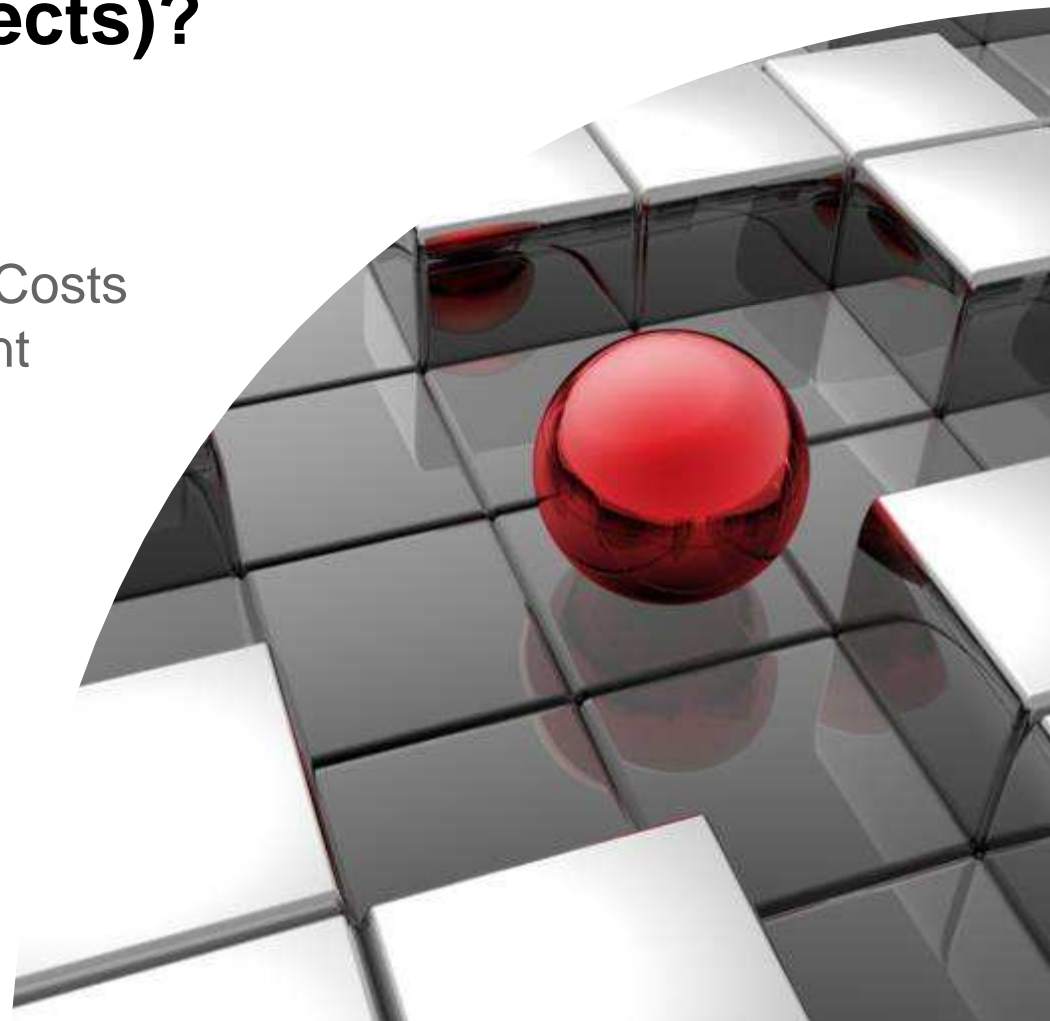


What's the Big Fuss Over Full Cost Pricing (and related subjects)?

NACWA 2009 Winter Conference
Controlling Chaos: Managing Capital Costs
in an Uncertain Economic Environment

February 3 - 6, 2009
Westin Buckhead
Atlanta, Georgia

Ken Rubin
Managing Partner
PA Consulting Group



Agenda

Setting the Stage: Financing Clean Water Investments

Is Full Cost Pricing a Panacea?

Do We Need More Private Activity Bonds?

What About the Clean Water Trust Fund?

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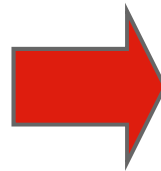
Solutions Du Jour

Who's Saying What?

EPA : Watershed Approaches
 Better Management
 More Efficient Water Use
 Full Cost Pricing

Aspen: Watershed Approaches
 Green Infrastructure
 20 Best Practices for Utilities
 Something re: Federal Role

Privates: PPPs
 More Private Activity Bonds



What's Really Happening?

“Needs” still ~ \$150-250B

NACWA Identified \$17B “shovel-ready”

House Stimulus: \$6B for POTWs

Senate Stimulus: \$4-10B (?) for POTWs

Public capital markets disrupted

Most important:

Water quality gains stalled

Water Quality Gains Have Stalled

We've been serious about water quality since 1972, so we're pretty far out on the unit removal curve

CSOs: 850 billion gallons a year of untreated sewage and stormwater discharged into our waterways

SSOs: up to 10 billion gallons a year of raw sewage discharged

ASCE graded the nation's water and wastewater infrastructure a D-

The Dawn of the Replacement Era

According to EPA, if left unaddressed, as early as 2016 we could see a return to pre-Clean Water Act levels of impairment

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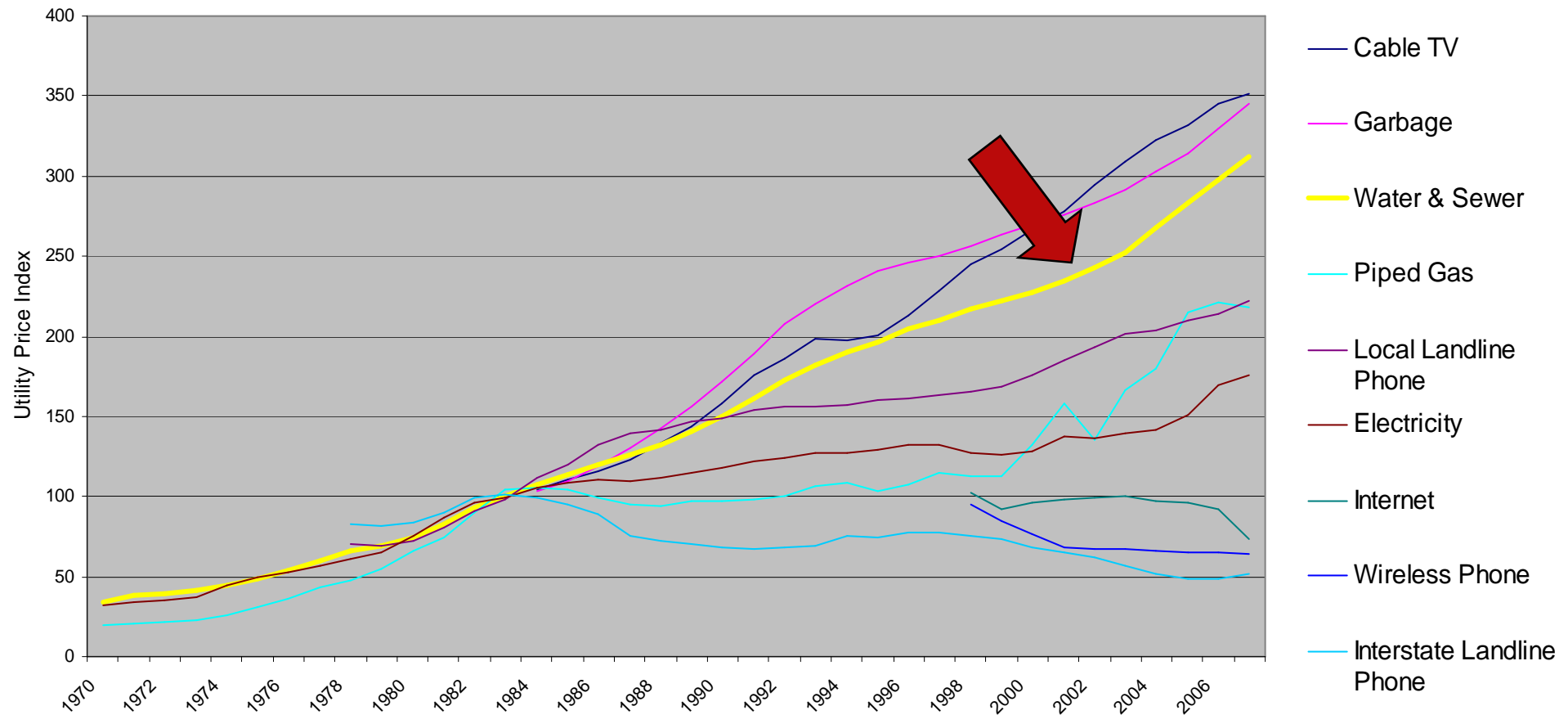
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And there is continuous pressure on local rates

Local water and sewer rates are increasing 3% above inflation, on average, faster than rates in nearly any other network service.



Source: US Bureau of Labor Statistics

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Focus on Full Cost Pricing

There is no dispute about whether wastewater utilities should or should not price their services at their full costs of meeting agreed service standards – they do now and should continue to do so.

But this is not the same as saying that utility ratepayers alone should shoulder the burden of all costs of service: the issue is not pricing, it is distribution of costs through prices to all recipients of benefits.

Wastewater utilities deliver services to their customers and to the environment more broadly. So, if we ask only direct customers to pay for all services, we jeopardize attainment of environmental standards that Congress set as a national priority in 1972

Plus, serious issues of equity arise when we impose the same standards of service on different kinds and locations of urban and rural utilities.

There are effective, efficient, and equitable solutions for sustainable financing of wastewater infrastructure that include full cost pricing.

What Is Full Cost Pricing?

According to EPA and the International Water Association, when utility services are priced at full cost, *they recover costs of operations and a provision for the renewal of infrastructure so that a water or wastewater utility can achieve and maintain a specified standard of service that is economically efficient, socially acceptable, and environmentally sound, both for the present and future generations.*

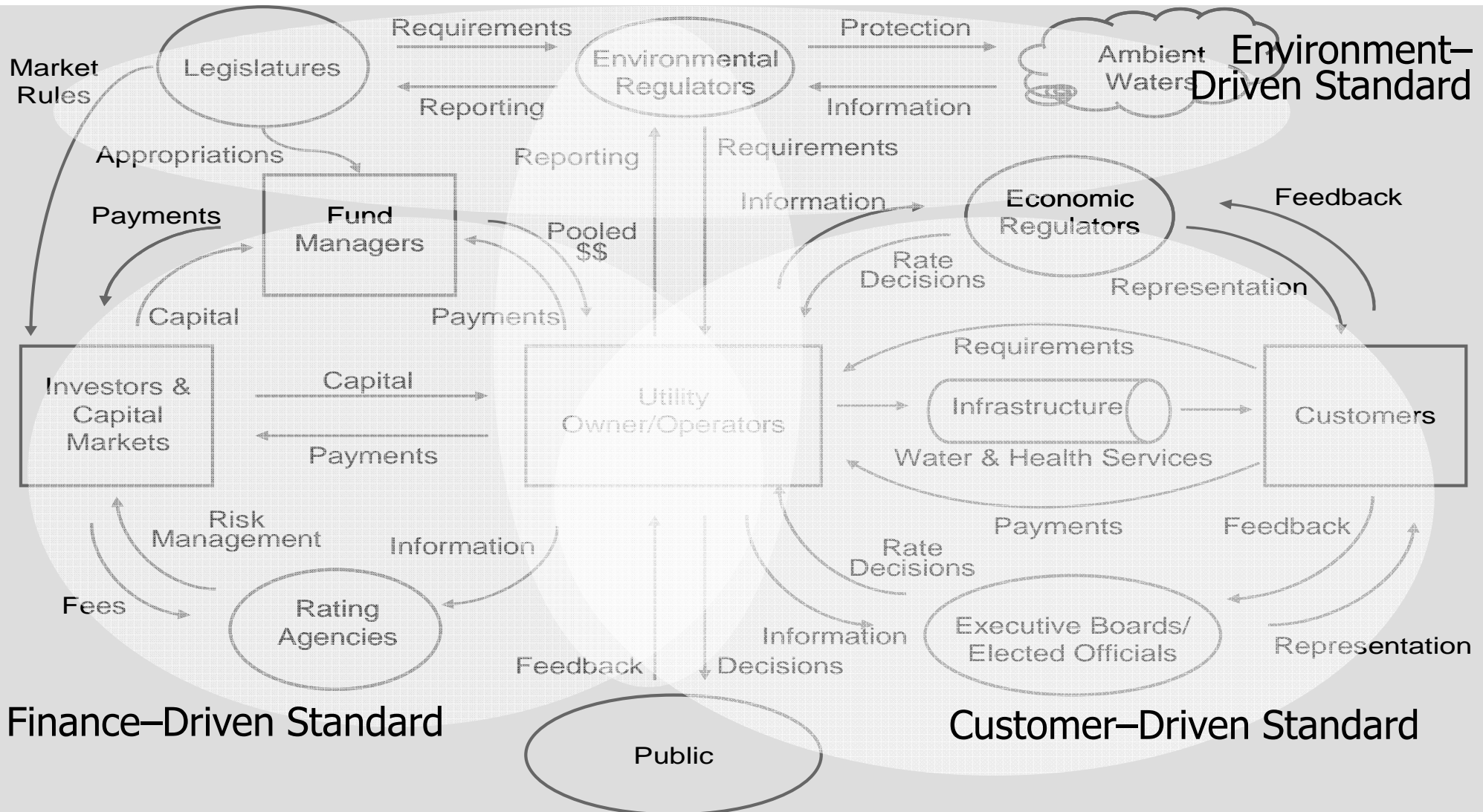
Standard of Service – to include services delivered to direct customers, the environment, and in many cases, the financial community

Strategy to Deliver – at least cost to both today's and tomorrow's population

Public (“Social”) Agreement – that the allocation of costs via the pricing mechanism is fair and equitable

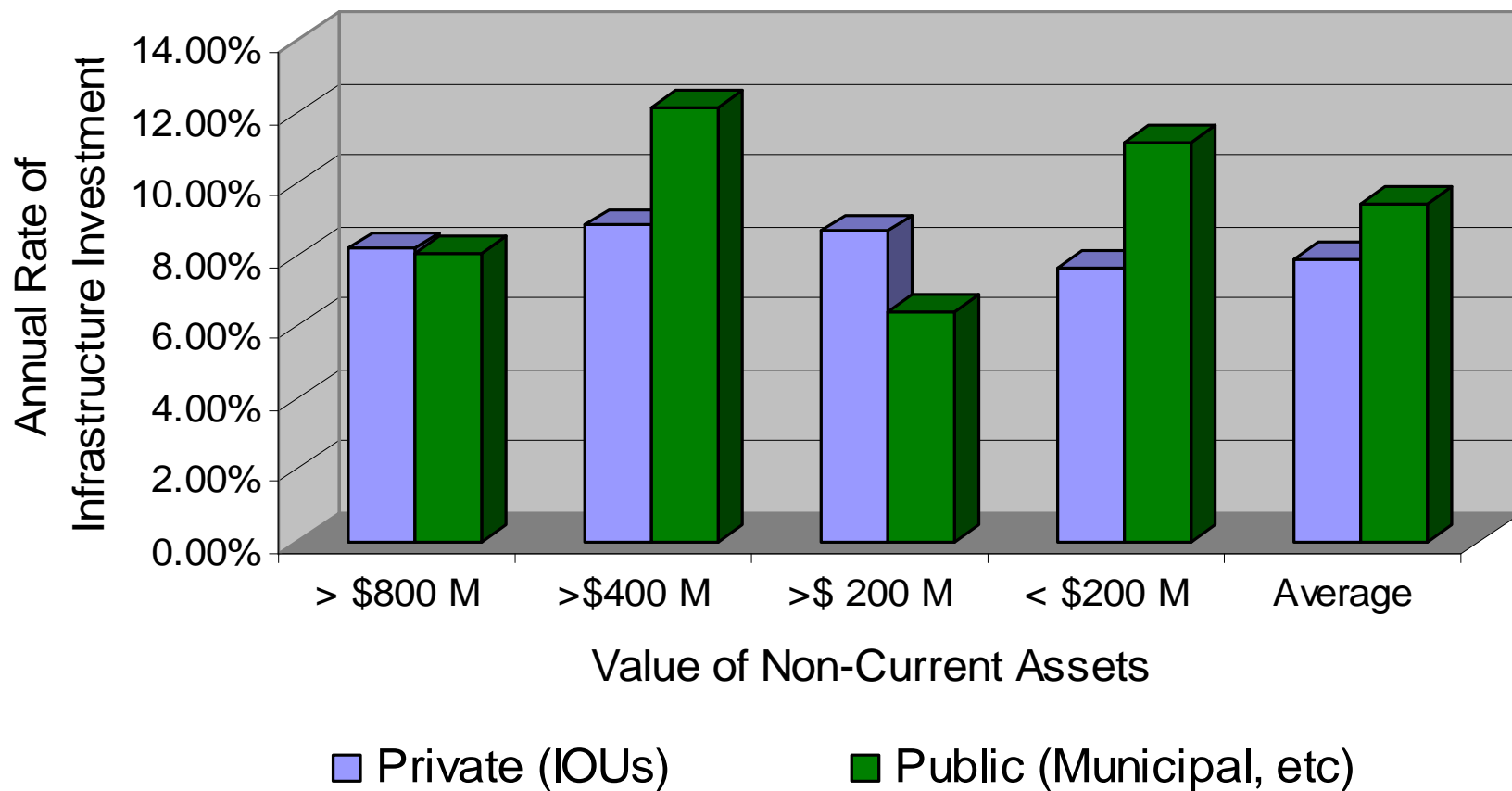
Three Kinds of Service Standards

While all utilities have one, there is no single, broadly accepted standard for either water or wastewater service in the United States.



Are We Spending Enough on Wastewater Infrastructure?

There is no difference between rates of investment between private and public utilities, where if we were not investing “enough,” we would expect private investment to exceed public investment



US Capital Investment Rates vs International Exemplars

Even if only half of US water and wastewater investments are for renewal, replacement, and renovation and not expansion, US investment rate suggests we are competitive with the best in the world

Country	Percent Water Mains Renewed (Average)	Percent Sewers Replaced or Renovated (Average)
England and Wales	0.92	0.14
Scotland	0.45	0.03
Australia	0.68	0.45
Canada	0.48	--
Portugal	1.34	0.18
United States	3.30 ^a	3.80 ^a

^a Renewal rates shown for the USA are the percentage of expenditure on the asset divided by the asset value, so include both replacement and new investment. Renewal rates for other countries are replacements and rehabilitations. Source: OFWAT, fpe_report2006-07.pdf

Is the Allocation of Cost Fair and Equitable (ie. are we meeting the social agreement)?

Asking direct customers to pay all costs of wastewater infrastructure may be effective, but it raises serious questions of efficiency, equity, and simple practicality

- Wastewater utilities deliver services to direct customers, thereby meeting customer-driven standards, but they also deliver services broadly to the environment to meet environment-driven standards. Assuming we capture all utility costs in full-cost prices, if we do not allocate some of these costs to the environment for which all Americans should pay, we may charge utility customers too much to produce broadly available clean water benefits.
- For many urban core cities whose population has shifted to outlying suburbs, the cost of replacing wastewater infrastructure can be unmanageable for generally lower-income households who still live there. Not replacing these “stranded” assets can result in failures in the wastewater function, reductions in local economic productivity, and pollution of local waters. Consequently, serious questions of equity arise when local sewer fees have to increase dramatically to serve these populations.

How Do Other Critical Infrastructure Networks Price & Allocate Costs?

Other critical national infrastructure networks like highways, airports, transit systems, and inland waterways enjoy dedicated sources of funding organized through Federal Trust Funds where users pay full costs at the national level, but not necessarily at local levels.

- Paying for America's highways through strictly local fees, for example, would create tolls only for residents while travelers passed through freely. Drivers would pay gasoline taxes only at their local pumps, but would enjoy tax-free prices for gas purchased outside their communities.
- Paying for airports this way would mean only passengers who were local residents would pay landing fees when they touched down in their city while international travelers got a nice discount on their airfares.
- These basic infrastructure systems underpin the US economy broadly, with benefits that accrue widely to users without geographic limitations imposed by local political boundaries – just like the benefits delivered by America's network of rivers lakes and streams

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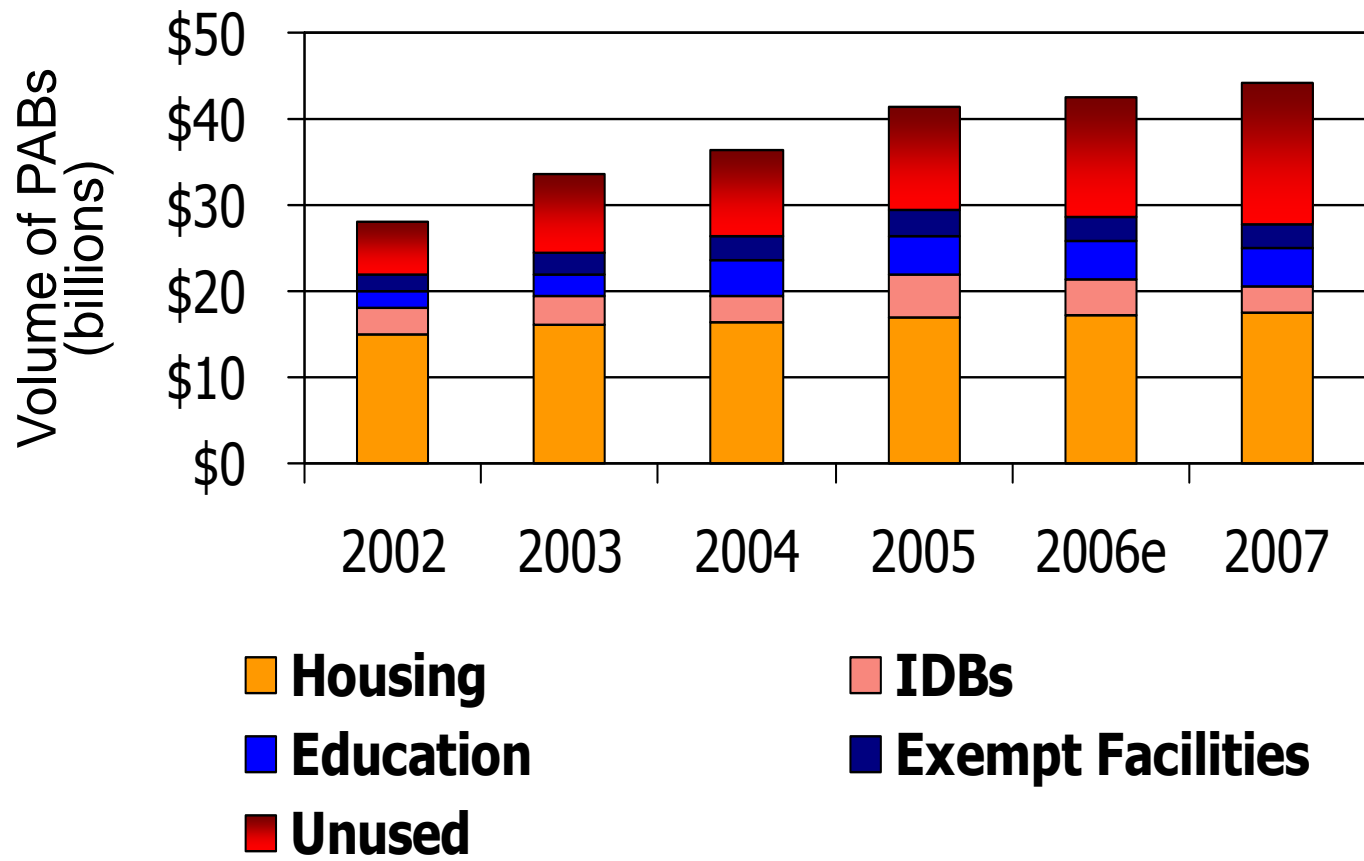
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Many Claim Caps on PABs Impede Clean Water Financing

There is no evidence that volume caps on private activity bonds have limited their use for “Exempt Facilities,” like wastewater treatment facilities,



Number of States with Unused Capacity By Year

2002.....	46
2003.....	47
2004.....	46
2005.....	49
2006e...	46
2007.....	43

Source: The Bond Buyer

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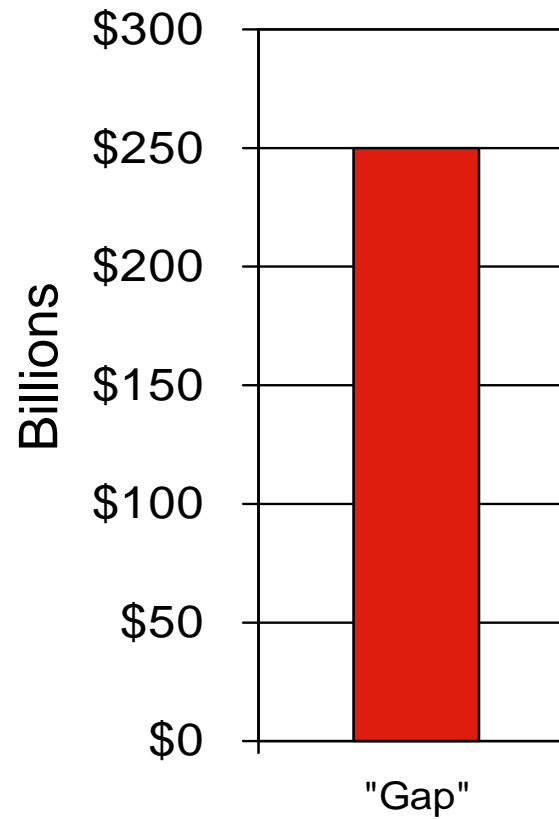
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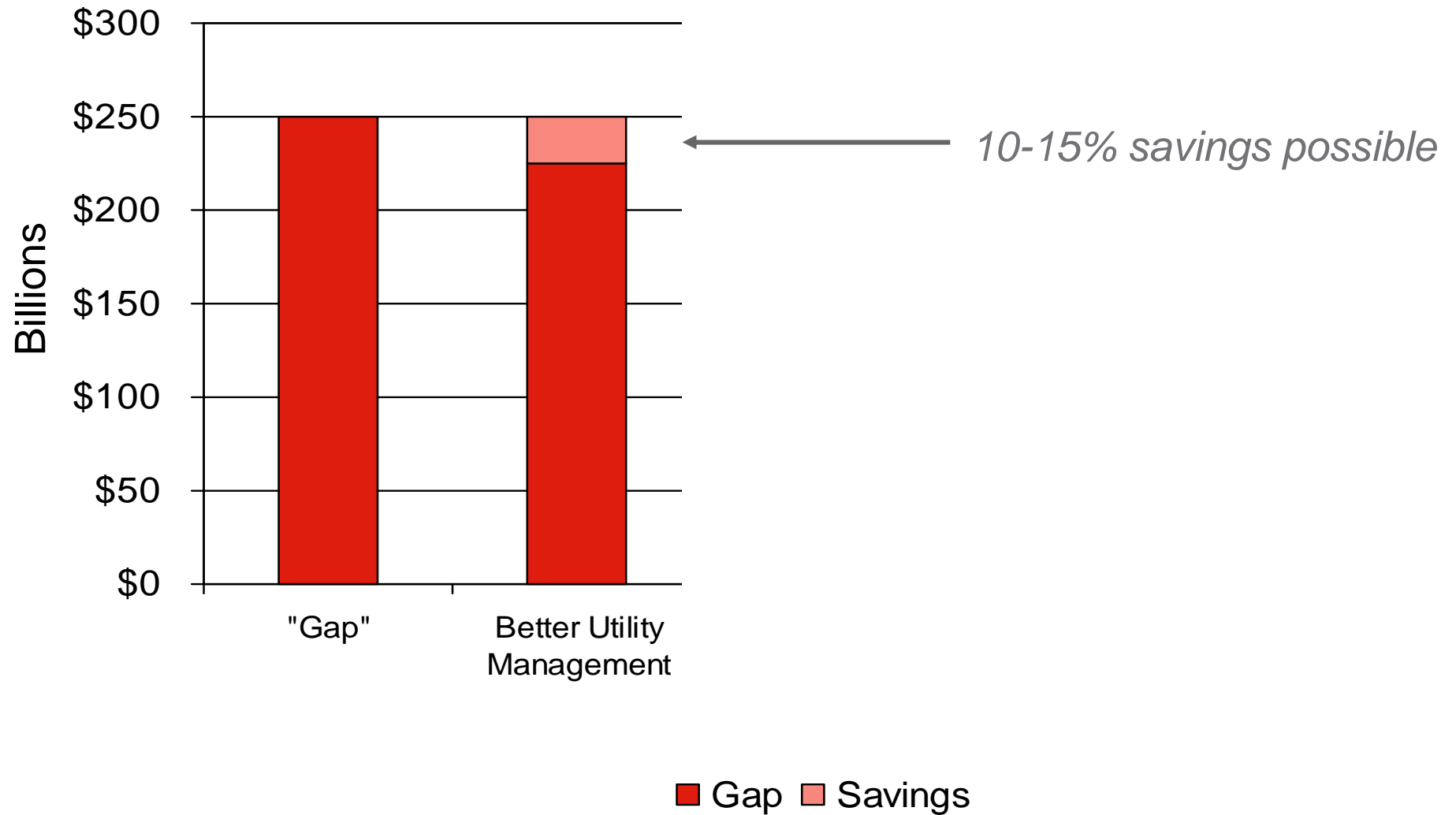
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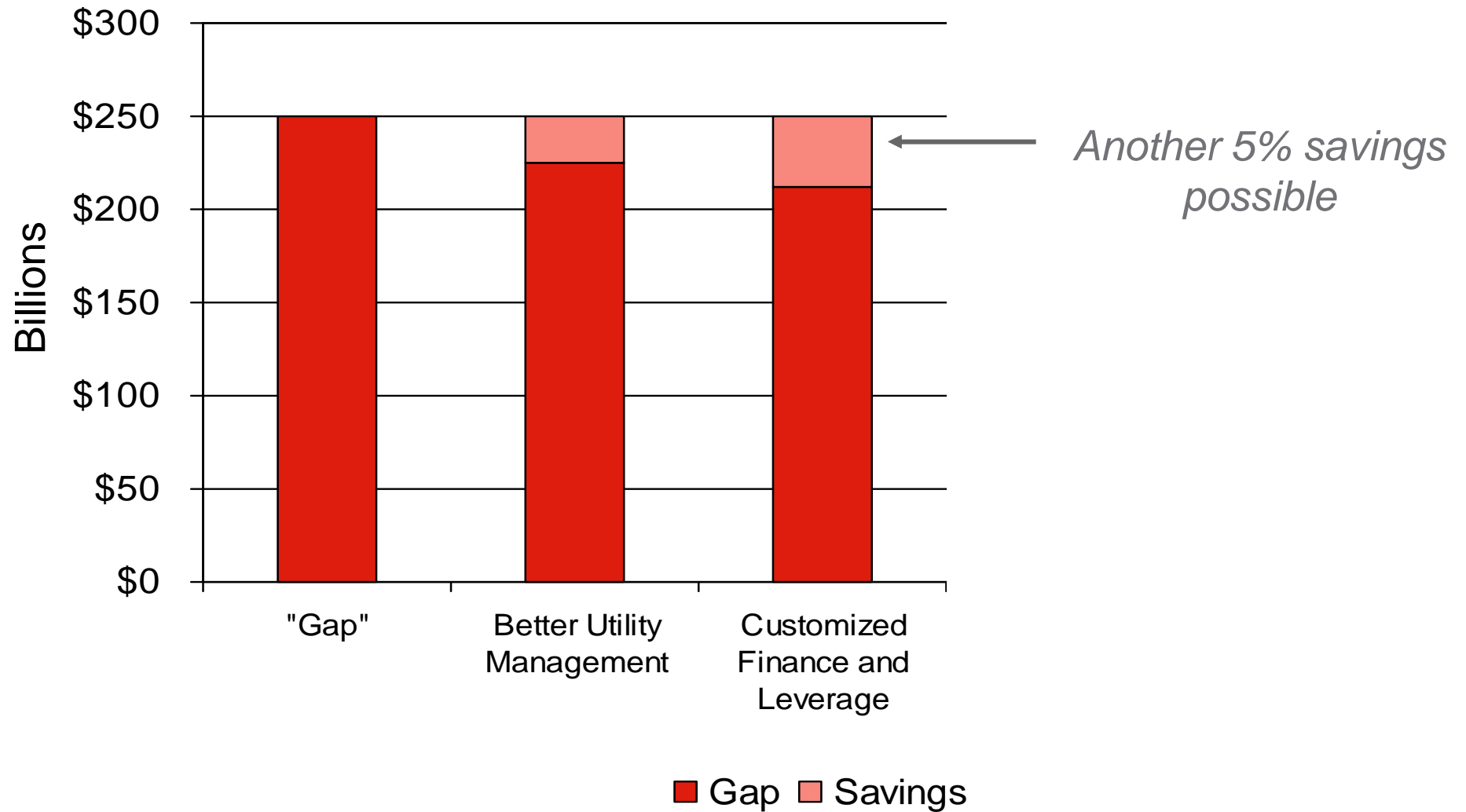
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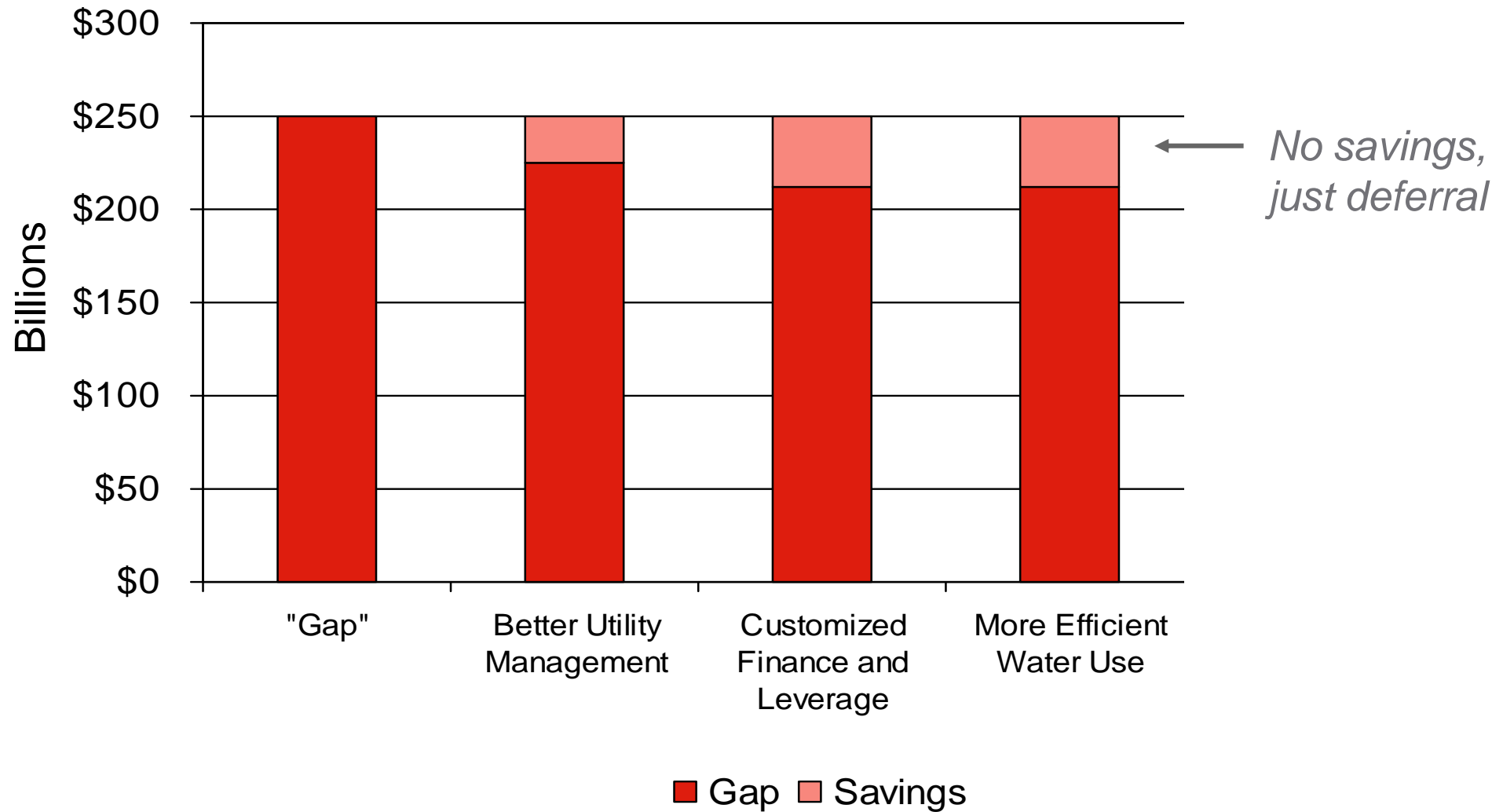
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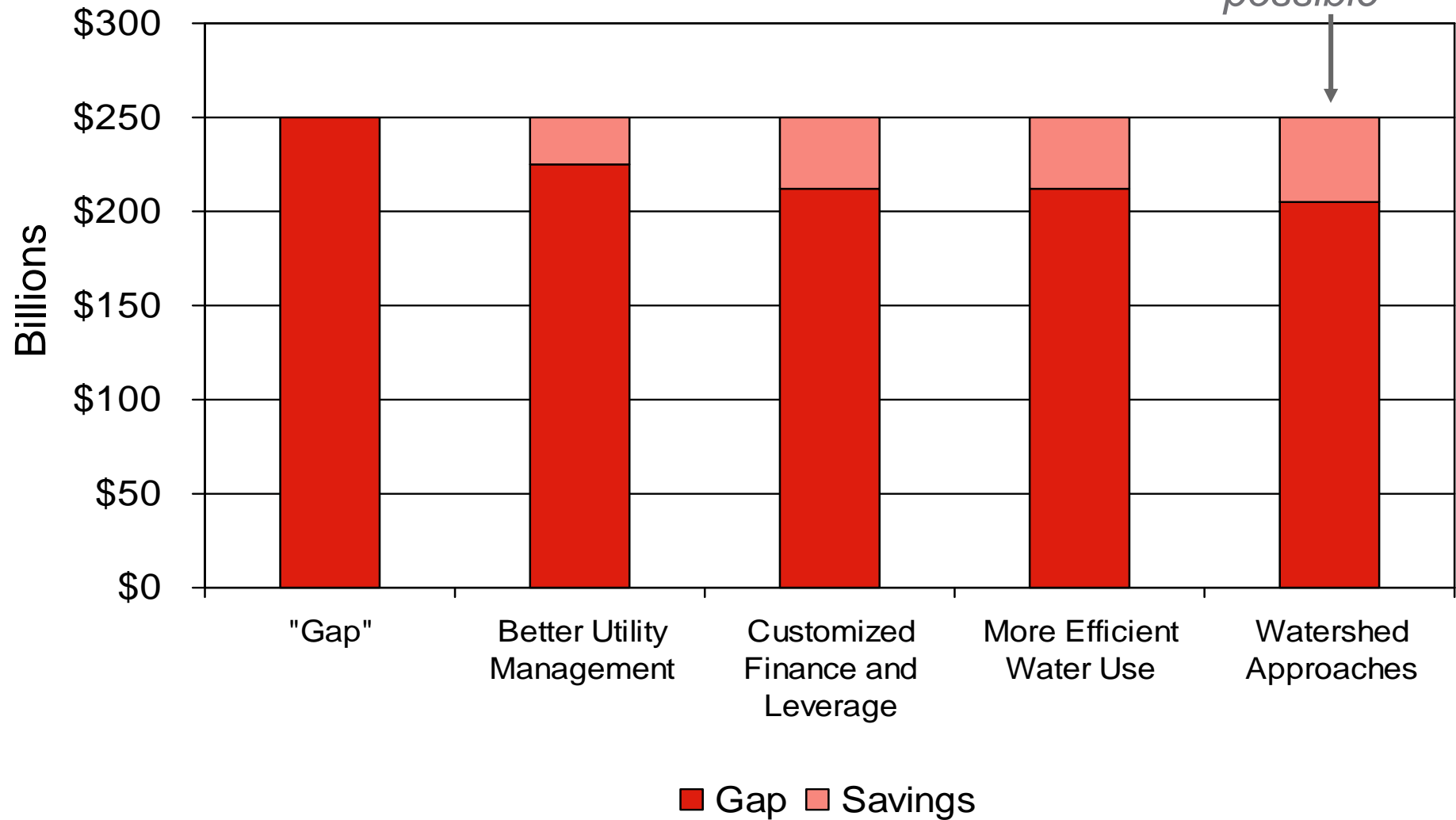


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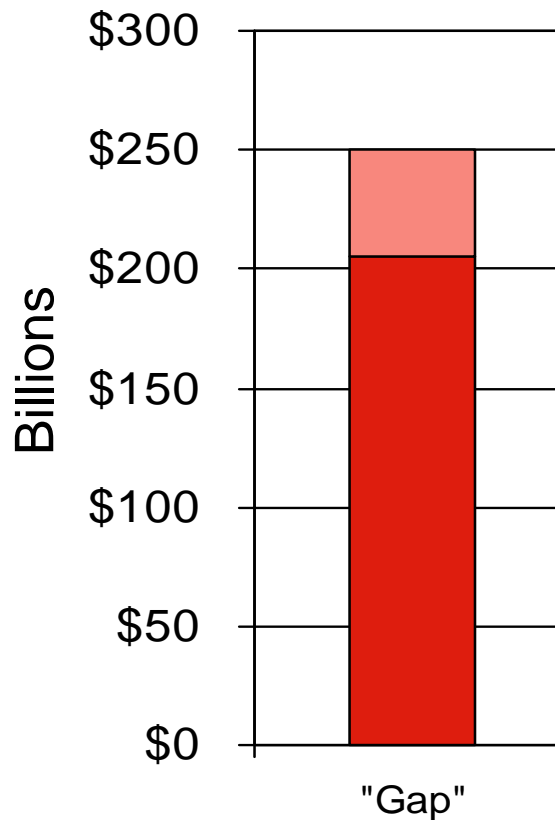


Do We Still Need a Trust Fund?

Another 3-5% savings possible



Do We Still Need a Trust Fund?



How is this possible if we're pricing at "full cost?"

We're under-funding the true cost of meeting environmental service standards!

Full cost pricing, or, charging more to replace worn infrastructure to meet all service standards will continue...

Pricing to meet environmental service standards is key, original "Gap" still left equity concerns suggest that at least some cost should be allocated to all "customers"

Some "customers" live downstream, some live across the nation

A Clean Water Trust Fund could correct this and continue national progress toward clean water goals

Thank You!