



Ceres

Improving Credit Assessment in the Water Sector

Municipal Analysts Group of New York

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Who We Are

Ceres is an advocate for sustainability leadership, mobilizing investors and business to build a thriving, sustainable global economy

Company Network

More than 75 members
in 20 sectors

Investor Network

101 members
Representing more than
\$11 trillion AUM

The Ceres Coalition

More than 130 public interest groups including
environmental and human rights organizations



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What's Changing?

Unavoidable Expenditures

- ➔ **Persistent Underinvestment**
- ➔ **Heightened Stresses**
 - **Climate Change**
 - **Resource Depletion**
 - **Resource Competition**

Uncertain Revenues

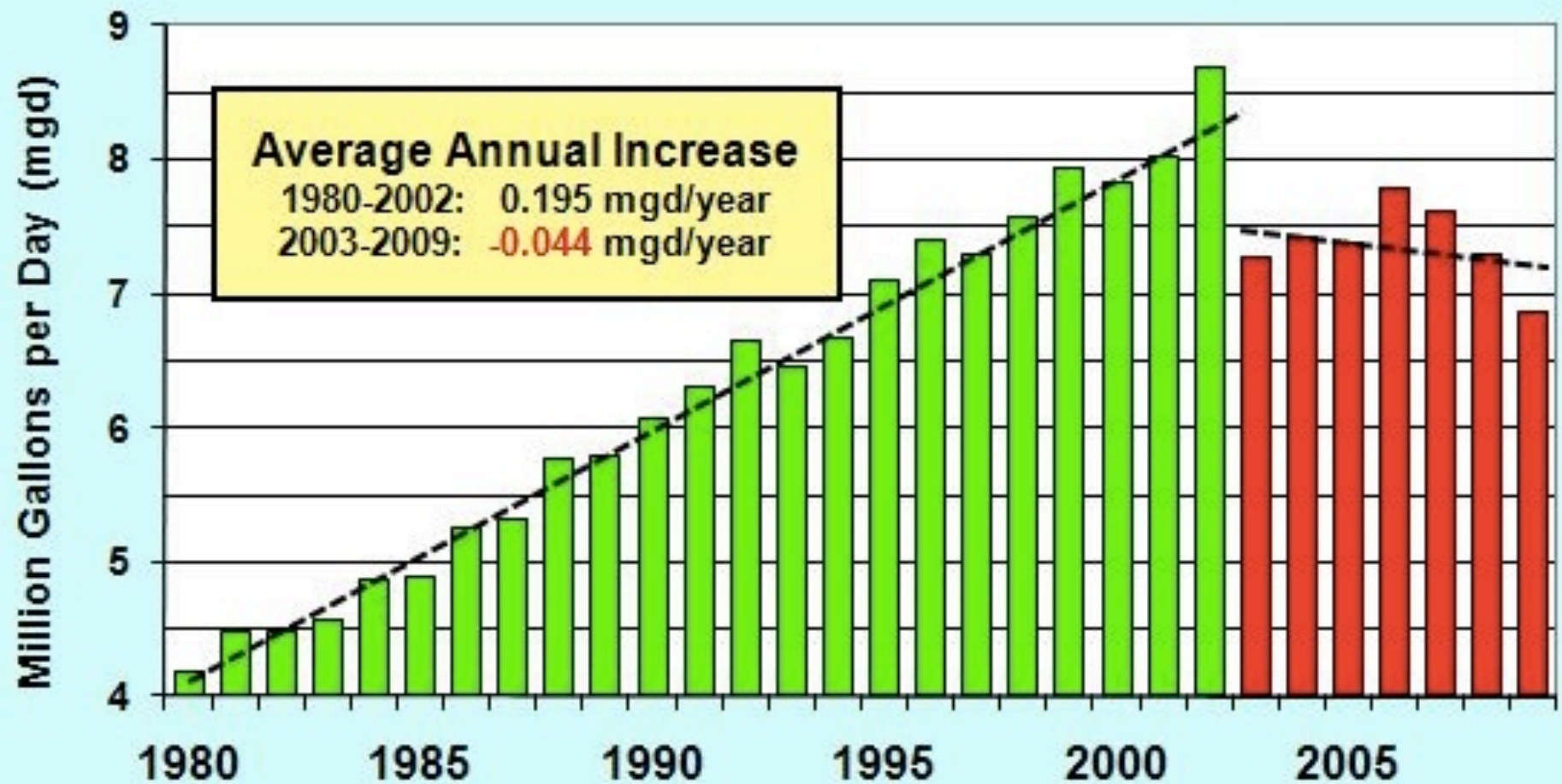
- ➔ **Changing Demand**
- ➔ **Rate Resistance**



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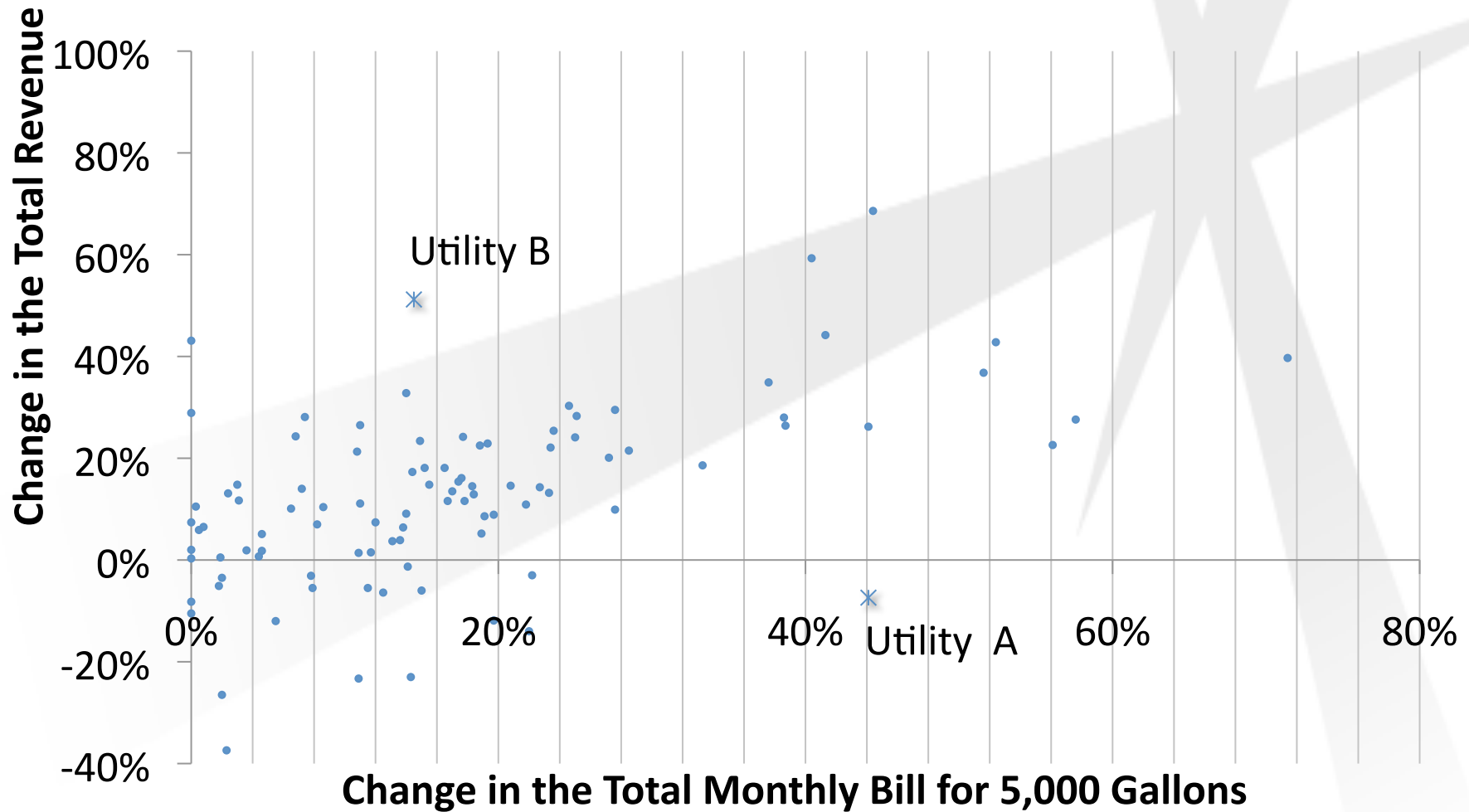
Figure 3. OWASA Water Sales, FY 1980-2009





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System Revenue Growth vs. Changes in Household Bills in Texas from 2007 to 2010

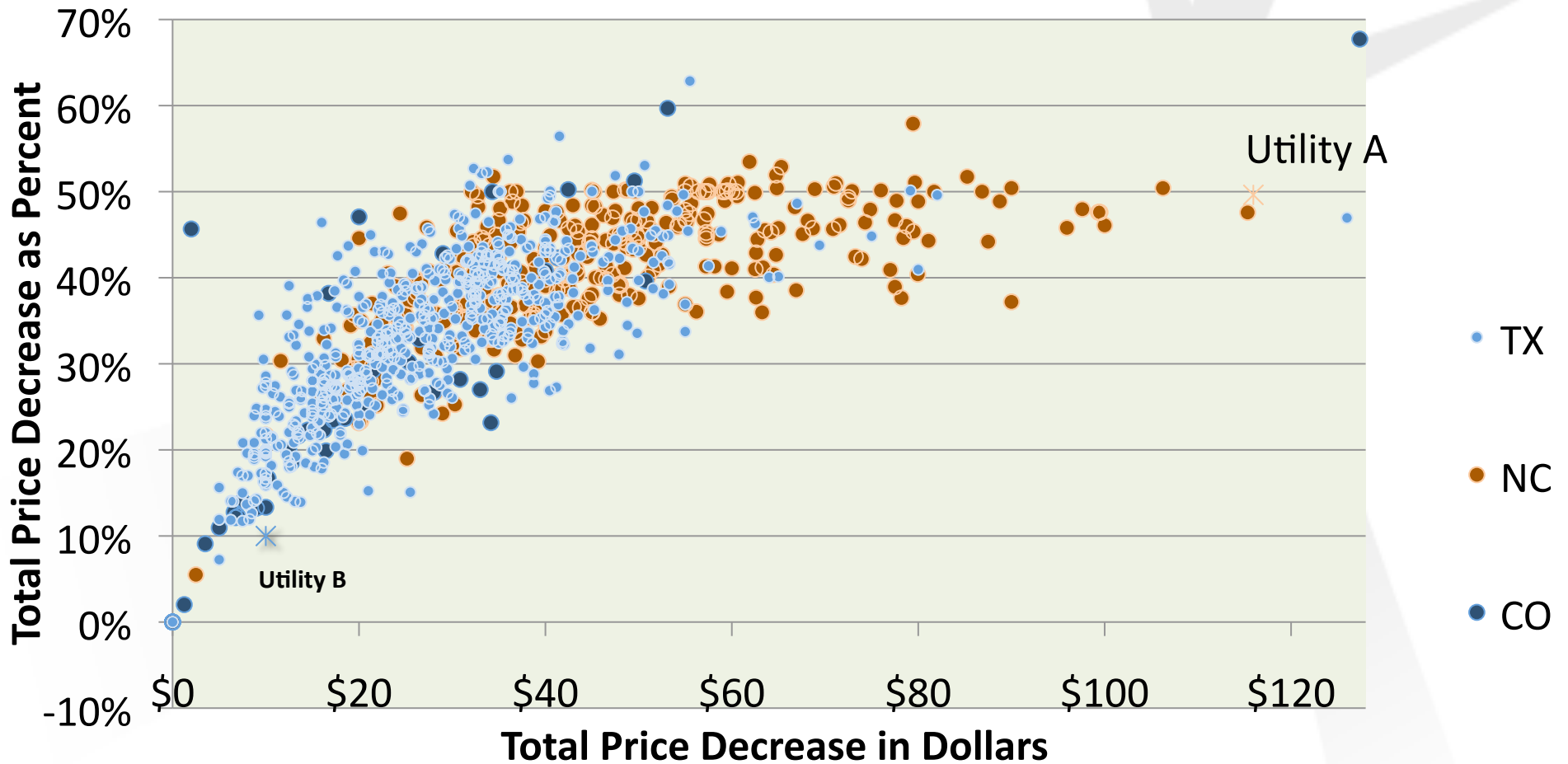


Data analyzed by the Environmental Finance Center at the University of North Carolina, Chapel Hill.
Data sources: Texas Municipal League annual TX water and sewer rate surveys (self-reported),
Texas Water Development Board data from audited financial statements of utilities with outstanding loans.



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Conservation Pricing Signals

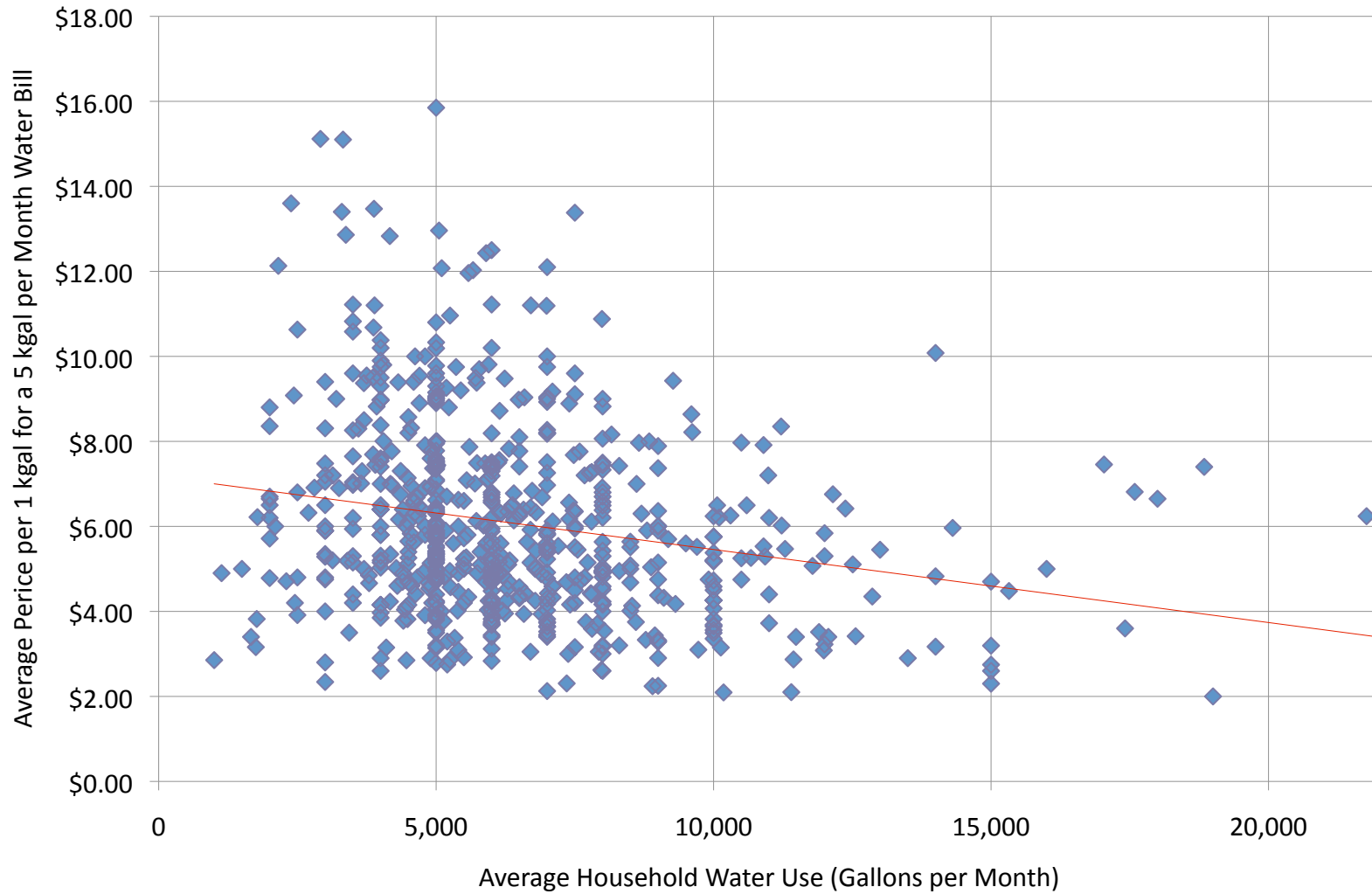


Data analyzed by the Environmental Finance Center at UNC-Chapel Hill.



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Correlation between 2012 Average Monthly Household Water Use and Average Price/1,000 Gallons for a 5,000 GPM Water Bill (661 TX Municipalities)

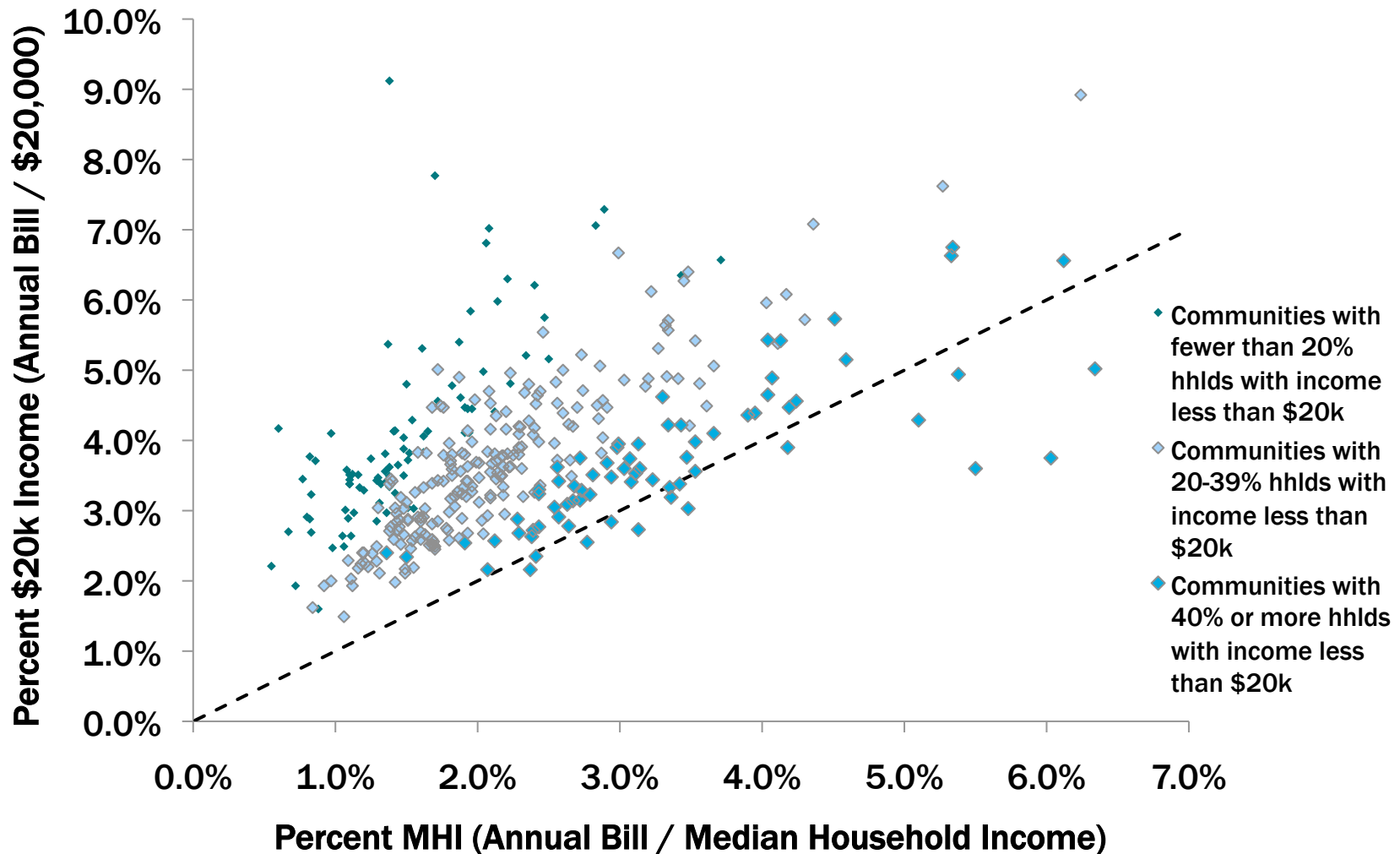




Annual Water & Sewer Bills at 5,000 Gallons/Month in 2012

Ceres Compared to Community's Income Levels in 2011 in North Carolina

(n=365 utilities)





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Failing Infrastructure



Water Main Failure, Los Angeles 2009



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Failing Infrastructure



Water Main Failure, Los Angeles 2009



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Increased Flooding



Miami Beach Floods, May 2013



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Increased Flooding



Miami Beach Floods, May 2013



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Storm Surge



Post Sandy Sewage Spills, October 2012



Storm Surge



Post Sandy Sewage Spills, October 2012



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Wildfire



Buffalo-Hayman Fire, Colorado 1996



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Wildfire



Buffalo-Hayman Fire, Colorado 1996

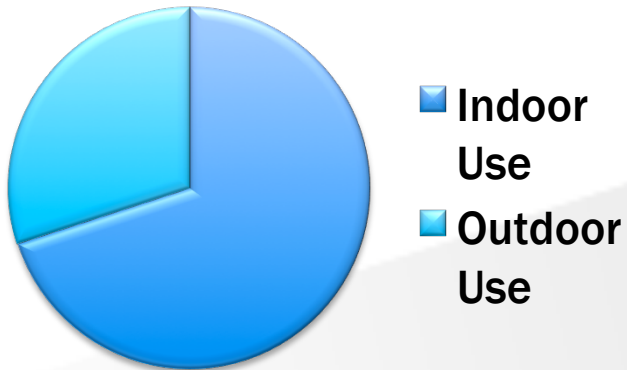


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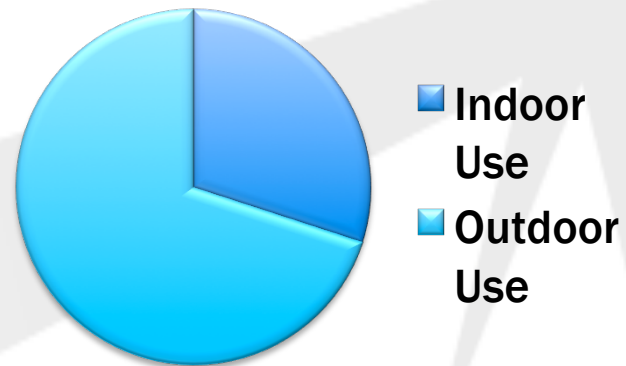
Essential Service Provider

But what percentage of water sales are essential?

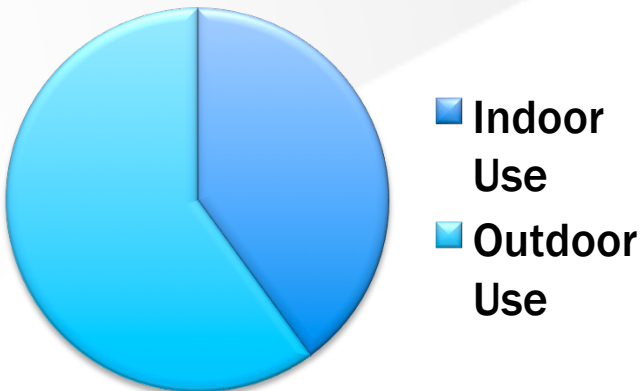
National Average



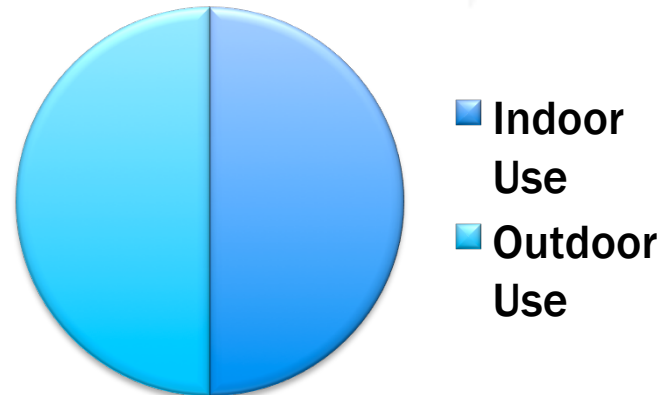
Las Vegas



Phoenix



Texas



Source: EPA WaterSense 2009, Fitch Ratings 2011



Disclosure Framework for Water & Sewer Enterprises

March 2013

