Water Rates

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Talking Points

- Basic Rate Development & Design
- Rate Designs Example
- Future Trends

“Thousands have lived without love, not one without water.”
W.H. Auden

Basic Rate Development & Design

Basic Goals of Properly Designed Rates

- Simple and Realistic.
- Meets Revenue Requirements
- Provides Revenue Stability
- Fairness and Equity
- Rates are based on your System needs Present & Near Future

Basic Rate Development & Design

- Ability to Pay
- Legally Defendable

Complete a Cost of Service Study

COS studies determine the fixed and variable cost of the system

  - Fixed (Admin & General, Meter Reading, Postage, Debt Service)
  - Variable (Power, Chemicals, Maintenance)
- This should drive how you structure your customer charges and usage charges.

" Whiskey is for drinking; water is for fighting over."

Mark Twain

Rate Designs

Remember try to keep it simple
and
easy to understand.

Current Rate Designs Example- Base Rate

- Determine Revenue Requirement.
- Example: $50,000 a year is needed.
- Base Rate = $16,600 Revenue / 25 connections
- $664 Per Connection a year. Or $55.33 Month.

Example 1 (Small Water System 25 connections)

Base Rate 33%

Usage Rate 33%

CIP/ Reserve/ debt 33%

- Questions to ask?
- Do we charge a connection fee per Residence? Meter Size
- Do we charge for Fire Services?
- Do we charge for Backflow devices?

Current Rate Designs Example Usage Charge

Usage Charge Example : Usage is billed monthly as follows:

8 Units of water a month = $7 a unit (748 gallons to a unit).

Revenue per month per connection = $56 (8 units of water)

Example 1

25 Connections = a population of 82.5 (3.3) multiplier

Allocated Usage per person =75 gallons per person per day = 6188 gallons a day for your system.

What I need to remember:

1. Elasticity: for every 10% of cost increase -3 or -4 % decrease in usage Example 100% increase in cost expect a potential 30% to 40% decrease in usage.
   This is a single tier system, but you can have a multi-tiered rate structure based on additional cost to pump the water. Additional storage may be needed to meet daily demand.

Current Rate Designs Example CIP/Reserve/debt

We need to have a Capital Improvement Plan, Reserves and be able to pay off loans.

$16,600 / 25 Customers = $55.33 a Month.

Monthly bill per connection $166.66

166.66 x 25 connections =$4166.5 a month. $50,000 a year.

What do I need to do next to get started?

A CIP (Capital Improvement Plan) What needs to be replaced, repaired, updated or newly installed.

Cost of Service Study

A rate analysis

Future Trends

- Groundwater Management Fees
- Extraction Fees

These fee's can be added to the customers bills as a percentage of water usage.

- Growing Infrastructure Needs
- Increasing O/M Cost
- Increasing Regulatory Requirements
- Conservation +/- $

"The present operating costs of water utilities are the highest ever experienced in this country . . . Where fixed charges have exceeded (revenues), it has been necessary to raise rates . . . Management does not initiate rate increases except as a last resort . . . If present conditions persist, however, or a substantial portion of the rise in costs remains in effect, increases in the water rates will be imperative for many utilities." - by Albert P. Learned – 1948

Price of Water is Going Up

PRICE OF WATER: 2010-2015

A survey of water prices for households in 30 major U.S. cities.

Since 2010, the price of a monthly water bill for a family of four has increased an average of 41% in 20 of the largest U.S. cities and in 10 regionally representative cities, as chosen by Circle of Blue staff. Over the last year alone, prices climbed an average of 6%, well above any other household staple.

Key

Average Monthly Bill for Family of Four Using:

2010 2011 2012 2013 2014 2015

150 Gallons/ Person/Day

100 Gallons/Person/Day

50 Gallons/Person/Day

HIGHEST 2015 WATER BILL*
$153.78: Santa Fe

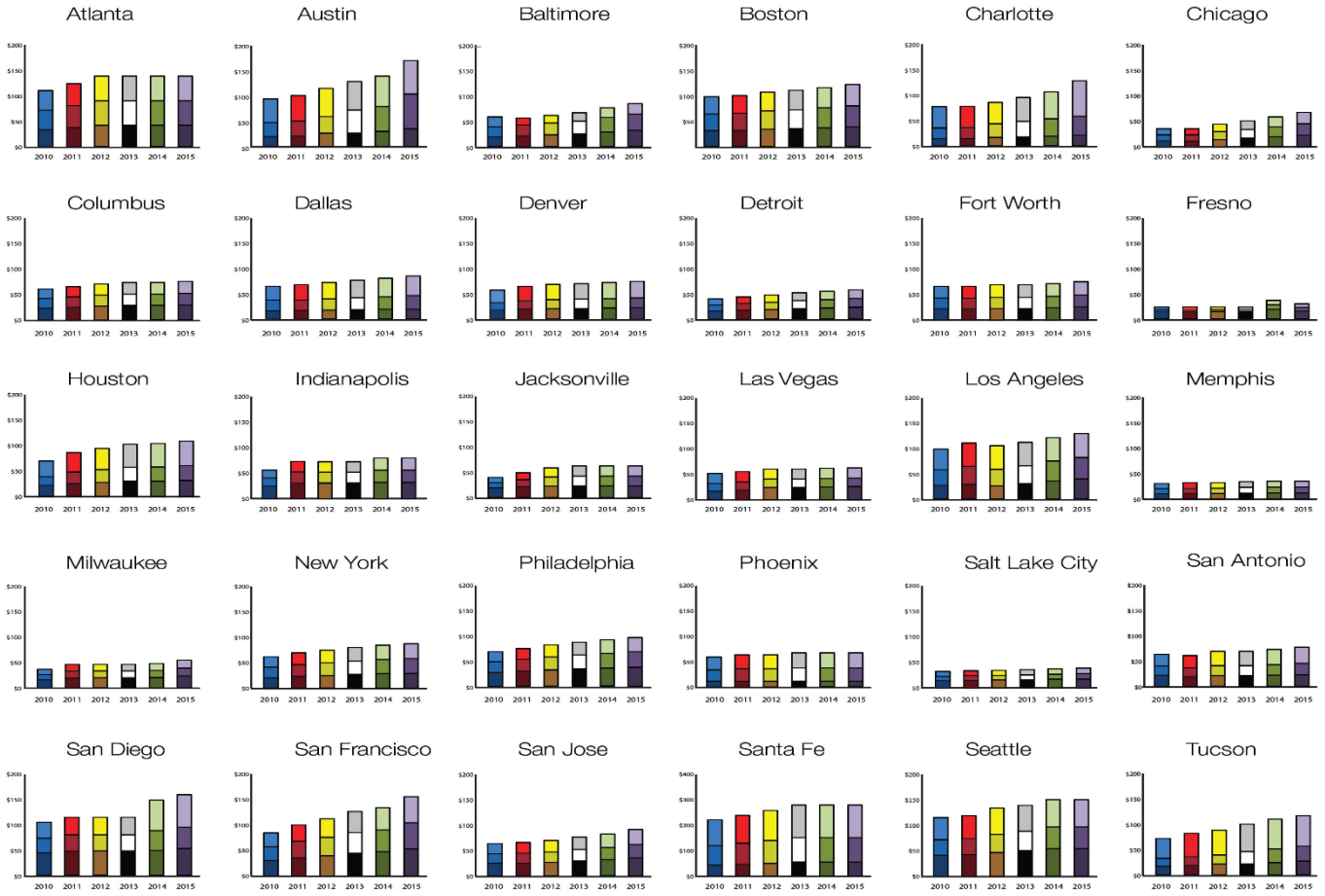
LOWEST 2015 WATER BILL*
$23.26: Fresno
*Based on 100 gallon per person daily use for a family of four.

HIGHEST INCREASES SINCE 2014

31%: Austin is increasing the cost of water for its highest-volume users. The city utility is also charging higher fixed fees so that revenue is stable, even as water use declines.

15%: Chicago is nearing the end of a 5-year plan to double water rates. The new revenue will help the city to double the rate at which it replaces old water pipes.

15%: San Francisco has steadily increased rates to pay for a $US 4.8 billion project to ensure that the city water system will be able to deliver water within 24 hours after a major earthquake.



Rates current as of April 1, 2015.
Prices calculated for three usage tiers: 50, 100, and 150 gallons per person per day.
Source: Circle of Blue research, based on utility water rates.

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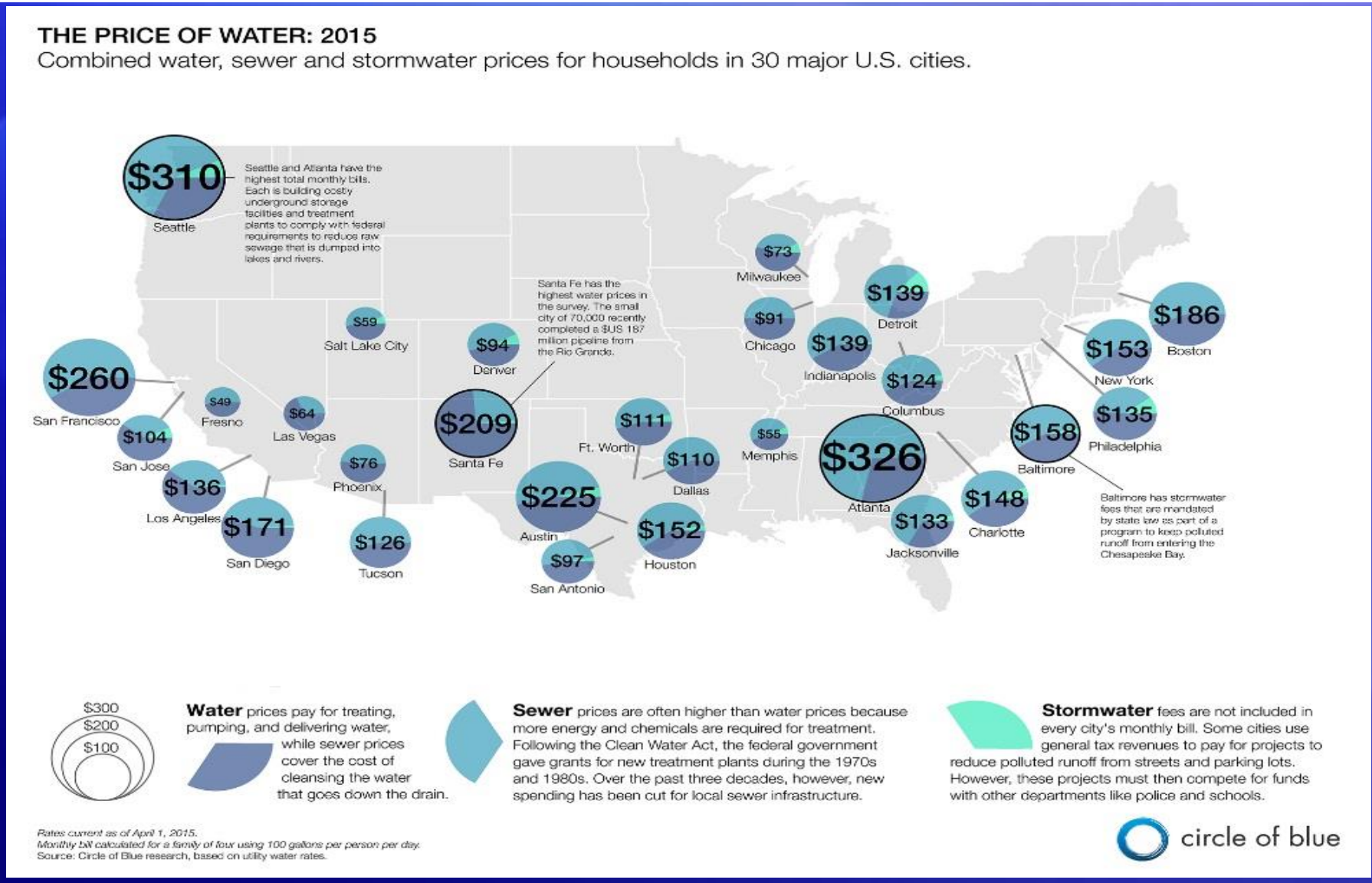
http://www.circleofblue.org/

The Price of Water 2015



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