offered free waterless urinals to nightclubs, restaurants and government offices.

Due to the huge response to the programs and the resulting decrease in consumption, the rebate programs ended in 2007. While the programs were in effect more than 11 million square feet of turf was removed, 14,000 high-water-use washing machines were replaced, 10,300 refrigerated air units replaced evaporative coolers and over 179,000 water-efficient showerheads were distributed.

In 2010, the Utility was approached by the City's Sustainability Department to manage a clothes washing machine rebate funded by a large Federal stimulus grant. The Utility processed a total of 1,110 washing machines rebates under this program, which ended in 2010. In 2012 the utility initiated a second program to distribute free low-flow showerheads to its customers. More than 140,000 showerheads have been distributed in the past two years.

Education and Partnerships

An important part of the conservation program is education. The Carlos M. Ramirez TecH_2O Water Resources Learning Center offers visitors bilingual information and interactive exhibits that increase awareness of total water management in the Chihuahuan Desert. In addition to being an informal science provider of information, the center hosts conferences, workshops, seminars and school field trips and provides a perfect venue for exchanging information about water resources.

The Water Conservation Department is also proactive in public education campaigns. Staff works with area educators, makes presentations to local schools, and participates in local and regional events and contests. Teachers can request the use of interactive educational kits that have been designed to meet state standards regarding surface and groundwater issues, watershed ecology and many other environmental concepts. The kits include hands-on activities, videos and materials thus enhancing our outreach educational efforts.

Education is also carried out through media campaigns that include billboards, radio and television commercials, and other creative means of encouraging the wise and efficient use of water. For example, a decorated van known as the "Williemobile" promotes water

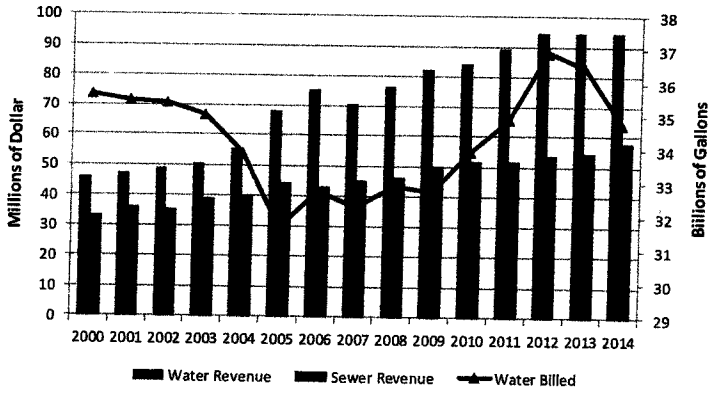
conservation. The van is named after the water conservation mascot, Willie the Water Drop. Staff takes the "show on the road" when participating in city-wide conservation and environmental events or when presenting at area schools.

Ongoing collaborative programs with other agencies have resulted in beneficial and innovative solutions to the continuing education of customers. Examples include monthly public activities and workshops offering information about the environment, practical solutions and tips to conserve water or hands-on STEM related activities for students. Additionally the conservation staff has been successful in obtaining grants from governmental agencies such as the EPA/BECC and the Texas Parks and Wildlife. Such grants have allowed the development and establishment of demonstration sites including fruit trees and a series of keyholes vegetable gardens as well as the pilot program for middle school students to increase awareness of wetlands. EPWU has collaborated with Region 19 Head Start to develop interactive exhibits for the Region 19 Intellizeum, and in cooperation with the Junior League of El Paso, allowed for the development of the Keystone Botanical Garden. Our partnership with the El Paso Zoo culminated with the completion of the El Paso Water Utilities Discovery Education Center which was partly funded by EPWU. Educational programs and events are regularly hosted at the Discovery Center as another venue to deliver our conservation messages.

EPWU's Conservation Program continues to be recognized and modeled throughout the nation. The Conservation Manager served on the State Water Conservation Implementation Task Force set forth by the 78th Texas Legislature. The final report presented to the Legislature included a state-wide public education campaign proposal and a set of best management practices heavily based on El Paso's successful program.

Rate Structure

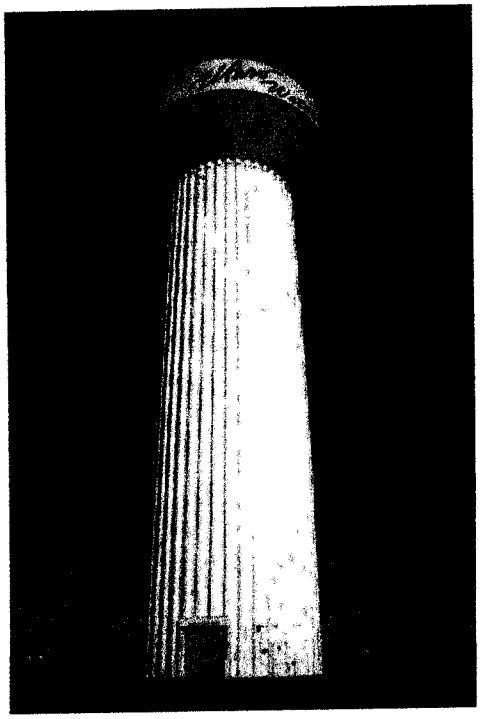
In 1991, EPWU implemented an inclining rate structure where the unit price increases as water consumption increases. The graph below illustrates how the Utility uses pricing as both a demand management tool and a way to generate additional revenue.



Municipal water utilities use rate structures and pricing signals as a water management tool in order to decrease non-discretionary uses of water. Many regions facing water shortages have implemented large rate hikes in order to manage water use. The responsiveness to these rate hikes is measured by the price elasticity of water demand. Since water is a precious resource with no close substitutes, the price elasticity of water demand is very low, or price inelastic. This means that as the price of water rises, increases in revenue will more than offset a resulting decrease in consumption, indicating that consumers are relatively unresponsive to small changes in the price of water. In order to send the right price signal to consumers, many water utilities have adopted large rate hikes in order to get the desired response of decreased consumption.

Price elasticity of water also depends on other factors such as precipitation and temperature, household income (the higher the household income, the higher the level of water consumption) and the implementation of conservation outreach programs.

RECLAIMED WATER



Reclaimed water has also played an increasingly important part in conserving El Paso's potable water supply. Reclaimed water is wastewater that is treated to be suitable for safe use in many beneficial applications, such as industry and irrigation. Although the Haskell Street **Wastewater Treatment Plant (WWTP)** has been providing its effluent to Ascarate Golf Course for irrigation for over forty years, the Utility began making aggressive efforts to expand its reclaimed water treatment and distribution system in 1992. The Utility now provides advanced secondary (98.0% of organic pollution has been removed and it has been 99.99% disinfected) and tertiary (99.9% of organic pollution has been removed and it has been 99.99% disinfected) reclaimed water to users all over the City, from all four of its wastewater treatment plants. With the expansion of the Haskell Street WWTP reclaimed system the Utility was able to provide service to six parks, three schools, Evergreen cemetery, the City Zoo, the historic Concordia Cemetery complex, and various street medians. The first phase was completed in 2003. Construction of a second phase

was completed in 2006. A third phase was built in 2006 to provide two automated dispensing stations for street sweeping and construction use. In 1999, a golf course was connected to the Northwest Reclaimed Water Project. Two townhome associations, two apartment complexes and one City park were connected to the Northwest Reclaimed Water Project in 2003. In 2005, one townhome association, a medical office building, and two commercial landscapes were connected. The Resler extension medians, one large commercial landscape, an apartment complex, a shopping center, the Northwest Regional Center/Park and Canutillo High School were connected in 2006, followed by the construction of one automated dispensing station. In 2007 and 2008, the Westside Sports Complex and an industrial facility began using reclaimed water for their irrigation and process activities respectively.

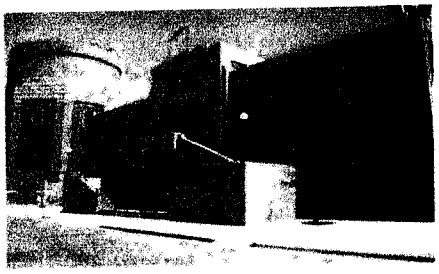
The Roberto Bustamante WWTP currently provides reclaimed water to a 10-arce City Tree Farm, which is managed by the Street Department, to Mt. Carmel Cemetery, and to various contractors for construction use. Reclaimed water facilities are in place to serve the Riverside International Industrial Center just east of Loop 375. Mount Carmel Cemetery was connected in 2006 after completion of the pipeline project that extended from the Riverside International Industrial Center to the cemetery. Construction for the expansion of the reclaimed water system in Northeast El Paso to serve the Northeast Regional Park that was completed in 2005. The northeast system (Fred Hervey Water Reclamation Plant) produces tertiary quality reclaimed water for El Paso Electric Company, Painted Dunes Golf Course, Bowen Ranch and the Northeast Regional Park and various contractors for construction use. The remaining reclaimed water is recharged into the Hueco Bolson for aquifer replenishment. These projects are informally called the "purple pipe" projects because of a regulatory requirement to color-coordinate utility lines based on what they transfer. EPWU distributes nearly 2.17 billion gallons of billed reclaimed water per year. Currently there are three golf courses, eighteen parks and ten schools connected to the system as well as six residential and eighteen commercial landscapes; two industries and several roadway medians. The cost-benefit is especially favorable because of millions of dollars in grants from the federal government for these projects and is comparative in costs to other viable new water supply sources.

WATER AND WASTEWATER SYSTEMS

The Utility owns and operates facilities throughout the City of El Paso, including: water and wastewater treatment plants; water reclamation plants; reservoirs; booster pump stations; wells; lift stations; and thousands of miles of distribution and collection lines. They are outlined below. The water and wastewater map in the Appendix geographically shows the area served by each facility.

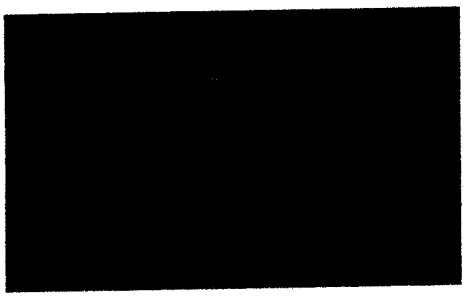
WATER SYSTEM FACILITIES

Robertson-Umbenhauer Water Treatment Plants



The Robertson Plant began operations in 1943 with a 20 MGD capacity. The Umbenhauer Plant was later added in 1967, also with a 20 MGD capacity. Together, these two plants are called the Canal Street WTP, and they use conventional treatment technology to purify Rio Grande surface water (typically March to September, when water is released from Elephant Butte Dam to serve downstream users). The plants can be utilized during the non-irrigation season to blend and treat water pumped from wells. The Canal WTP provides water to central and west El Paso. A major infrastructure renovation was completed in 2004 on these plants that will extend the life of these facilities well into the future. This included the installation of an Ultraviolet Light disinfection system for a portion of the water leaving the plant. Major electrical upgrades were also completed in 2006.

Jonathan Rogers Water Treatment Plant



This plant, operational in 1993, was expanded to a total capacity of 60 MGD in 2002. The Utility received a $14.9 million **Environmental Protection Agency (EPA)** grant through the **Border Environmental Cooperation Commission (BECC)** and NADBank for this project, which expanded the plant's surface water treatment capacity by 50%. The grant represents approximately 40% of the cost of the total project. The expanded plant, along with a major new distribution line, went online in May 2002.

In addition to the two surface water treatment plants, the Utility's distribution system includes over 74 reservoirs, 215 boosters, 53 booster stations, over 10,000 fire hydrants, and over 2,600 miles of water lines of various sizes, up to 60 inches in diameter. The Utility must operate and maintain the entire system 24 hours a day, seven days a week, and 365 days a year. While infrastructure failures do occur, the Utility ranks among the most reliable in the world. The median number of main breaks as reported by the **American Water Works Association (AWWA)** is one per every 4.2 miles of water line. EPWU averages one per every 14.50 miles of water lines—that's Three times as good! Finally, the Utility has as a part of its system over 169 operational wells.

Upper Valley Water Treatment Plant and other Arsenic Facilities

In 2005 El Paso Water Utilities began operating four treatment plants specifically designed to achieve compliance with EPA's new **maximum contaminant level (MCL)** for arsenic which became effective on January 23, 2006. The four plants have a combined treatment capacity of 41 MGD which results in 96 MGD blended water meeting the MCL. The largest of the four plants is the 30 MGD Upper Valley Water Treatment Plant which uses conventional flocculation/sedimentation/filtration to remove arsenic. The remaining three plants have a combined capacity of 11 MGD and use a granular iron media to absorb arsenic.

Kay Bailey Hutchison Desalination Plant

The Kay Bailey Hutchison Desalination Plant started operations in 2007. A joint project of El Paso Water Utilities and Ft. Bliss, the plant facility is capable of producing 27.5 MGD of fresh water daily. This state-of-the-art facility applies an innovative reverse osmosis technology to convert the brackish groundwater to high quality drinking water. This desalination process not only removes salts, but also is the most comprehensive water treatment technology available, removing other potential pollutants from the water. The water pumped to the desalination plant protects El Paso's and Ft. Bliss' fresh groundwater supplies from brackish water intrusion by capturing the flow of brackish water towards fresh water wells.

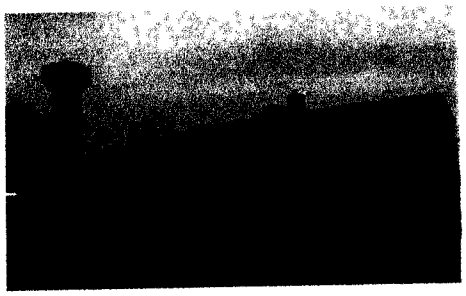
WATER QUALITY

Currently, both surface water and ground water treated by the Utility are monitored and the quality is reported to required public regulatory agencies. Both the EPA and the **Texas Commission on Environmental Quality (TCEQ)** have hundreds of standards for quality and reporting which must be met every day. Other governmental agencies with which the Utility must work closely include the **United States Geological Survey (USGS)**, the **International Boundary and Water Commission (IBWC)**, the Rio Grande Compact Commission, the Department of the Interior's Bureau of Reclamation, and BECC—to name just a few.

El Paso Water Utilities has a long history of awards for compliance in meeting or exceeding standards set forth by the **Safe Drinking Water Act (SDWA)** and other regulatory legislation at the state, federal, and even international level. Since 2004, the Canal and the Jonathan Rogers Water Treatment Plants have been awarded the Partnership for Safe Water Phase III Director's Award. EPWU sends an annual drinking water report to all of its customers in compliance with the EPA's Consumer Confidence Rule. The report describes the Utility's water content with respect to SDWA standards. It is printed in both English and Spanish and mailed to all customers on an annual basis. The Utility must test on a regular basis for many parameters including inorganic compounds, metals, microbiological organisms, synthetic organic chemicals, and volatile organic compounds and report the results to the TCEQ and EPA. Because the Utility, without exception, meets or exceeds all quality requirements and transmits this quality potable water to its customers in a reliable manner, the TCEQ has again recognized the Utility as a "Superior Water System," the highest such designation a Utility can earn in the State of Texas.

WASTEWATER SYSTEM FACILITIES

Haskell R. Street Wastewater Treatment Plant



The oldest wastewater facility in El Paso, it was built in 1923. It has since undergone several expansions and upgrades, including a $22 million upgrade to increase treatment capacity to 27.7 MGD and improve effluent quality and operational efficiencies at the plant, completed in 1999. This plant provides highly treated reclaimed water for

the Central El Paso reclaimed water system, which began in 2003. The plant serves central schools and parks including Ascarate Park and Ascarate Golf Course with irrigation water. This plant has won and continues to win awards for perfect compliance with regulatory permit requirements from the **National Association of Clean Water Agencies (NACWA)**.

Since 1997, the plant has received 11 NACWA Gold Awards for perfect permit compliance. In 2004, the plant received the NACWA Platinum Award for five consecutive years of perfect permit compliance, and in 2007 the plant received the Platinum Eight Award for eight consecutive years of perfect compliance.

In 1994, it was selected as the Texas State and USEPA Region VI winner of the Operations and Maintenance Excellence Award, Large Advanced Plant Category. It has been selling its reclaimed water to the Ascarate Municipal Golf Course for nearly 40 years, and will see its reclaimed water capabilities expanded in phases through the next several years.

John T. Hickerson Water Reclamation Facility

Serving the west side of the Franklin Mountains into the Upper Valley, this plant began operations in 1987 and has since been expanded to its current 17.5 MGD of treatment capacity. Highly treated effluent is either safely discharged into the Rio Grande or transmitted through the Northwest Reclaimed Water Distribution System. With significant Bureau of Reclamation and State of Texas funding assistance, the Northwest Reclaimed System serves Coronado Country Club Golf Course and various parks and schools in west El Paso providing additional, significant savings to the potable water supply. This plant has been nominated for six EPA Operations and Maintenance Excellence Awards, and in 2008 received 1st Place in the National Clean Water Act Recognition Awards for Operations and Maintenance Excellence in the Large Advanced Plant category. Since 1997, it has received 6 NACWA Gold Awards for perfect permit compliance. In 2003, the plant received the NACWA Platinum Award for having received five consecutive Gold Awards. In 2013, the plant received the Platinum Fifteen Award for fifteen consecutive years of perfect permit compliance. In 1992, the plant and its personnel were also recognized for their

commitment to safety by being awarded the Water Environment Federation's George W. Burke Award for Safety. In 2008, the plant also received the Texas State, Regional and National winner of the Clean Water Act O&M Awards Program in the Large Advanced Category.

Roberto R. Bustamante Wastewater Treatment Plant

The newest plant in the system, it began operating in 1991 with a 39 MGD capacity. Using traditional technology for treatment, it—along with its neighboring Jonathan Rogers WTP—serves east El Paso. This plant has been honored by NACWA for its perfect compliance as well. Since 1997 the plant has received 12 NACWA Gold Awards. In 2002, the plant was one of 17 Platinum Award recipients in the nation for five consecutive years of perfect permit compliance. In 1994, the plant received second place in the national USEPA Operations and Maintenance Excellence Awards. In 2005, the plant won the Water Environment Association of Texas Plant of the Year Award. Effluent is discharged into either the Riverside Canal or Riverside Intercepting Drain for use downstream. A new large-scale reclaimed water project (online in 1998) with a capacity of two million gallons per day also serves the immediate area. The Utility has begun improvements to the plant's aeration basins that will lead to enhanced treatment to serve continued growth in the area.

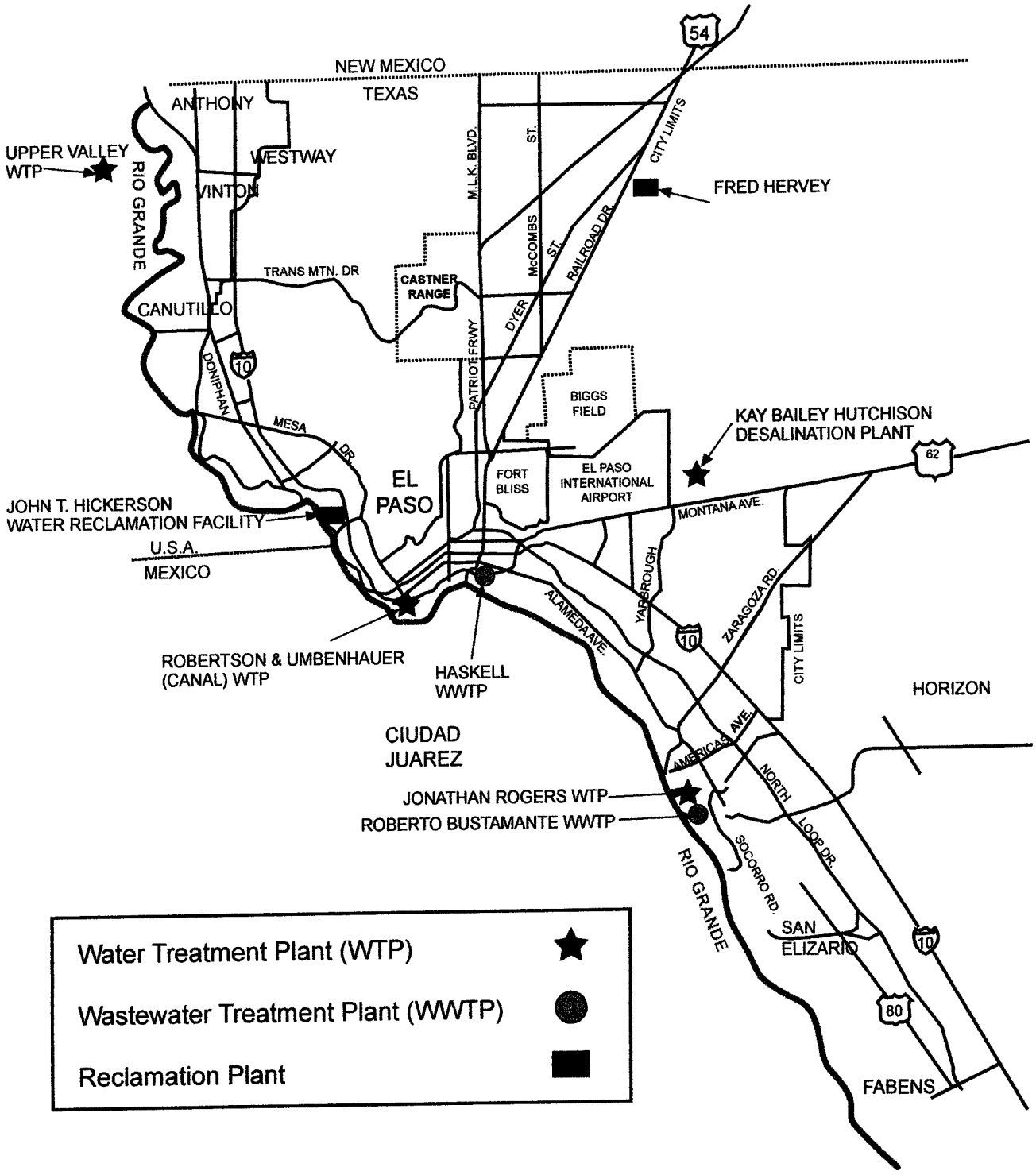
Fred Hervey Water Reclamation Plant

This 12 MGD plant has won not only awards, but also worldwide attention. The plant is essentially a combined water and wastewater treatment plant, which treats wastewater to drinking water quality standards. The treated effluent from this plant is sold to El Paso Electric Company for cooling water, to the nationally renowned Painted Dunes Desert Golf Course for irrigation, to various other customers in the Northeast part of the city, and the remainder replenishes the Hueco Bolson through a series of injection wells and several groundwater recharge infiltration basins. Tours are regularly provided to industry, utility, and academic representatives as one of the model plants of the system. The plant became operational in 1985 and was significantly financed with EPA assistance. The plant is also a crucial part

of the EPWU plan to reduce dependence on groundwater and was featured on the internationally acclaimed PBS series "Water: The Drop of Life". The plant has received numerous awards including: the 1994 AMSA Public Information and Education Award; second place in the 1994 national USEPA Operations and Maintenance Excellence Award, No Discharge category; and the 1998 American Water Works Association's Conservation and Reuse Award. In 1999, the plant received special recognition by the El Paso del Norte Region Mission Possible-Survival Strategies in the category "Protection and Preservation of the Environment." The plant has received 4 NACWA Gold Awards and 2 Platinum Awards for perfect permit compliance under the expanded NACWA Peak Performance Award program since 2006.

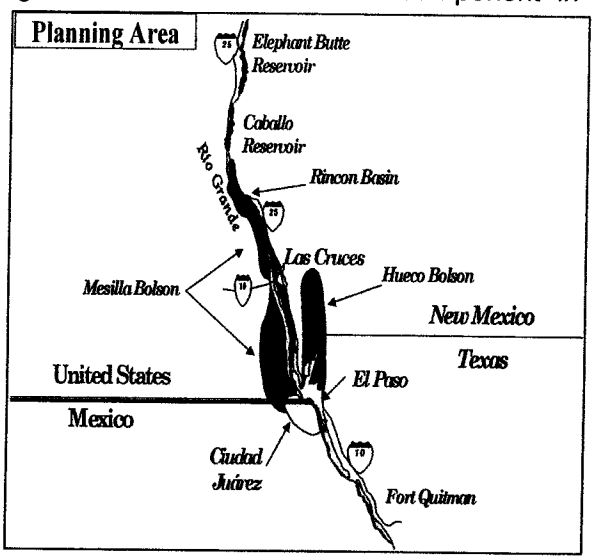
The Utility also operates and maintains 75 lift stations and over 2,270 miles of collection lines to keep the sewer system running at peak reliability and meet customer demand. The Water Environment Association of Texas (WEAT) in 2007 awarded the lift stations section with the George W. Burke, Jr. Award for having an effective safety program. In 2007, WEAT awarded the wastewater collection maintenance section with the Medal of Honor for Heroism in recognition for the section's contribution during the flood of 2006.

El Paso
Water & Wastewater System



STRATEGIC

Long-term water and wastewater planning continues to be a critical component in managing the region's water resources. EPWU continues to take a leadership role in working with various entities from throughout the region that are all devoted to regional planning efforts.



In 2014, EPWU along with other stakeholders in the Far West Texas Regional Plan attended meetings to begin work on the 2016 State Water Plan. The Region E State Water Plan is included as part of the State Water Plan that will be submitted to the Texas Legislature. The Plan will provide an evaluation of current and future water demands for all water-use categories, and water supplies available during drought-of-record conditions to meet those demands. Where future water demands exceed an entity's ability to supply that need, alternative strategies are considered to meet the potential water shortages. State water planning is updated every 5 years and covers a 50 year time period. The 2016 Plan will include new water management strategies for EPWU including purified water project at the Bustamante Plant, brackish groundwater at the Rogers Plant, expansion of the Jonathan Rogers Water Treatment plant. EPWU will continue to use diversified water supply portfolio to meet the water supply needs of the future. The major components of the EPWU water supply portfolio include the Rio Grande, groundwater from Mesilla and Hueco Bolsons, desalination of brackish groundwater, water reuse, conservation and importation. Regional leadership is and has been an important consideration as the Utility implements long-term planning strategies aimed at ensuring a sustainable supply of water.

In 2014 EPWU's water resources manager advanced the knowledge of the city's three water sources (Rio Grande, Hueco Bolson groundwater and Mesilla Bolson groundwater) as well as potential future sources of water. Data collection continued in the Mesilla and Hueco Bolsons as part of an ongoing effort to update groundwater models. Groundwater models simulate potential future groundwater management scenarios, which can be helpful in evaluating the feasibility of proposed projects.

Climate change can affect the allotment of water from the Rio Grande. However, as an effective steward of El Paso's water resources, the Public Service Board incorporates possible climate change scenarios into the Utility's adaptive management water resources policies. The analysis demonstrates that the historic variability and predicted changes associated with climate change are insignificant with respect to meeting municipal water demands in El Paso County. Thanks to proactive planning and sound management, El Paso is prepared for the extreme weather patterns that could occur.

The analysis also confirms that because of EPWU's water resource management policies, fresh groundwater storage in the El Paso portion of the Hueco Bolson will remain above 75 percent of 2002 fresh groundwater storage. This means that over the next 50 years, there will not be less than 7.05 million acre-feet of fresh water available in the Hueco Bolson, even under the worst case scenario.

The current management approach and infrastructure ensure that El Paso County's groundwater supply will not be significantly impacted by the worst-case climate change scenario. Future water demands will be met through the year 2060 and beyond.

The continued implementation of the County Water and Wastewater Master Plan previously developed by the Utility and El Paso County continues to serve as a guide for working with communities located outside the City limits of El Paso that require assistance in receiving water. In addition, efforts to adhere and consider smart growth principles within land use Master Plans developed for property owned by the Public Service Board are well underway. Such planning efforts are to be completed before development occurs and will ensure that the necessary infrastructure and quality of life amenities are in place before development occurs.

CHARTER

The El Paso Water Utilities – Public Service Board exists to serve the water resource needs of the population of the El Paso geographical area. Its strategic and operational impetus is on delivering quality services in an affordable manner to all who demand it. These services include water for all uses, wastewater services, and related services as demanded and as deemed feasible.

As a growing Utility in a rapidly growing region, El Paso Water Utilities strives to anticipate, plan for, and react to the changing environment in which it operates. Through diligence in all of its functions, the Utility seeks to deliver ever-increasing value to its customers while promoting orderly growth in its service area. We encourage the involvement and participation of the public through open and honest communication at all levels with all our stakeholders.

To be as effective as we can be, we use all our resources to continuously create an enterprise for leadership. That leadership is reflected in our technology, our management style, our critical business practices, and in our vision. Most importantly, it is reflected in our employees whose diligence is the cornerstone of the success of the Utility. To that end, we continually work to develop the capabilities and initiative of our employees and our leadership. We believe it is primarily through their efforts that the Utility will continue to excel.

We recognize the criticality of the mission with which we are entrusted. Through a consistently high level of attention to the needs of the community, the Utility demonstrates an ongoing commitment to supporting the lifestyle demands of the El Paso Southwest. In all of our actions we seek to balance those demands with attention to conservation and restraint in our use of water resources. With our stakeholders as partners, we envision a bright future of water availability, technological innovation, and support of economic growth for the personal, commercial, and industrial benefit of El Paso.

MISSION STATEMENT

To provide our customers a sustainable water supply and the highest quality water services at a reasonable cost with excellent customer service.

VISION STATEMENT

To sustain the future of the community through proper planning and implementation of diverse and alternative strategies.

STRATEGIC PLAN FY 2015-16

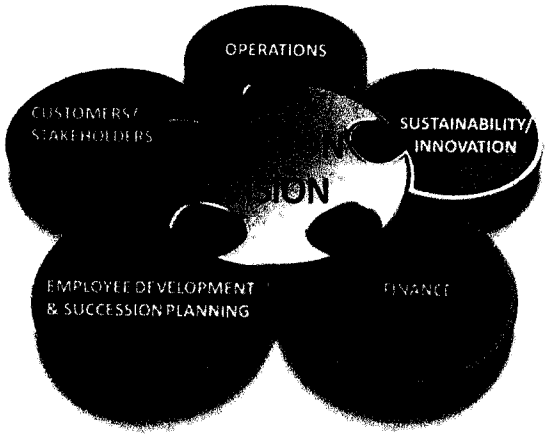
In FY 1997-1998, the Public Service Board developed a strategic plan to guide the Utility. This "Ten-Year Strategic Plan" is updated annually and specifies a comprehensive prioritized set of initiatives and ongoing activities to enhance the present and future delivery of quality water and wastewater services for our current and future customers.

The EPWU continued to follow the strategic plan that was revamped in 2013. The Utility focused on developing a new strategic plan by looking at the strengths, weaknesses, opportunities and threats. Section managers play an active role in the strategic planning process, where strategic initiatives along with key goals and objectives are developed in an effort to identify problem areas, define plans for addressing various issues within each section, and establish priorities. This year, the Utility invited key stakeholders, entities, private companies, consultants, environmental groups and political leaders to participate and share their views and experiences with the Utility. This process allows key section managers an opportunity to provide policy recommendations that are considered by the Public Service Board. Furthermore, the approved Strategic Plan is monitored by staff on an ongoing basis to ensure execution and implementation of the plan.

The updated plan identifies the key functional areas the Utility will focus on and addresses how the Utility should proactively deal with these driving forces on a prioritized basis:

- Operations
- Sustainability and Innovation
- Finance
- Employee Development and Succession Planning
- Customers/Stakeholders

STRATEGIC OBJECTIVES, INITIATIVES, AND GOALS



I. OPERATIONS – EPWU will provide reliable and high quality service to its customers.

- Enhance planning efforts through the implementation of capital budgeting methodologies to ensure projects are completed on time and on budget.
- Improve rehabilitation of current infrastructure to ensure a reliable and resilient system.
- Employ operational excellence program to reduce operational costs and energy utilization.
- Proactively monitor changes in water quality regulation to ensure providing the highest quality service to customers.

GOALS:

1. Over the next year, implement a new capital budget methodology that prioritizes projects based on need and financial impact and ensures that 100% of planned capital projects are completed.
2. Reduce water main breaks by 10%.
3. Reduce operation budget and electricity costs by 2% over the next 3 years.
4. Annually report on any government water quality policies that may impact the Utility

II. SUSTAINABILITY & INNOVATION – **EPWU** will use the latest technological advances and alternative resources to provide a sustainable water supply for the community.

- Plan and implement alternative water resource projects to augment current water supplies and ensure a drought proof water supply.
- Evaluate resource recovery projects to increase water capacity, decrease costs and energy consumption.
- Plan and secure additional water resources.
- Employ innovative technologies to improve efficiencies throughout the Utility.

GOALS:

1. Increase well capacity to 185 MGD over the next 3-years. Produce 10 MGD of advanced purified water by 2016.
2. Reduce energy consumption by 1% and increase water capacity by 3 MGD through resource recovery by 2015.
3. Secure a sustainable supply of an additional 30,000 AF of water by 2019.
4. Reduce operational costs by 2% over the next 3-years.

III. EMPLOYEE DEVELOPMENT & SUCCESSION PLANNING – EPWU will identify candidates, provide training and mentoring, and create opportunities to ensure a well prepared workforce.

- Employ a succession planning strategy that will identify and develop employees to prepare them for leadership positions in the future.
- Craft a cross exposure program for employees to introduce them to other areas of the Utility and develop their management and leadership skills.
- Implement and train all employees on the principles of continuous improvement.
- Create a project management program that provides training, coaching and mentoring to project managers to ensure the successful execution of capital projects.

GOALS:

1. Complete a succession plan within the next year.
2. Over the next year, develop and implement a cross exposure program in operations and engineering
3. Train 100% of employees over the next three years on continuous improvement.
4. Train 100% of engineers on project management over the next three years and have 50% of engineers certified in project management.

IV. FINANCE - EPWU will depend on proper financial planning to minimize customer impacts.

- Evaluate and implement different strategies to prioritize future projects as the needs of the Utility change.
- Analyze different rate structures to remain financially stable while improving cash reserves and debt service coverage to increase bond rating outlook.
- Evaluate the financial framework for future planning and growth.
- Develop new revenue sources.

GOALS:

1. Over the next year, Finance and Engineering will use a new capital budgeting methodology that ensures proper capital planning and 100% of planned projects get completed.
2. Within the next year, evaluate the current rate structure and implement changes.
3. Over the next year, integrate major projects or initiatives into the financial plan to analyze potential impacts to customers.
4. Create one new revenue source each year for the next five years.

V. CUSTOMER & STAKEHOLDERS – EPWU will improve internal and external communications and improve the quality of life of the community.

- Employ an internal communications strategy to improve the dissemination of information between diverse areas of the Utility.
- Employ a marketing strategy to educate customers on current and future projects.
- Improve the customer service experience for our customers.
- Improve the aesthetics of the Utility's facilities and streamline process to serve customers more efficiently.

GOALS:

1. Over the next year, every functional area will conduct monthly strategic brainstorming sessions.
2. Within the next year, develop a strategic marketing plan to educate customers and stakeholders on EPWU's new initiatives.
3. Accurately measure and reduce the call wait time by 25%.
4. Improve the image of visible EPWU facilities by 2019.

FINANCIAL

EPWU is accounted for as an Enterprise Fund, which is a proprietary fund. Enterprise Funds are used to account for operations that are financed and operate in a manner similar to private business enterprises, where the intent of the governing body is that the costs (including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges. All activities necessary to provide such services are accounted for in this fund, including, but not limited to, administration, operations, maintenance, financing and related debt service, and billing and collection. EPWU uses no other funds to account for its' activities; it consists solely of two enterprise funds, the Water and Wastewater Fund and the Stormwater Fund which are accounted for separately.

FLOW OF FUNDS POLICY

City Ordinance No. 752 established certain "funds". These "funds" are mandatory asset segregation and not funds in the sense of governmental fiscal and accounting entities with self-balancing sets of accounts. These funds are described in the following paragraphs.

EPWU funds are designated in City Ordinance No. 752 which was adopted on May 22, 1952. This ordinance authorized the issuance of a series of Revenue Bonds entitled "City of El Paso, Texas, Water and Sewer Revenue Bonds Series 1952", and the City reserved the right and option in the 1952 resolution to issue, under certain conditions, additional bonds on a parity as to lien and right with the Series 1952 Bonds.

Ordinance No. 752, as amended, requires that gross revenues of the System be applied in sequence to: (a) current expenses of maintenance and operations; (b) debt service and service requirements; (c) capital expenditures, or unexpected or extraordinary repairs or replacements, or for any other lawful purpose. The following funds have been established to account for the application of gross revenues: (i) Water and Sewer Fund; (ii) Water and Sewer Revenue Bond Funds, known as the Interest and Sinking Fund; (iii) Water and Sewer Revenue Bond Reserve Funds; and (iv) Water and Sewer Improvement Fund. All revenues of every nature received through operations of the System shall be paid into the Water and Sewer Fund. The Bonds Funds are required to contain an amount of money

and investments equal to the principal and interest requirement during the fiscal year. The funds are described as follows:

Water and Sewer Fund

All gross revenues shall be deposited from day to day as collected in the Revenue Fund. Moneys on deposit in the Revenue Fund shall be first used to pay all Operation and Maintenance Expenses. The revenues of the System not actually required to pay Operation and Maintenance Expenses (the "Net Revenues") shall be transferred from the Revenue Fund to the other funds, in the order of priority, in the manner set forth in the Bond Ordinance.

Interest and Sinking Fund

The following shall be deposited in the Interest and Sinking Fund:

1. Such amounts, in equal monthly installments, commencing on the first day of the month next following the month of Closing, and on the first day of each month thereafter, as will be sufficient to pay the interest scheduled to come due on the bonds next interest payment date, less any amounts already on deposit therein for such purposes derived from the proceeds of the bonds or from any other lawfully available source.
2. Such amounts, in equal monthly installments, commencing on the first day of the month next following the month of Closing, and on the first day of each month thereafter, as will be sufficient to pay the next maturing principal of the bonds, including any scheduled mandatory redemption of bonds.

Reserve Fund

So long as the funds on deposit in the Reserve Fund created for the benefit of all bonds are equal to the Reserve Fund Requirement, no deposits need to be made to the credit of the Reserve Fund. However, should the Reserve Fund at any time contain less than the Reserve Fund Requirement, then subject and subordinate to making the required deposits to the credit of the Interest and Sinking Fund, the Utility shall transfer from the Net Revenues in the Revenue Fund and deposit to the credit of the Reserve Fund, on the first day of each month, such amounts in equal monthly installments to accumulate within at least five years and one month a sum equal to the Reserve Fund Requirement. The money on deposit in the Reserve Fund may be used to pay the principal and interest on all bonds at any time there are not sufficient funds on deposit in the Interest and Sinking Fund for such purpose.

Improvement Fund

All money remaining in the Revenue Fund at the end of each month after all payments required to be made from the revenue fund have been made and all deficiencies accumulated from prior months have been paid shall continue to be paid to the Improvement Fund established in connection with the System, and shall be held in and paid out from such fund for the following purposes:

1. To pay the cost of any special or extraordinary repairs or replacements to or of the properties comprising the System, properly payable with such money under the laws of the State of Texas, necessitated by reason of some emergency.
2. To the extent permitted by law, for the making of extensions, improvements, and betterments of the System.

Contributions in Aid of Construction Fund

Any moneys that may be received by the Board that shall represent contributions in aid of construction shall be deposited in a separate account at the Depository Bank. Such contributions shall not be considered as part of the gross revenues of the System. Payments from such bank account shall be made only for the purposes for which the contributions were made, including any refunds that may become due to any contributor.

CAPITAL IMPROVEMENTS BUDGET POLICY

For capital budgeting purposes, the Utility staff uses a strategic weighting scale to determine priorities for each of the scheduled projects. Criteria used to prioritize capital projects include regulatory requirements; aging and condition; overloaded or overtaxed infrastructure; environmental impacts; reliability; drought, customer service; other agency driven projects (street and highway construction); growth and new development; new water supplies, financial impacts; and operational efficiency. The Utility defines a capital expenditure as an asset with an individual cost of $5,000 or more and an estimated useful life in excess of one year.

Due to state procurement laws and the nature of capital improvement expenditures, it generally takes more than one fiscal year to completely spend one year's appropriations. By law, EPWU cannot award a project unless it is fully funded. However, many large projects have multiple year and/or multiple phase construction periods. El Paso Water Utilities uses several benchmarks of efficiency to ensure capital budget integrity. These include timely completion clauses, aggressive efforts to minimize change orders, and

tracking the progress of the overall capital improvement plan (CIP). On an annual basis, staff members from Engineering, Operations, and Finance update the CIP. The final CIP document stretches from a mid-year update out to a ten year planning horizon. It incorporates all known or likely to occur variables based on growth, maintenance of the current system, and addresses issues including new and/or probable regulatory requirements or political directives.

The following is a typical schedule for the development of a CIP budget:

- March 1 – fiscal year begins
- April to May – strategic planning updates to the 10 year capital plan
- August – Project managers gather information for 1st draft CIP budget
- September – draft CIP budget reviewed by Management and Finance
- October – revisions made to draft and presented to President/CEO
- November – Management approves capital budget and Finance assigns necessary funding
- November to December – budget workshops to review the operating and capital budget requests with the Public Service Board and the public can comment
- December – PSB approves and adopts the final combined operating and capital budget for the fiscal year beginning next March 1

This simplified flowchart graphically represents the entire capital budgeting process.