

Water and Wastewater Utility Bill Comparisons April 2014



City of Phoenix

Prepared by the Finance Department

City Of Phoenix
Water and Wastewater Utility Bill Comparisons
April 2014

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INTRODUCTION

The City of Phoenix annually calculates the Water and Wastewater utility bill amounts for a typical single-family customer to compare the bill amounts to prior years. Additional comparisons are made against six other Phoenix Metro cities; nine other Southwest Region cities and then the other nineteen largest populated cities in the United States (according to the 2010 Census). In total, twenty-nine cities, including Phoenix, are studied. This report illustrates the findings.

The cities studied are:

- Albuquerque, NM *SW*
- Austin, TX *20, SW*
- Chandler, AZ *PM*
- Charlotte, NC *20*
- Chicago, IL *20*
- Columbus, OH *20*
- Dallas, TX *20, SW*
- Detroit, MI *20*
- El Paso, TX *20*
- Fort Worth, TX *20, SW*
- Glendale, AZ *PM*
- Houston, TX *20*
- Indianapolis, IN *20*
- Jacksonville, FL *20*
- Los Angeles, CA *20*
- Memphis, TN *20*
- Mesa, AZ *PM*
- New York, NY *20*
- Oklahoma City, OK *SW*
- Peoria, AZ *PM*
- Phoenix, AZ *20, SW, PM*
- Philadelphia, PA *20*
- San Antonio, TX *20, SW*
- San Diego, CA *20, SW*
- San Francisco, CA *20*
- San Jose, CA *20, SW*
- Scottsdale, AZ *PM*
- Tempe, AZ *PM*
- Tucson, AZ *SW*

Notations: *PM* – Phoenix Metro, *SW* – Southwest Region, *20* – 20 largest U.S. City

This report provides general information on the City of Phoenix (“City”) water and wastewater systems, the water and wastewater rates, and an overview of the model used to develop the comparison. Tables and charts at the end of the report summarize the water and wastewater bills for a 5/8” metered typical single-family customer.

ORGANIZATION and ADMINISTRATION

Phoenix is the sixth largest city in the U.S. and the largest city of the southwest region and metropolitan survey cities with an estimated population of 1,485,719. The City water and wastewater systems operate as a financially self-supporting municipal utility service. The systems are organized as separate functional divisions in the City's Water Services Department (“Department”). The Department’s authority and responsibility are derived from the Phoenix City Charter and City Council adopted ordinances and resolutions. The Water Services Director reports to a Deputy City Manager. The three Assistant Water Services Directors for Administration, Water Services and Wastewater Services report to the Water Services Director.

The Department prepares and submits the annual Operating and Capital Improvement Program budgets for the water and wastewater systems to City Management. After their review, the budgets are submitted to the City Council for adoption. Finally, the Council

establishes the water and wastewater rate structures to meet those budget requirements. Rate changes are usually implemented in the spring. This year, there are no adjustments to the rates.

The Financial Accounting and Reporting Division of the Finance Department is responsible for providing financial accounting and reporting services for the water and wastewater systems. The division reviews the accuracy of the billing services, and provides all financial reporting and financial information that allows management to make informed financial decisions. The division also provides financial and resource planning, and fee and rate development. In coordination with the Water Services Department, the annual financial plans to meet the Operating and Capital Improvement Program needs are developed.

WATER SYSTEM

General Background

The City water service area encompasses 540 square miles, both inside and outside the city corporate limits.

Based on annual estimates, the population of the City increased during the period of 2000 to 2007 by 9.5% from 1,321,045 to 1,446,686. The number of points-of-service increased 16.4% for the same period. The 2010 United States Census set the City's population at 1,445,632, for a small decrease from the peak in 2007 to 2010. The number of active and billed points-of-service associated with housing units has increased only marginally, leaving a number of inactive points-of-service. This is a factor that helps explain the decrease in the annual billed one-hundred cubic feet ("ccf") per account ratio. The City billed 375.2 ccf per account in 2000 and 328.0 ccf in 2007. The decrease was attributed to cooler than normal weather conditions and the impact of a drought alert and conservation efforts. The 2013 ccf per account was down to 291.4 ccf.

During the month of June 2013, the City served 414,188 accounts, of which 364,005 (88%) of the accounts were single-family residential, 15,899 (4%) were multi-family residential, and 34,284 (8%) were non-residential. For fiscal year 2012-13, the System billed 118,723,000 units of retail water of which 60,197,000 units (51%) was to single-family residential accounts, 17,931,000 units (15%) to multi-family residential accounts, and 40,595,000 units (34%) to non-residential accounts.

The desert climate leads to seasonal patterns in water consumption. Temperatures fluctuate greatly during the course of the year. Based on weather conditions over the last twenty-five years, the average maximum temperature during the month of July is 105.8 degrees, 103.8 degrees in August, but only 67.6 degrees in January and 71.0 degrees in February. Rainfall also affects consumption and varies during the year. The rainiest month of the year is August when the average rainfall equals more than one inch. Rainfall exceeds .75 inch in February and March, but in May and June, it is virtually nonexistent. The long-term annual average rainfall is 5.9 inches.

Water System Facilities

Raw water is processed at five treatment facilities located adjacent to the Central Arizona Project (CAP) Hayden-Rhodes Aqueduct and various Salt River Project canals downstream of the Granite Reef Dam and at the confluence of the Verde and Salt Rivers. The treatment capacity in million gallons per day (mgd) of the plants, including active well capacity, is indicated below:

| <u>Water System Facilities</u> | <u>Treatment Capacity</u> |
|--------------------------------|---------------------------|
| Lake Pleasant | 80 |
| Union Hills Plant | 160 |
| 24 th Street Plant | 140 |
| Deer Valley Plant | 100 |
| Val Vista Plant (1) | 130 |
| Groundwater (2) | <u>25</u> |
| Total | 635 |

- (1) The Val Vista Water Treatment Plant is jointly owned by the cities of Phoenix and Mesa with a total capacity of 220 mgd of which Phoenix owns 130 mgd.
- (2) Out of 52 groundwater wells, there are 24 active wells that are in compliance with the Federal standards which took effect in 2006. The inactive wells will be returned to service as new treatment systems are completed.

The system also includes the Cave Creek Water Reclamation Plant (WRP) that went operational in December 2001. The plant provides additional water resources through the use of recycled wastewater for irrigation of turf facilities larger than five acres in the WRP service area and groundwater recharge in the northeast area of Phoenix. In addition to the water system facilities, the system maintains 500 million gallons of storage capacity for treated water in ground reservoirs and elevated tanks. The transmission and distribution system includes over 6,847 miles of water mains, ranging in size from 2” to 108” in diameter, 155,158 valves and 51,542 fire hydrants.

WATER RATE STRUCTURE

Water Charge

The City’s current water rate structure, implemented in June 1990, is a seasonal uniform rate structure with a monthly service charge that varies by the size of the meter. Included in the service charge to all accounts are 6 units (4,488 gallons) of water for the months of October through May and 10 units (7,480 gallons) of water for the months of June through September. A volume charge is applied for usage above that included in the service charge. There are three distinct rate seasons with the summer months of June through September having the highest rate and the winter months of December through March having the lowest rate. The spring and fall months of April, May, October and November have intermediate rates that transition customers between the high and low rate seasons. The high summer rates are designed to encourage water conservation in the peak demand period. Under this rate structure, excluding those customers with very low water consumption, customers will pay more during the summer months when rates are higher and less during the winter, spring and fall months when rates are lower.

Environmental Charge

An environmental charge, which is assessed to recover the annual cost of complying with environmental standards, was implemented on December 1, 1992. Revenues from this charge are used to cover all operation, maintenance, replacement, administrative and capital expenses necessary for water treatment processes and facilities to meet Federal, State and County environmental regulations.

Table 1 summarizes the water rate schedule for the City.

Table 1

WATER RATES SCHEDULE

Effective July 1, 2012

SERVICE CHARGE (1)

| <u>Meter Size</u> | <u>Monthly</u> |
|-------------------|----------------|
| 5/8" | \$ 4.36 |
| 3/4" | 4.45 |
| 1" | 4.49 |
| 1-1/2" | 5.57 |
| 2" | 5.97 |
| 3" | 20.23 |
| 4" | 22.56 |
| 6" | 24.60 |

USER AND OTHER CHARGES (2)

| <u>Month</u> | <u>Per unit</u> |
|-------------------------------------|-----------------|
| Low Months: Dec., Jan., Feb., Mar. | \$2.86 |
| Med Months: Apr., May, Oct., Nov. | 3.37 |
| High Months: Jun., Jul., Aug., Sep. | 3.77 |

ENVIRONMENTAL CHARGE (3)

| | <u>Per unit</u> |
|----------------------|-----------------|
| Environmental Charge | \$0.38 |

Notes

1. The Service Charge is a monthly fee based on meter size. It includes 6 units of water for October through May and 10 units for June through September.
2. User and Other Charges are charged on the consumption in excess of the units included in the Service Charge and includes \$0.29 per unit for raw water.
3. The Environmental Charge is charged on the total number of units metered.
4. Users outside the boundaries of the City, except for service within the Town of Paradise Valley, are charged 150% of the applicable rate.
5. The above charges are subject to applicable sales taxes and surcharges.

WASTEWATER SYSTEM

General Background

The City wastewater service area encompasses 518 square miles. In addition to the City's other treatment facilities, the City operates and jointly owns the regional 91st Avenue Wastewater Treatment Plant (WWTP) with the cities of Glendale, Mesa, Scottsdale and Tempe. The service area of the combined systems, including Phoenix, is approximately 932 square miles, with a total population served of approximately 2,500,000. The other cities also operate treatment facilities within their service areas.

During the month of June 2013, the City served 397,627 accounts, of which 359,707 (90%) of the accounts were single-family residential, 15,821 (4%) were multi-family residential, and 22,099 (6%) were non-residential. For fiscal year 2012-13, the System billed 62,007,000 ccf of which 34,399,000 ccf (55%) was to single-family residential accounts, 12,582,000 ccf (21%) to multi-family residential accounts, and 15,026,000 ccf (24%) to non-residential accounts.

Wastewater System Facilities

The Phoenix system consists of two treatment facilities - the 23rd Avenue WWTP and the 91st Avenue WWTP. The 23rd Avenue WWTP has the capacity to treat 63.0 mgd. The 91st Avenue WWTP has the capacity to treat 204.5 mgd of combined flow from the five participating cities. The City capacity share of the 91st Avenue WWTP is 112.8 mgd.

In addition to the WWTP's, the system also includes the Cave Creek Water Reclamation Plant (WRP) that has the capacity to treat 8.0 mgd. The plant provides additional water resources through the use of recycled wastewater for irrigation of turf facilities larger than five acres in the reclamation service area and groundwater recharge in the northeast area of Phoenix. The wastewater collection system uses more than 4,816 miles of sewer mains, ranging in size from 4" to 90" in diameter, 412,714 taps, 107,314 manholes and 8,373 cleanouts.

WASTEWATER RATE STRUCTURE

Sewer Service Charge

The City's wastewater (sewer) rate structure includes several customer classes with rates for each customer class based on the relative strength of the sewage discharge. The higher the customer class's sewage strength, the higher the rates. The strength based volume charges recover the operating costs. Costs related to billing and collection are recovered through a monthly service charge of \$1.00. A commercial inspection fee of \$19.53 is applied to customers with grease entrapment systems. There is a minimum charge of \$4.50 per billing per month for all customers.

Each customer's sewer service charges are calculated by applying the class rate to a percentage, Sewer Flow %, of the average January, February and March metered water consumption (JFM Average). Industrial customers and self-service laundries use a percentage of the actual month's water consumption. The percentage is set at eighty percent for the single-family customer and eighty-five percent for all other customers for

the months a rate adjustment occurs through the end of June. In July, when each customer's JFM Average is updated, the Sewer Flow % is adjusted by the Sewer Flow Stabilization Factor (SFSF). The SFSF adjusts the Sewer Flow % to off-set the year to year change in the JFM Average due to changes in weather conditions. This ensures a consistent level of revenue as the JFM Average will vary from year to year.

Environmental Charge

An environmental charge, which is assessed to recover the cost of complying with new environmental standards, was implemented on December 1, 1992. Revenues from the charge are used to cover all operation, maintenance, replacement, administrative and capital expenses necessary to meet Federal, State and County environmental regulations.

Table 2 summarizes the wastewater rate schedule for the City.

Table 2

| WASTEWATER RATE SCHEDULE | | | | | |
|---------------------------------|--------------|---------------|---------------|------------------|-------------------|
| Effective July 1, 2012 | | | | | |
| Customer Class | USER RATE | OTHER RATE | TOTAL RATE | ENVIRON. RATE | MONTHLY CHARGE |
| Residential | \$ 0.7441 | \$ 1.4713 | \$ 2.2154 | \$ 0.5385 | \$ 1.00 |
| Commercial | | | | | |
| Without Dining | 0.6716 | 1.2813 | 1.9529 | 0.5385 | 1.00 |
| With Dining | 0.8026 | 1.6043 | 2.4069 | 0.5385 | 20.53 |
| Laundry - Self-service | 0.6716 | 1.2813 | 1.9529 | 0.5385 | 20.53 |
| Laundry - Commercial | 1.2702 | 2.6576 | 3.9278 | 0.5385 | 20.53 |
| Mortuaries | 1.1767 | 2.2542 | 3.4309 | 0.5385 | 1.00 |
| Restaurants & Bakeries | | | | | |
| Without Dining | 1.4525 | 3.1137 | 4.5662 | 0.5385 | 20.53 |
| With Dining | 1.5289 | 3.3063 | 4.8352 | 0.5385 | 20.53 |
| Public/Government | | | | | |
| Without Dining | 0.6599 | 1.2213 | 1.8812 | 0.5385 | 1.00 |
| With Dining | 0.7595 | 1.4956 | 2.2551 | 0.5385 | 20.53 |
| Industrial | | | | | |
| Charge per hundred cubic feet | 0.3938 | 0.6023 | 0.9961 | 0.5385 | 1.00 |
| Charge per pound of BOD * | 0.1561 | 0.3133 | 0.4694 | | |
| Charge per pound of TSS ** | 0.0896 | 0.2985 | 0.3881 | | |
| * Biochemical Oxygen Demand | | | | | |
| ** Total Suspended Solids | | | | | |

OVERVIEW OF THE COMPARISON MODEL

The City began its rate comparison survey in 1992. Phoenix's comparison model includes water consumption/sewer flows by month, and calculates bills by class and meter size. The classes include single-family, multifamily, commercial, restaurants, car washes, and industrial. The purpose of comparing bills in this fashion is to show what a Phoenix customer's water and sewer bill would be if a Phoenix customer was subjected to the other city's rate structure, assuming that the customer does not change their monthly water consumption pattern. The reason for this approach is to account for varied rate structures in the comparison cities (i.e. fixed charges, block rates, seasonal rates, etc.). The surveyed cities were chosen based upon population size or geographic similarity to the City.

The City charges a separate environmental fee, in addition to the regular rate, to display the costs for greater water or wastewater treatment due to more stringent federal, state, and county regulations. If a utility does not have a separate environmental fee, the costs of the new treatment processes are within the regular rate. Therefore, for overall comparison purposes, the Phoenix non-environmental and environmental rates are totaled for one amount.

The model consists of numerous spreadsheets which are linked together to enable easy modification of the rates, rate structures and consumption pattern for each class to calculate the impact of a rate/rate structure on a customer's bill. Each year, the City obtains the water and wastewater rate schedules from the participating cities and updates the rates and/or rate structure. The treatment volume is based on the monthly water use for the City's median (50% use more, 50% use less) class user during the 1986-1994 period. This information is then used to calculate the monthly average bill by class for each city. Finally, the customer's bills by class are ranked into the various demographics.

The City calculated the annual average bills using the current rate schedules supplied by the participating cities and therefore, does not guarantee the accuracy of the information reported. The comparison excludes special discounts for early payment; City, state, and other taxes; and any surcharges.

COMPARISON TABLES AND CHART DESCRIPTIONS

Water Bill Comparison Summary (Table 3)

This report provides only the bill comparison for a single-family residential user with a 5/8" or 3/4" meter.

The monthly water consumption used in the single-family model is based upon the average of the 1986-1994 Phoenix median single-family accounts with a 5/8 inch meter.

The consumption amounts used in the comparison are as follows:

Single-Family Consumption in hundred cubic feet (ccf)

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total Annual |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------------------|
| 10 | 10 | 10 | 13 | 17 | 22 | 24 | 20 | 18 | 15 | 12 | 11 | 182 |

Wastewater Bill Comparison Summary (Table 4)

The model compares the monthly sewer bill for a single-family customer within the respective service area.

Cities bill their sewer customers by various methods, such as a fixed monthly charge, consumption based upon winter water consumption, a percentage of monthly water consumption and a combination of these. When water consumption is used to determine wastewater flows, the amount used in the model is 10 units, the 1986-1994 Phoenix median single-family account average of January, February and March water consumption.

Combined Water and Wastewater Bill Comparison Summary (Table 5)

The combined average monthly bill for Water and Wastewater fees, including the environmental fees, for all of the three geographical sections is also included.

Table 3

WATER BILL COMPARISONS FOR SINGLE-FAMILY
Annual Average Monthly Bill *

| Alphabetical Order | | Bill Amount Order | |
|--------------------|------------------|--------------------|------------------|
| City | Total Water Bill | City | Total Water Bill |
| Albuquerque, NM | \$34.06 | San Francisco, CA | \$87.92 |
| Austin, TX | 63.97 | San Diego, CA | 82.33 |
| Charlotte, NC | 49.52 | Los Angeles, CA | 71.66 |
| Chandler, AZ | 37.33 | Austin, TX | 63.97 |
| Chicago, IL | 37.61 | Philadelphia, PA | 62.39 |
| Columbus, OH | 50.90 | Houston, TX | 59.13 |
| Dallas, TX | 51.14 | San Jose, CA | 57.35 |
| Detroit, MI | 36.92 | New York, NY | 54.30 |
| El Paso, TX | 26.75 | Tucson, AZ | 53.85 |
| Fort Worth, TX | 45.20 | Dallas, TX | 51.14 |
| Glendale, AZ | 37.26 | Columbus, OH | 50.90 |
| Houston, TX | 59.13 | Indianapolis, IN | 50.67 |
| Indianapolis, IN | 50.67 | Charlotte, NC | 49.52 |
| Jacksonville, FL | 32.70 | Fort Worth, TX | 45.20 |
| Los Angeles, CA | 71.66 | Mesa, AZ | 44.11 |
| Memphis, TN | 22.83 | Peoria, AZ | 38.36 |
| Mesa, AZ | 44.11 | Scottsdale, AZ | 38.17 |
| New York, NY | 54.30 | Phoenix, AZ | 37.75 |
| Oklahoma City, OK | 32.19 | Chicago, IL | 37.61 |
| Peoria, AZ | 38.36 | Chandler, AZ | 37.33 |
| Philadelphia, PA | 62.39 | Glendale, AZ | 37.26 |
| Phoenix, AZ | 37.75 | Detroit, MI | 36.92 |
| San Antonio, TX | 21.84 | Tempe, AZ | 36.16 |
| San Diego, CA | 82.33 | Albuquerque, NM | 34.06 |
| San Francisco, CA | 87.92 | Jacksonville, FL | 32.70 |
| San Jose, CA | 57.35 | Oklahoma City, OK | 32.19 |
| Scottsdale, AZ | 38.17 | El Paso, TX | 26.75 |
| Tempe, AZ | 36.16 | Memphis, TN | 22.83 |
| Tucson, AZ | 53.85 | San Antonio, TX | 21.84 |

* Based on rates in effect March, 2014.

Table 4

WASTEWATER BILL COMPARISONS FOR SINGLE-FAMILY
Annual Average Monthly Bill *

| Alphabetical Order | | Bill Amount Order | |
|--------------------|------------------|-------------------|------------------|
| City | Total Sewer Bill | City | Total Sewer Bill |
| Albuquerque, NM | \$19.23 | San Francisco, CA | \$112.23 |
| Austin, TX | 58.04 | Houston, TX | 79.73 |
| Charlotte, NC | 56.53 | Jacksonville, FL | 77.19 |
| Chandler, AZ | 24.17 | New York, NY | 72.12 |
| Chicago, IL | 30.18 | Austin, TX | 58.04 |
| Columbus, OH | 50.77 | Charlotte, NC | 56.53 |
| Dallas, TX | 35.60 | Detroit, MI | 55.54 |
| Detroit, MI | 55.54 | Columbus, OH | 50.77 |
| El Paso, TX | 16.14 | Indianapolis, IN | 47.05 |
| Fort Worth, TX | 29.71 | San Diego, CA | 46.15 |
| Glendale, AZ | 29.23 | Tucson, AZ | 43.05 |
| Houston, TX | 79.73 | Philadelphia, PA | 39.56 |
| Indianapolis, IN | 47.05 | Dallas, TX | 35.60 |
| Jacksonville, FL | 77.19 | San Jose, CA | 33.83 |
| Los Angeles, CA | 31.17 | Los Angeles, CA | 31.17 |
| Memphis, TN | 21.50 | Chicago, IL | 30.18 |
| Mesa, AZ | 21.66 | Fort Worth, TX | 29.71 |
| New York, NY | 72.12 | Glendale, AZ | 29.23 |
| Oklahoma City, OK | 26.88 | San Antonio, TX | 27.96 |
| Peoria, AZ | 21.39 | Oklahoma City, OK | 26.88 |
| Philadelphia, PA | 39.56 | Chandler, AZ | 24.17 |
| Phoenix, AZ | 20.71 | Mesa, AZ | 21.66 |
| San Antonio, TX | 27.96 | Memphis, TN | 21.50 |
| San Diego, CA | 46.15 | Peoria, AZ | 21.39 |
| San Francisco, CA | 112.23 | Phoenix, AZ | 20.71 |
| San Jose, CA | 33.83 | Tempe, AZ | 20.15 |
| Scottsdale, AZ | 17.40 | Albuquerque, NM | 19.23 |
| Tempe, AZ | 20.15 | Scottsdale, AZ | 17.40 |
| Tucson, AZ | 43.05 | El Paso, TX | 16.14 |

* Based on rates in effect March, 2014.

Table 5

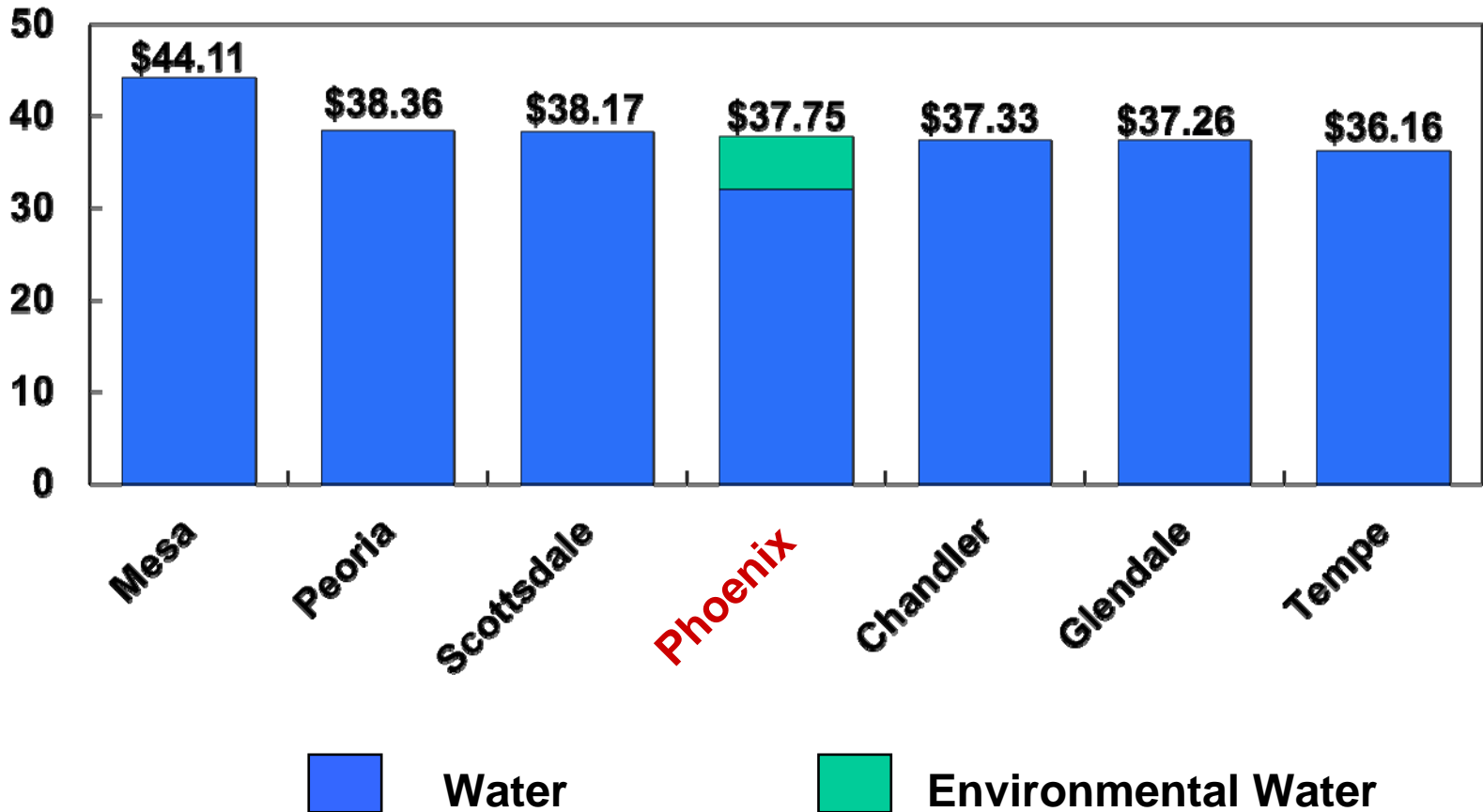
**WATER AND WASTEWATER BILL COMPARISONS FOR SINGLE-FAMILY
Annual Average Monthly Bill ***

| Alphabetical Order | | | Bill Amount Order | | |
|--------------------|------------------|------------------|-------------------|--------------------|--------------|
| City | Total Water Bill | Total Sewer Bill | Total Bill | City | Total Bill |
| Albuquerque, NM | \$34.06 | \$19.23 | \$53.29 | San Francisco, CA | \$200.15 |
| Austin, TX | 63.97 | 58.04 | 122.01 | Houston, TX | 138.86 |
| Charlotte, NC | 49.52 | 56.53 | 106.05 | San Diego, CA | 128.48 |
| Chandler, AZ | 37.33 | 24.17 | 61.50 | New York, NY | 126.42 |
| Chicago, IL | 37.61 | 30.18 | 67.79 | Austin, TX | 122.01 |
| Columbus, OH | 50.90 | 50.77 | 101.67 | Jacksonville, FL | 109.89 |
| Dallas, TX | 51.14 | 35.60 | 86.74 | Charlotte, NC | 106.05 |
| Detroit, MI | 36.92 | 55.54 | 92.46 | Los Angeles, CA | 102.83 |
| El Paso, TX | 26.75 | 16.14 | 42.89 | Philadelphia, PA | 101.95 |
| Fort Worth, TX | 45.20 | 29.71 | 74.91 | Columbus, OH | 101.67 |
| Glendale, AZ | 37.26 | 29.23 | 66.49 | Indianapolis, IN | 97.72 |
| Houston, TX | 59.13 | 79.73 | 138.86 | Tucson, AZ | 96.90 |
| Indianapolis, IN | 50.67 | 47.05 | 97.72 | Detroit, MI | 92.46 |
| Jacksonville, FL | 32.70 | 77.19 | 109.89 | San Jose, CA | 91.18 |
| Los Angeles, CA | 71.66 | 31.17 | 102.83 | Dallas, TX | 86.74 |
| Memphis, TN | 22.83 | 21.50 | 44.33 | Fort Worth, TX | 74.91 |
| Mesa, AZ | 44.11 | 21.66 | 65.77 | Chicago, IL | 67.79 |
| New York, NY | 54.30 | 72.12 | 126.42 | Glendale, AZ | 66.49 |
| Oklahoma City, OK | 32.19 | 26.88 | 59.07 | Mesa, AZ | 65.77 |
| Peoria, AZ | 38.36 | 21.39 | 59.75 | Chandler, AZ | 61.50 |
| Philadelphia, PA | 62.39 | 39.56 | 101.95 | Peoria, AZ | 59.75 |
| Phoenix, AZ | 37.75 | 20.71 | 58.46 | Oklahoma City, OK | 59.07 |
| San Antonio, TX | 21.84 | 27.96 | 49.80 | Phoenix, AZ | 58.46 |
| San Diego, CA | 82.33 | 46.15 | 128.48 | Tempe, AZ | 56.31 |
| San Francisco, CA | 87.92 | 112.23 | 200.15 | Scottsdale, AZ | 55.57 |
| San Jose, CA | 57.35 | 33.83 | 91.18 | Albuquerque, NM | 53.29 |
| Scottsdale, AZ | 38.17 | 17.40 | 55.57 | San Antonio, TX | 49.80 |
| Tempe, AZ | 36.16 | 20.15 | 56.31 | Memphis, TN | 44.33 |
| Tucson, AZ | 53.85 | 43.05 | 96.90 | El Paso, TX | 42.89 |

* Based on rates in effect March, 2014.

WATER RATE COMPARISON RANKING AVERAGE SINGLE-FAMILY MONTHLY BILL PHOENIX METRO AREA MARCH, 2014

\$/MONTH



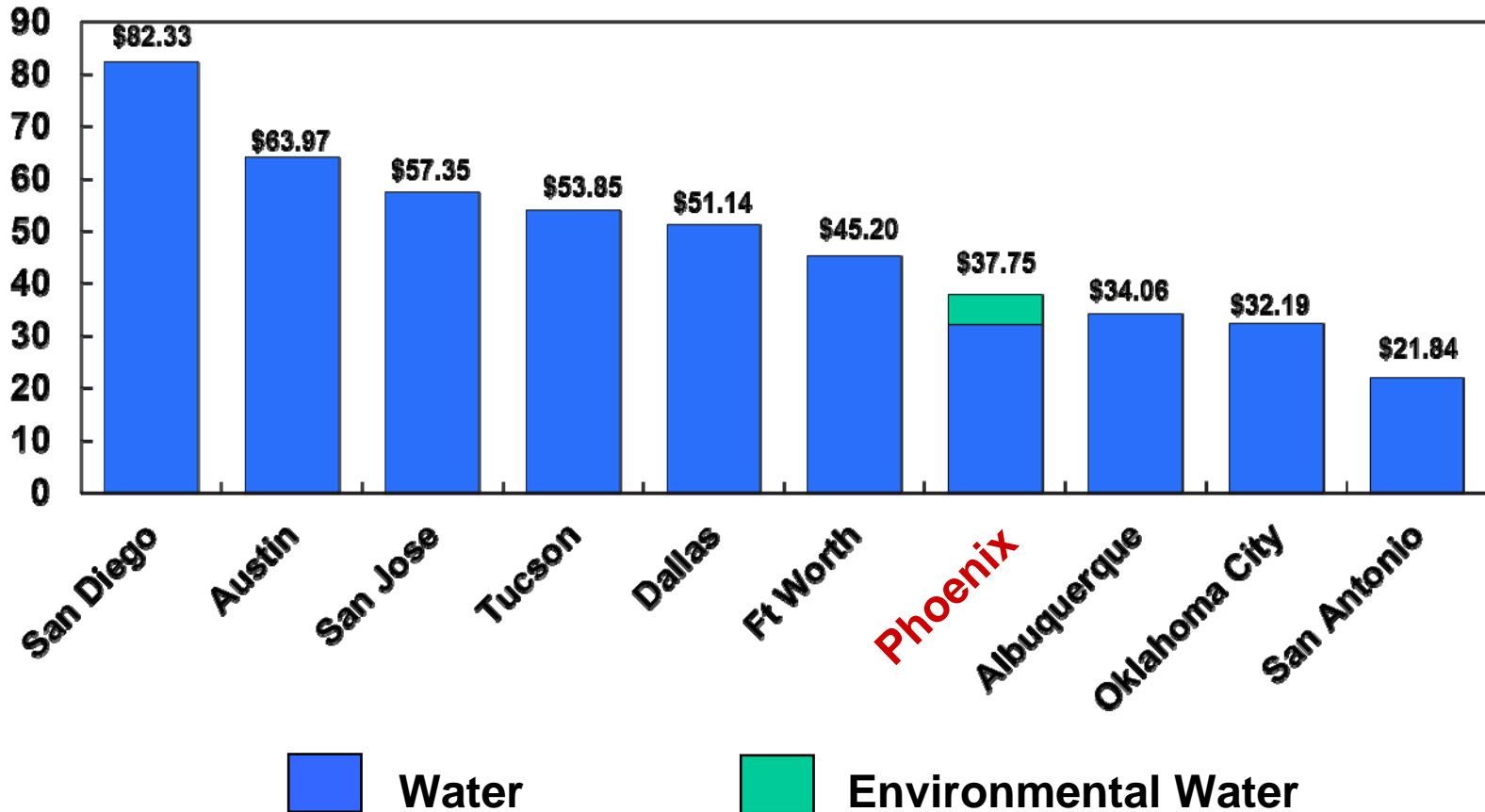
WATER RATE COMPARISON RANKING

AVERAGE SINGLE-FAMILY MONTHLY BILL

SOUTHWEST REGION

MARCH, 2014

\$/MONTH

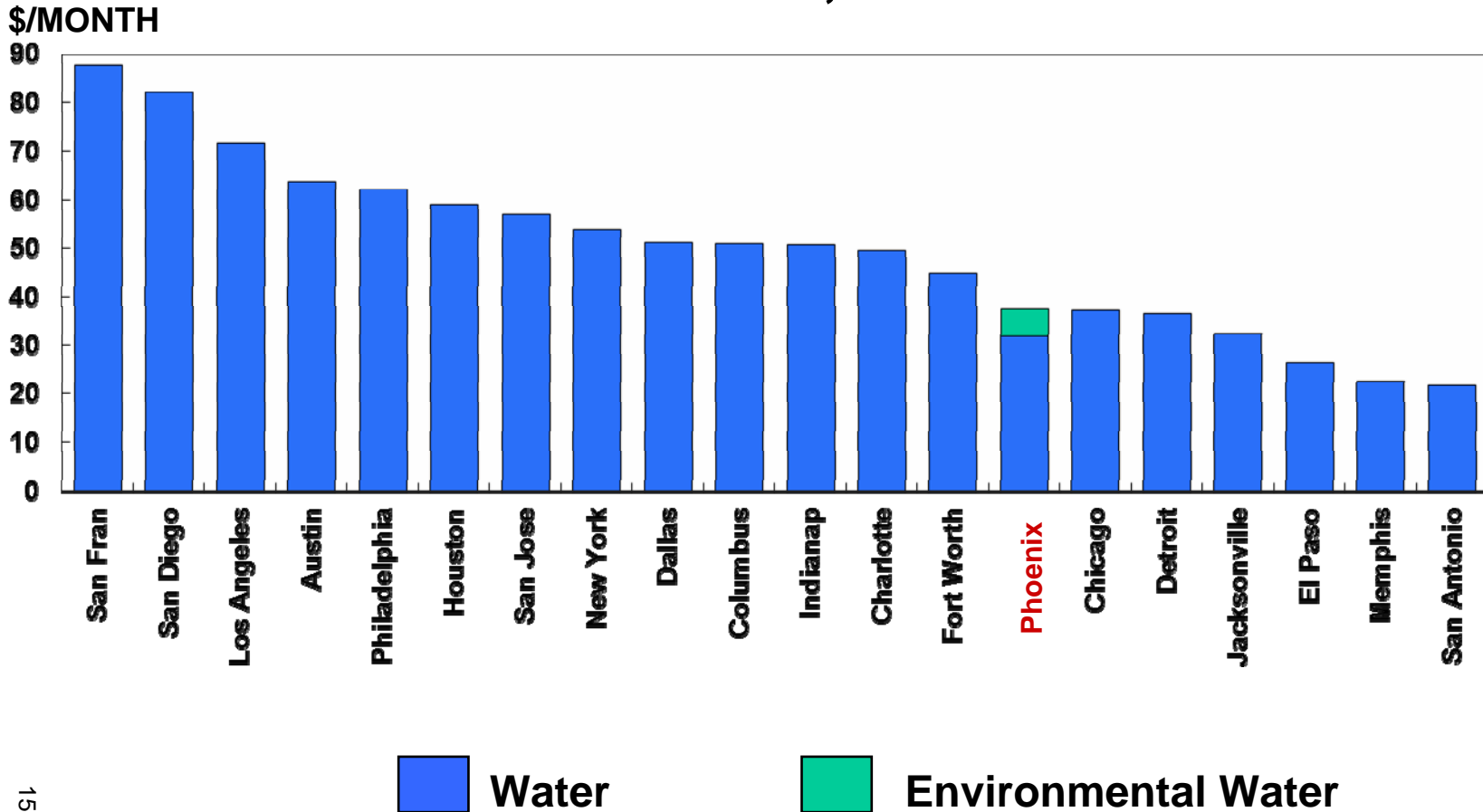


WATER RATE COMPARISON RANKING

AVERAGE SINGLE-FAMILY MONTHLY BILL

TWENTY LARGEST U.S. CITIES

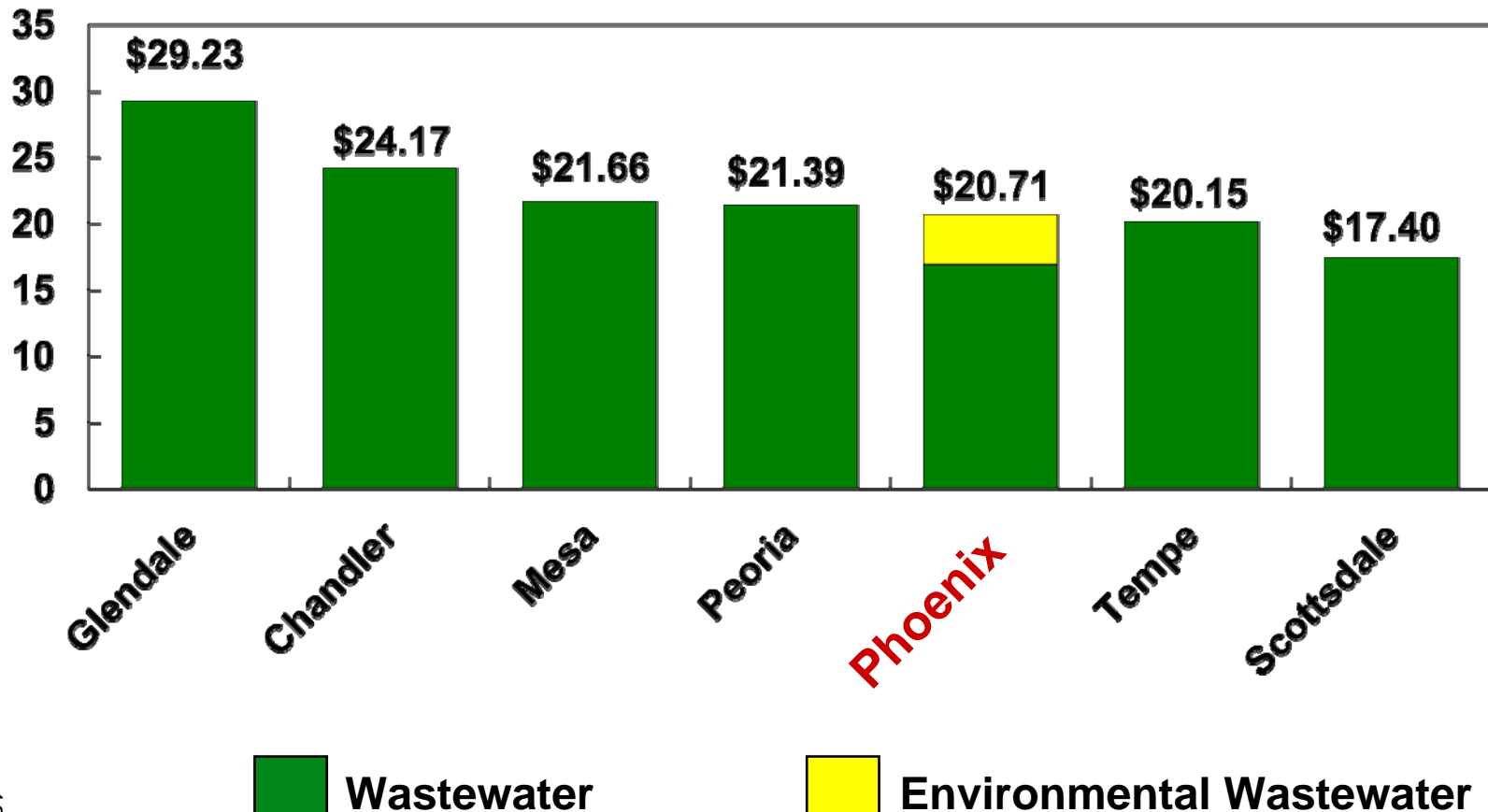
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WASTEWATER RATE COMPARISON RANKING AVERAGE SINGLE-FAMILY MONTHLY BILL PHOENIX METRO AREA

\$/MONTH

MARCH, 2014

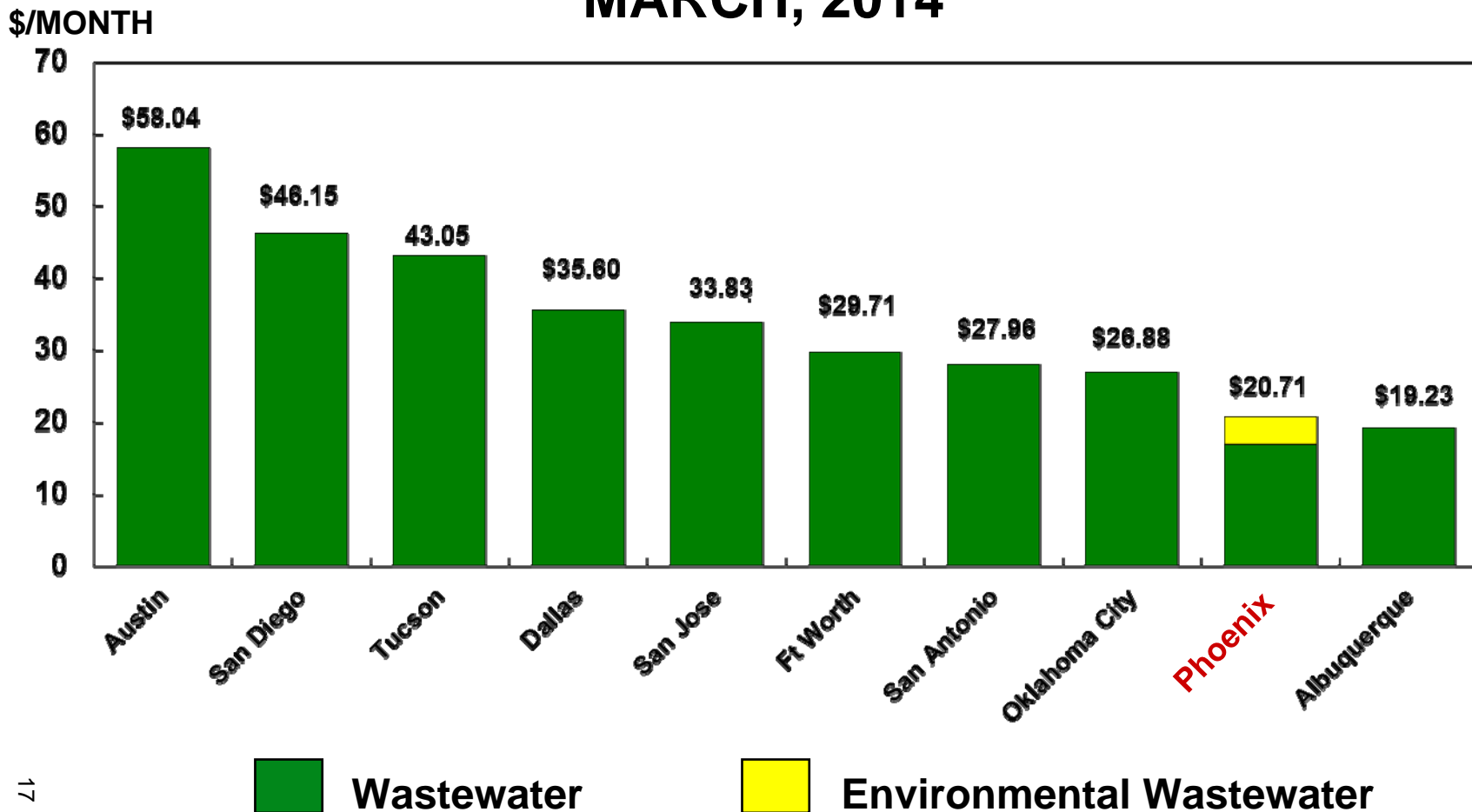


WASTEWATER RATE COMPARISON RANKING

AVERAGE SINGLE-FAMILY MONTHLY BILL

SOUTHWEST REGION

MARCH, 2014



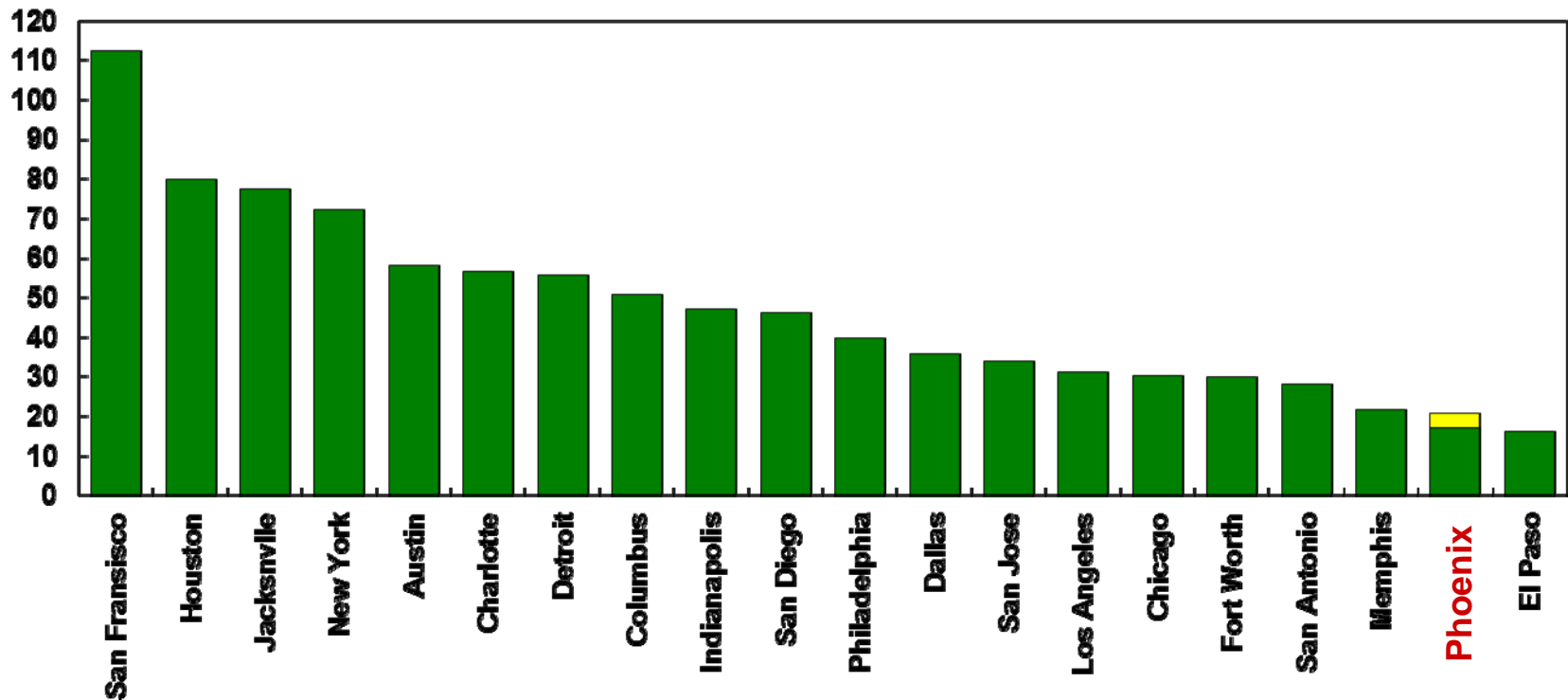
WASTEWATER RATE COMPARISON RANKING

AVERAGE SINGLE-FAMILY MONTHLY BILL

TWENTY LARGEST U.S. CITIES

MARCH, 2014

\$/MONTH

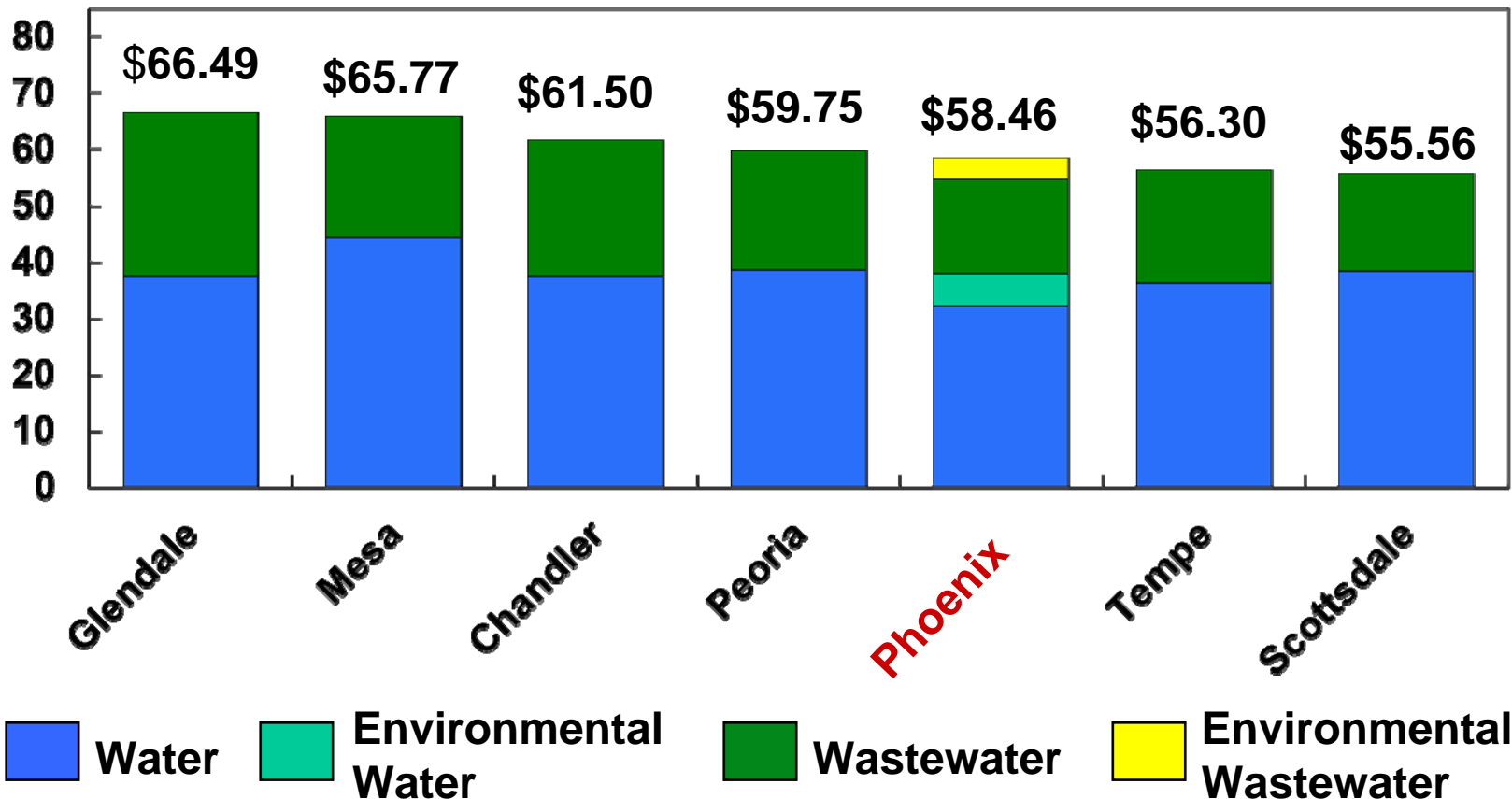


 Wastewater

 Environmental Wastewater

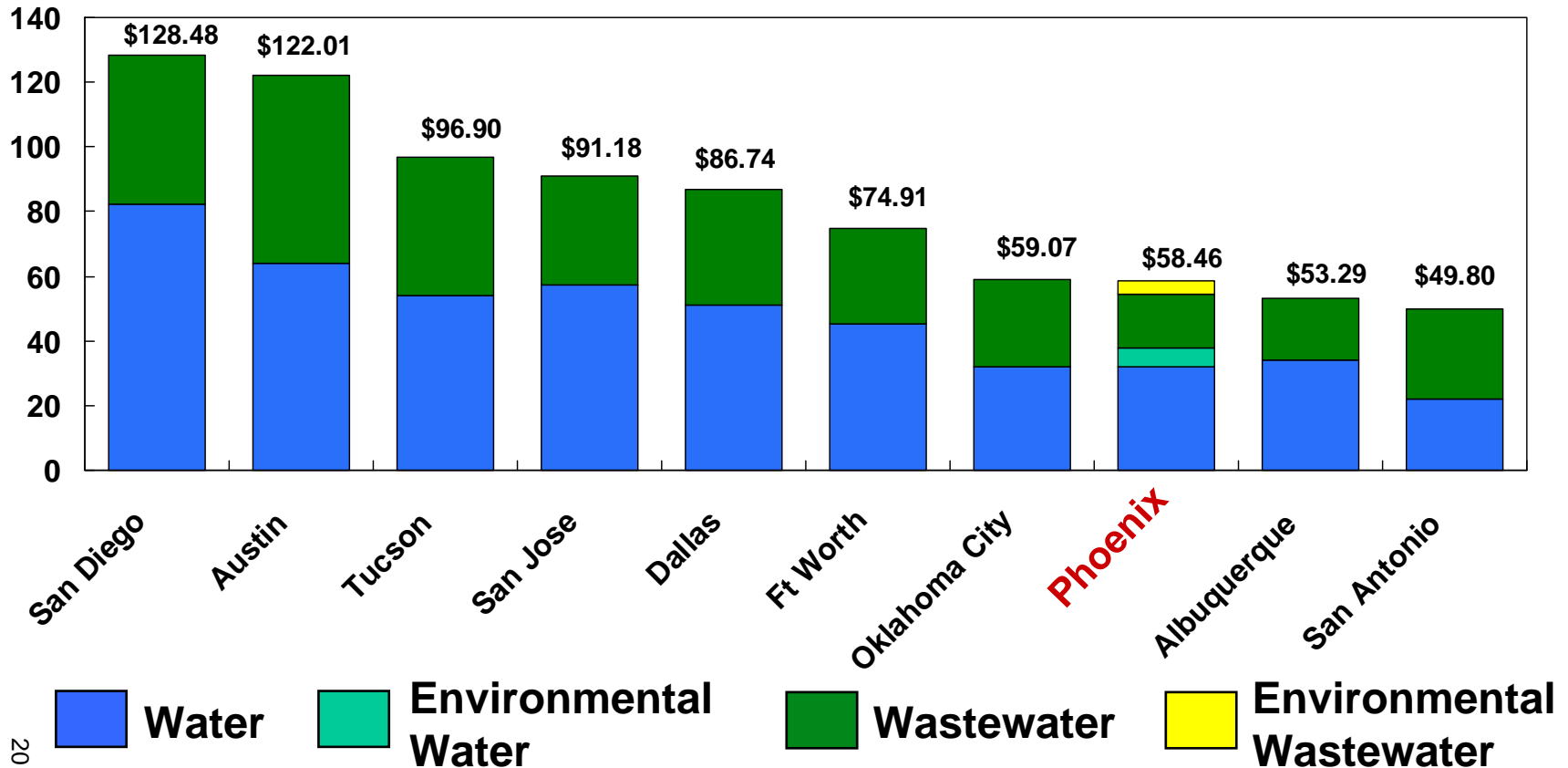
WATER & WASTEWATER RATE COMPARISONS COMBINED AVERAGE SINGLE-FAMILY MONTHLY BILL PHOENIX METRO AREA MARCH, 2014

\$/MONTH



WATER & WASTEWATER RATE COMPARISONS COMBINED AVERAGE SINGLE-FAMILY MONTHLY BILL SOUTHWEST REGION MARCH, 2014

\$/MONTH



WATER & WASTEWATER RATE COMPARISONS COMBINED AVERAGE SINGLE-FAMILY MONTHLY BILL TWENTY LARGEST U.S. CITIES MARCH, 2014

\$/MONTH

