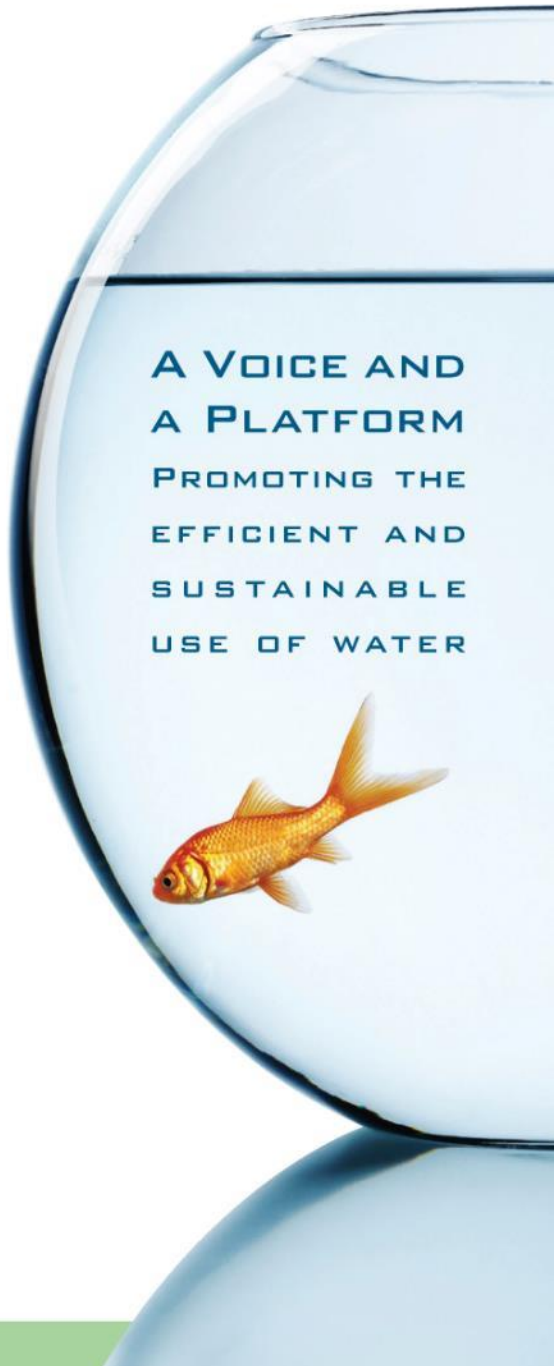
National Trends in Water Efficiency: What Texas Needs to Know

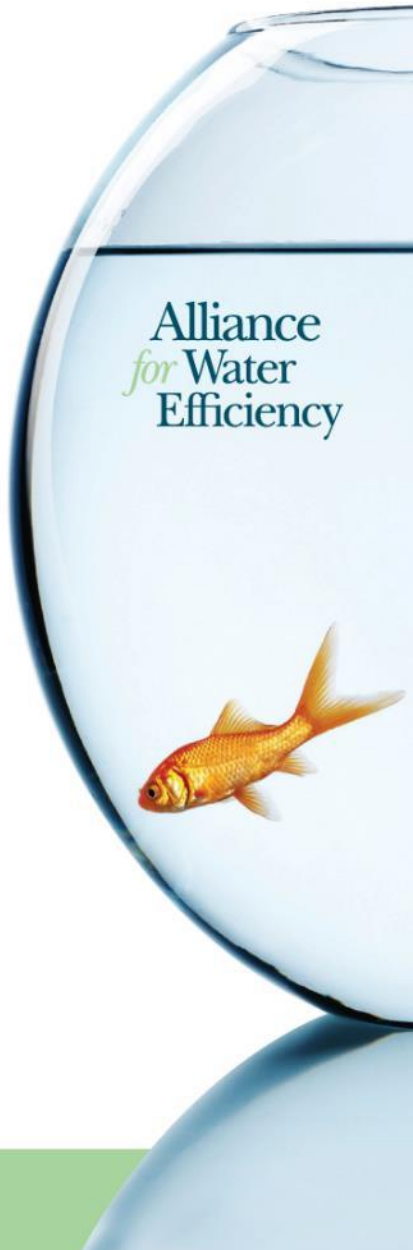
Mary Ann Dickinson
President and CEO

Alliance *for* Water Efficiency



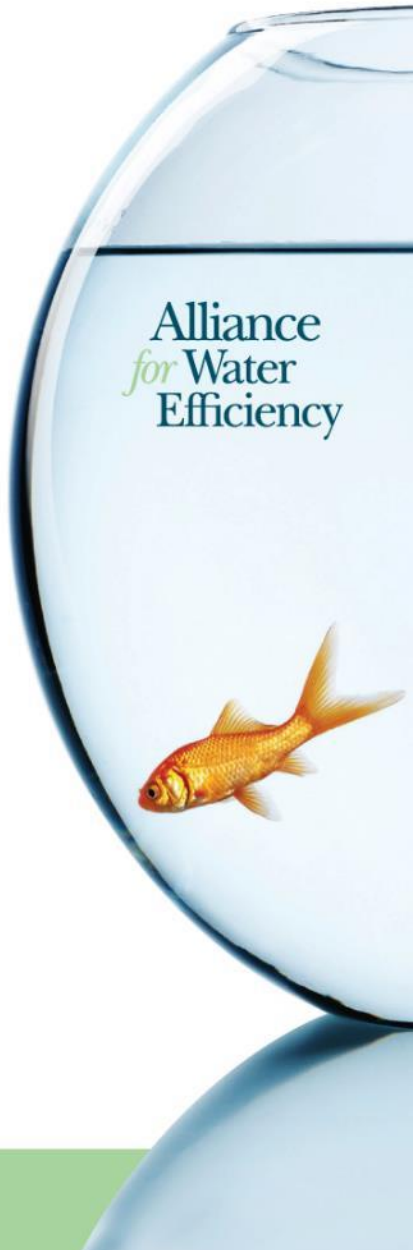
Water is Fundamental

- A basic human need and an important emotional connection -- think of rivers, lakes, waterfalls -- and where we choose to go for recreation
- We are facing a long-term water supply crisis
- National Geographic article last year on “Worst Drought in 1,000 years Predicted for American West” if we stay on current trajectory of green house gas emissions
- Nationally, this is not getting the public’s attention: water quality and infrastructure repair are more visible priorities



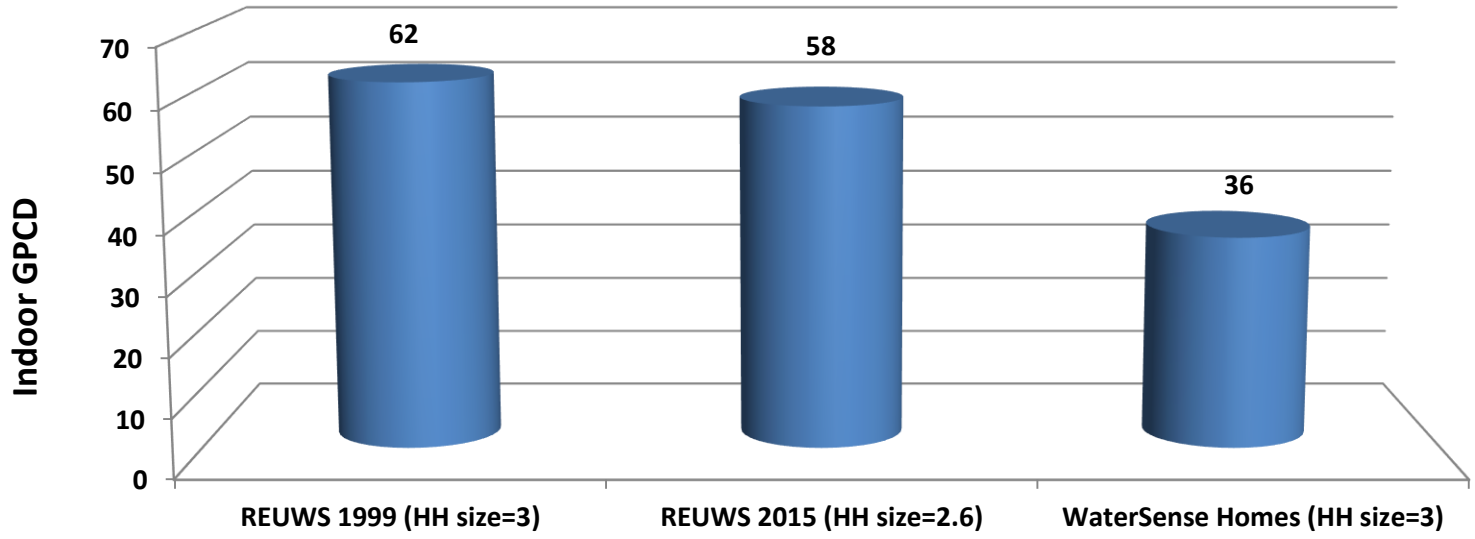
Water Efficiency Success

- Water efficiency is over three decades old
- We have proven that water efficiency works, but that success isolates us and sidelines us in our utilities
- Saving water is antithetical to a utility's desire to sell water, so we are not popular with utility management even when we re successful
- What have we achieved so far? What are the issues now facing us?



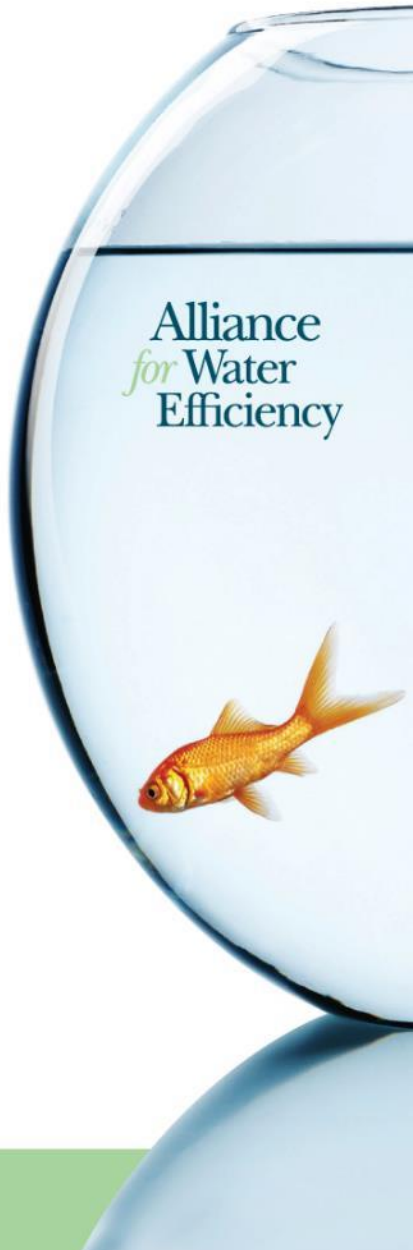
Preserve National Standards

- North America still the highest gpcd in world -- even among developed countries -- but we are improving

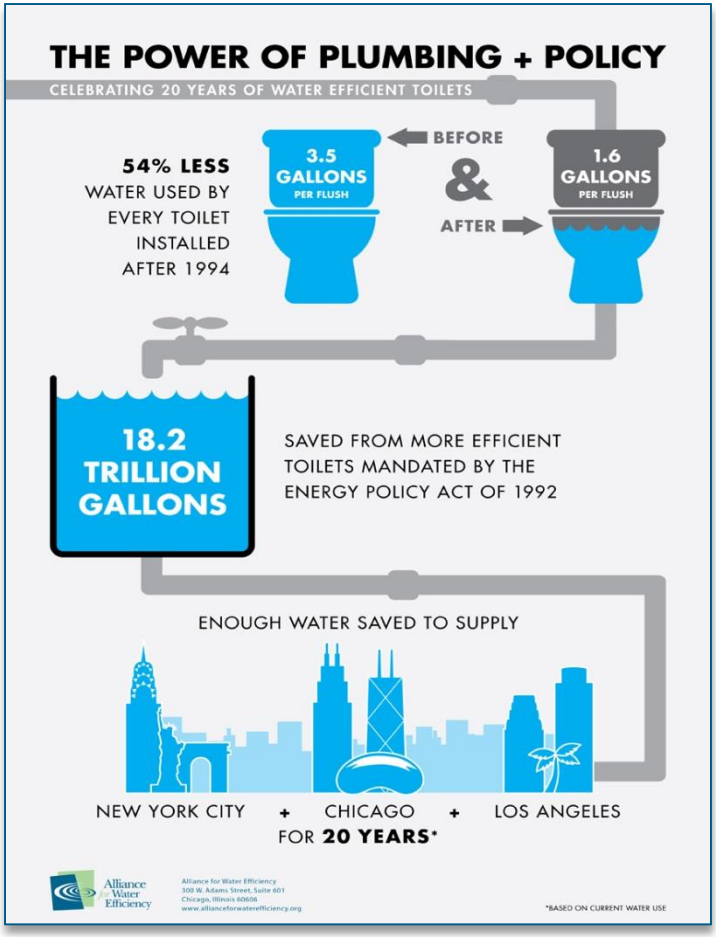


Preserve National Standards

- How did this happen?
- Passing1992 Energy Policy Act – standards for plumbing fixtures
- Embedding these standards in national Codes
- Enacting more stringent state water efficiency standards (Texas!)
- Launching a WaterSense product label
- Implementing water utility programs
- BUT: Can we hold on to these standards in this new political environment?



Preserve National Standards



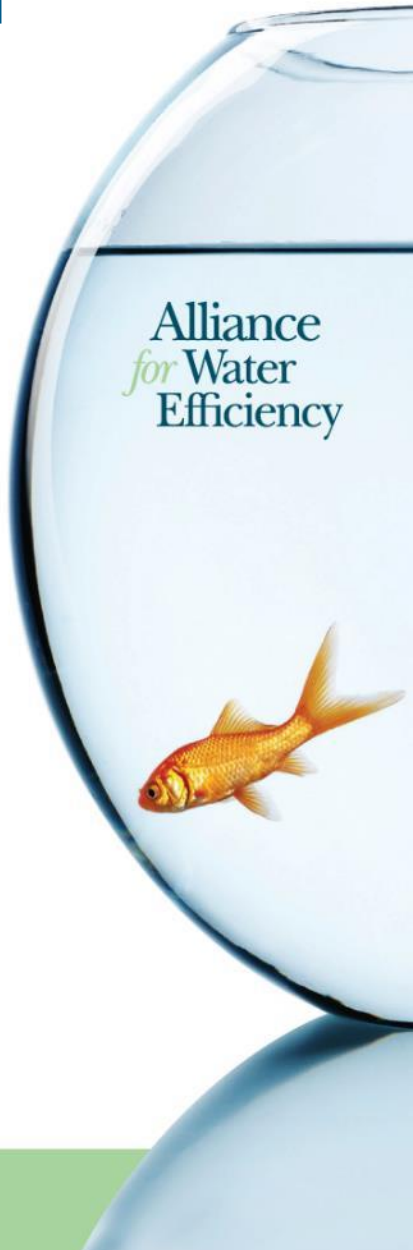
- Toilets alone, assuming a 4% changeout rate
- Savings occur without cost to the water utility
- Savings are permanent over the life of the fixture
- 18.2 trillion gallons
- Enough to supply New York City, Chicago, and Los Angeles for 20 years

Keep the WaterSense Program

- Launched in 2007
- Voluntary program, not regulatory
- Despite low funding, it has transformed the market
- Free savings:
  - ✓ 1.1 trillion gallons of water
  - ✓ $21.7 billion in water/energy bills
  - ✓ 146 billion kWh of electricity
  - ✓ 54 million metric tons of CO2

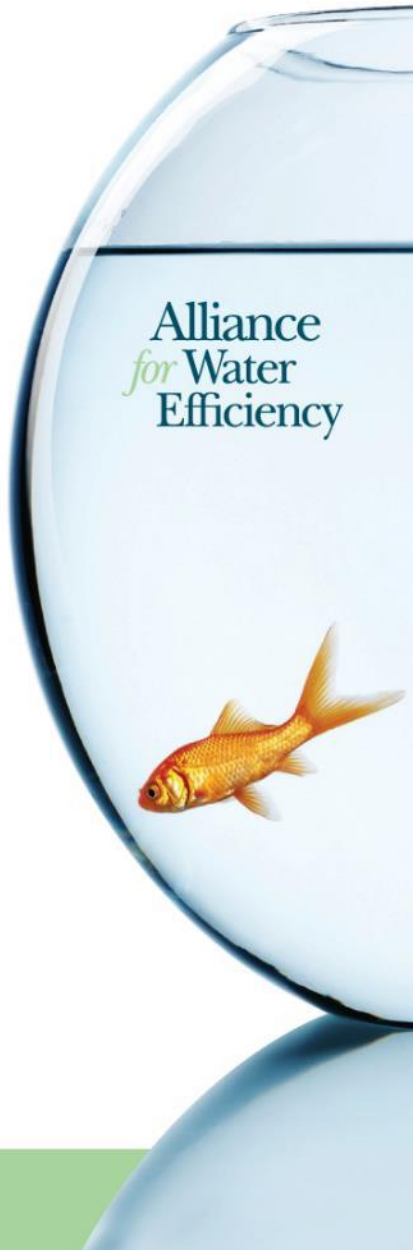
Keep the WaterSense Program

- WaterSense may now be in jeopardy
- Never authorized by Congress, despite dozens of attempts
- Funding is discretionary in EPA Administrator's budget
- Could be very easily cancelled
- Even the long-time Energy Star label appears to be at risk
- How do we protect it?



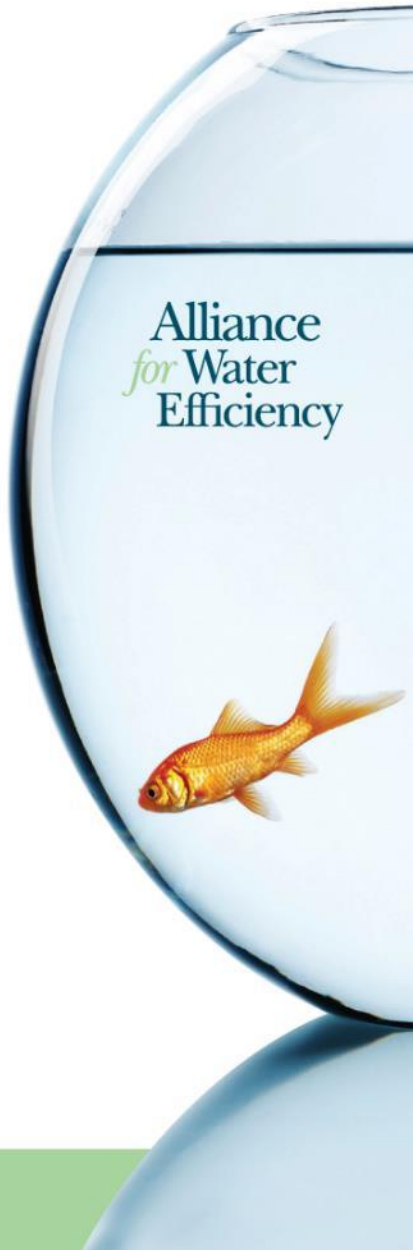
Focus on Utility Water Loss

- Once a minor program, leakage recovery now a priority and a solid business case
- New methods and standards for identifying and recovering non-revenue water have been developed internationally – AWWA M36 Manual and audit form
- States are beginning to require regular comprehensive validated water audits (Texas! Georgia! California! Wisconsin!)
- North American Water Loss Conference December 3-5, 2017 in San Diego



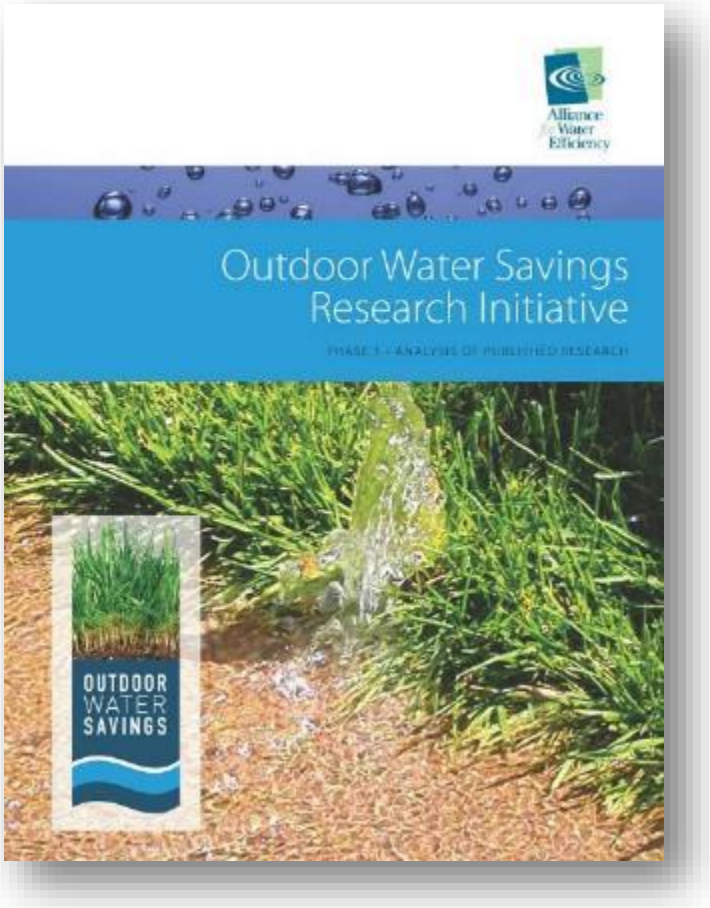
Focus on Outdoor Water Use

- We have made great strides in indoor water efficiency
- Outdoor water use still poorly understood & ripe for innovation & improvement at the consumer, landscape contractor & designer levels.
- Not anti-turf, but anti-waste
- Improve irrigation efficiency
- Change the water requirement of the landscape

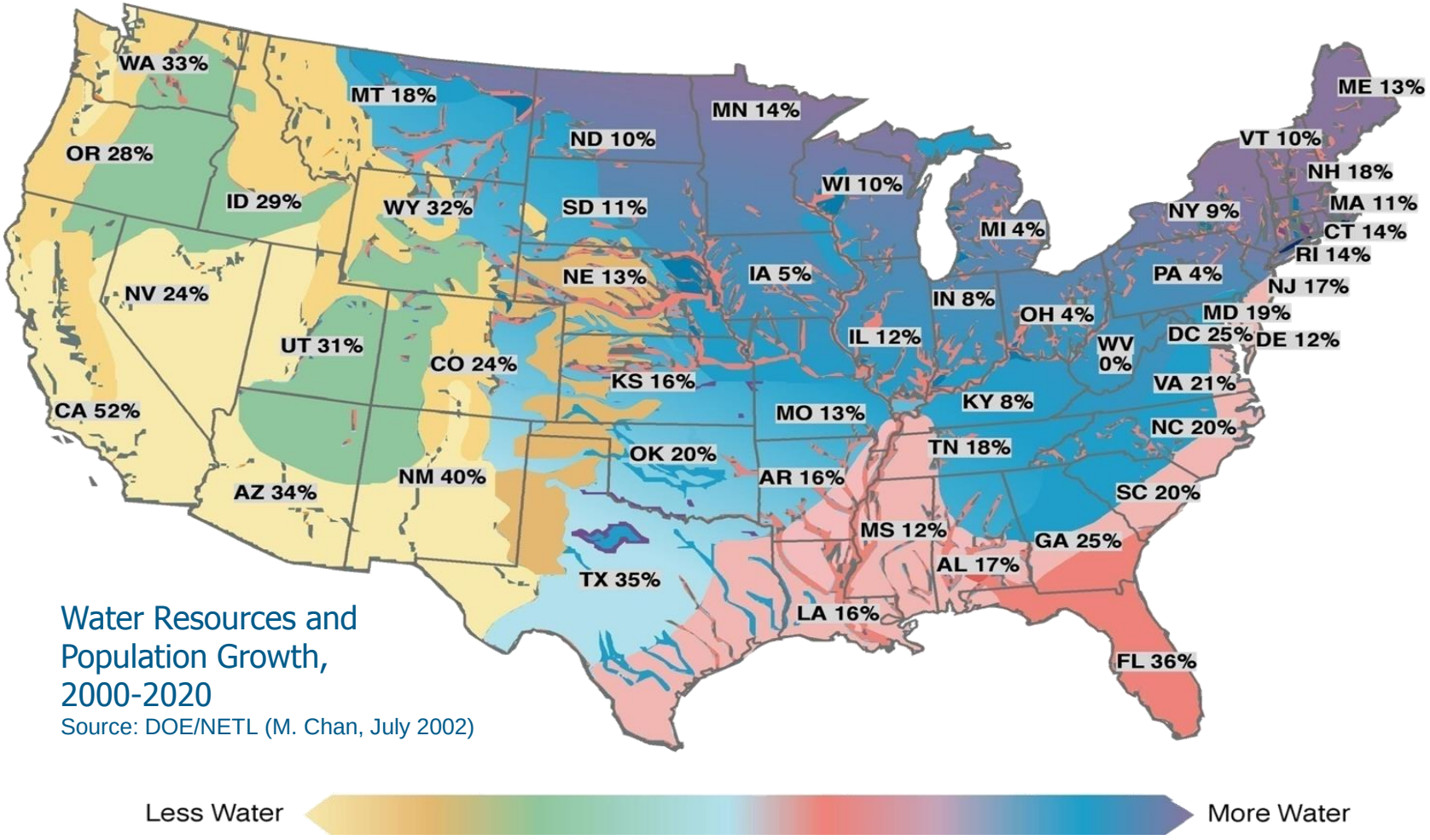


Focus on Outdoor Water Use

- Phase 1: Research compiled to date and identified gaps
- Phase 2: Conducting new studies to produce actionable information on water savings
- Texas Members included
- 2016 Studies:
  - ✓ Landscape Transformation
  - ✓ Impact of Drought Restrictions
  - ✓ Peak Reduction Study



Examine Growth in Arid Areas



Water Resources and Population Growth, 2000-2020

Source: DOE/NETL (M. Chan, July 2002)

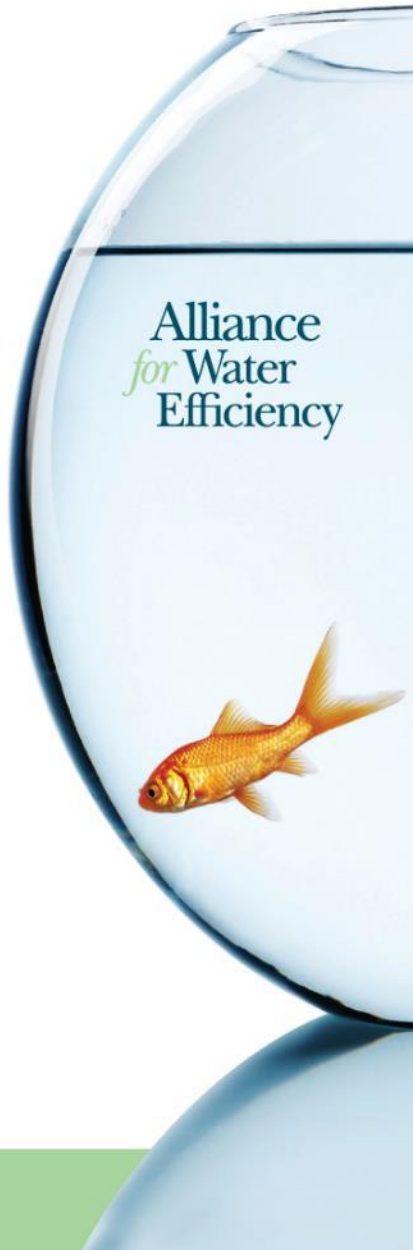
Less Water — More Water

Link Water and Land Use

- How to grow in the face of water scarcity?
- Net Blue: AWE project to promote sustainable communities
- Model ordinance that communities can tailor to create a water demand offset approach for new development
- Partners: Environmental Law Institute and River Network
- Launching February at **www.a4we.org**

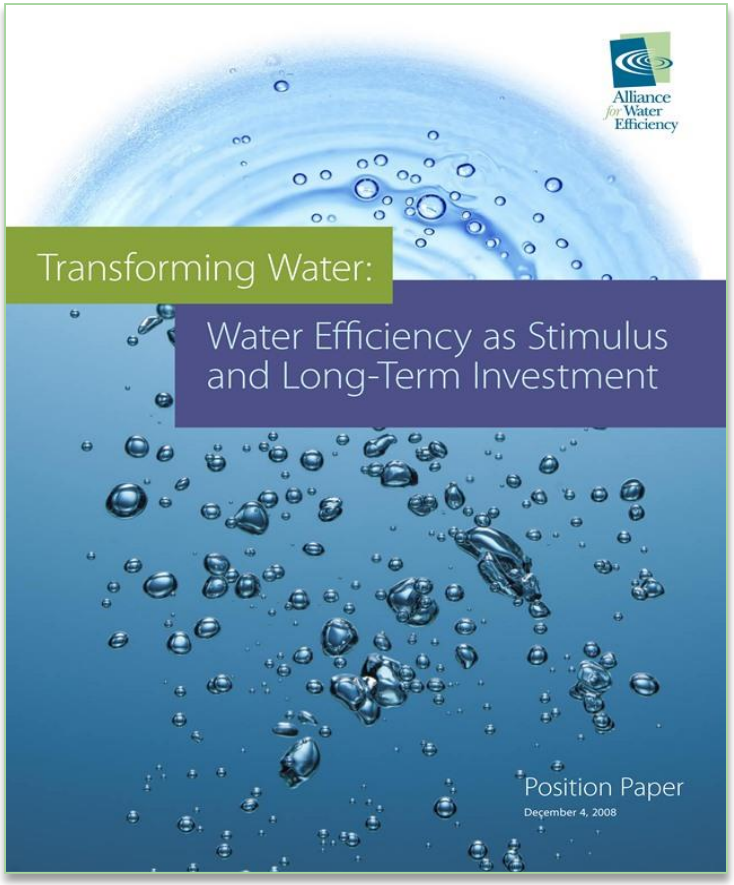
Keep Water Where It Is

- Need more integrated water management and reuse
- We use potable water once and discharge it
- Why not reuse the water onsite once it is already there?
- Don’t need to treat all water uses to safe drinking water act standards
- Need Guidance on treatment -- SFPUC Blueprint for Onsite water systems
- National panel to design standards to allow and promote distributed treatment



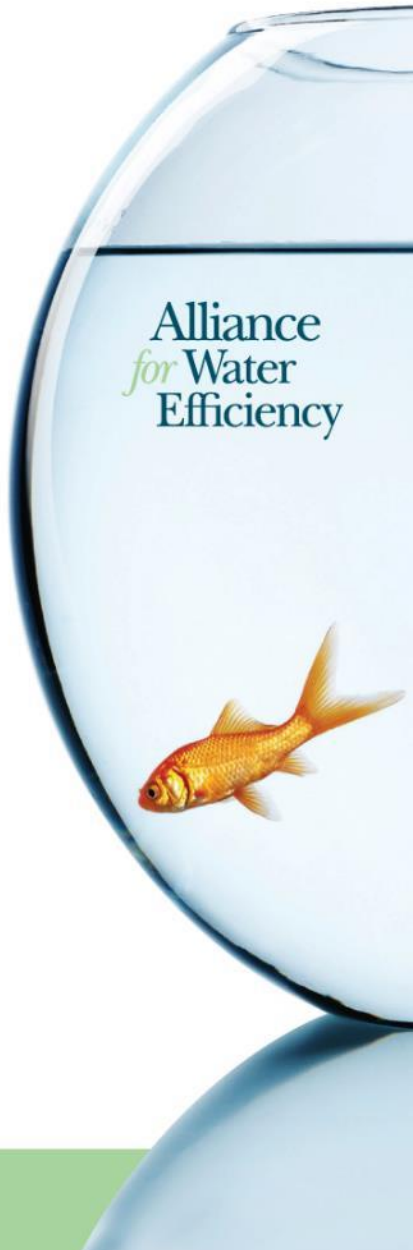
Link Water Efficiency and Jobs

- Prepared and distributed to Congress during 2009 Stimulus Bill discussion
- Analysis based on $10 billion of federal water efficiency investment
- 150,000 - 220,000 new jobs could be created
- Economic benefit multiplier of 1.3-1.5.
- Posted at **www.a4we.org**



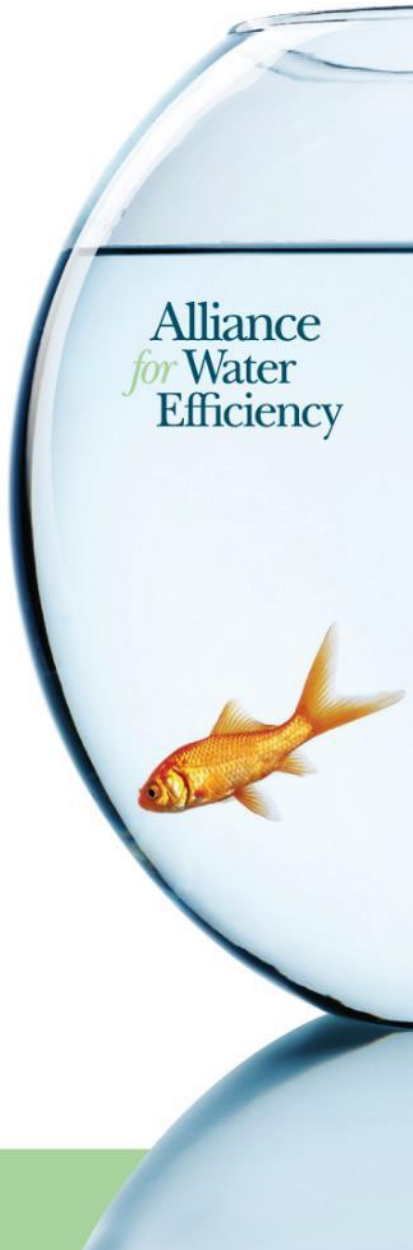
Make Our Customers Partners

- Not aware of how much water they actually use (ignorance is worse w/out meters)
- They complain about the rising cost of tap water when they willingly pay a thousand times more for the same equivalent amount in a plastic bottle
- They have no idea how the utility system is run and the nature of the infrastructure costs



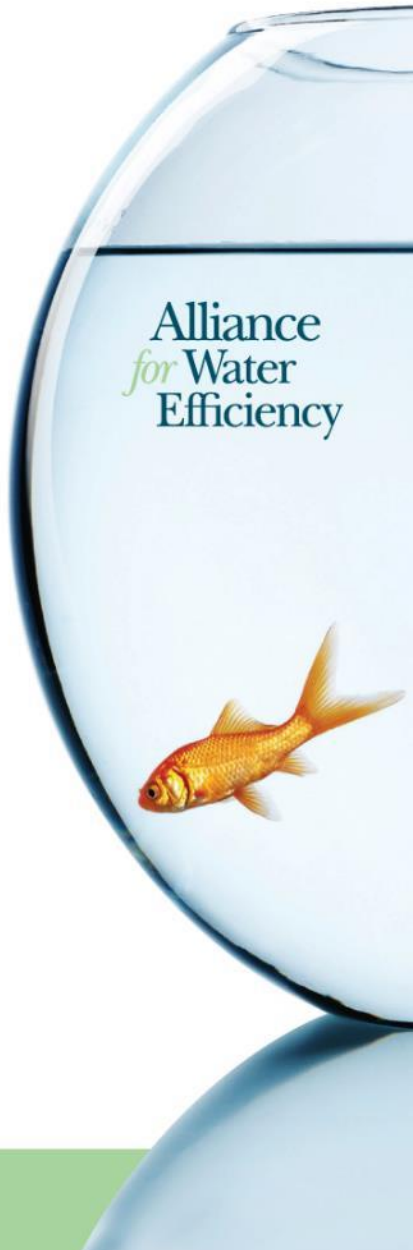
Make Our Customers Partners

- The American household spends, on average, only $523/year on water and wastewater charges, in contrast to an average of $707/year on carbonated soft drinks and other beverages



Make Our Customers Partners

- US has the lowest burden for treated water/wastewater bills as a percentage of household income, compared to other developed countries, and the highest water quality

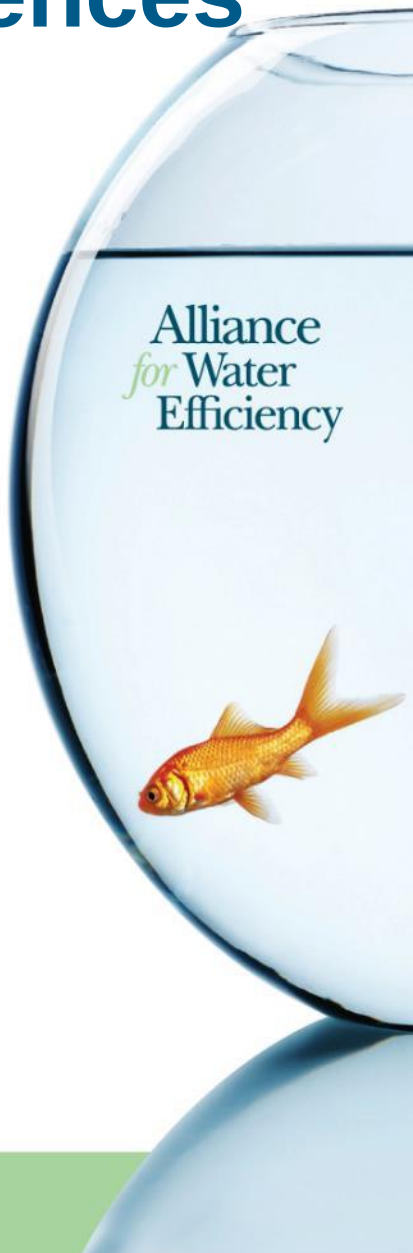


Make our Customers Partners

- Most monthly rate “hikes” = a hotdog and a coke
- Better consumer messaging without blaming conservation
- Learn from bottled water marketing: capture the emotional connection to water
- Consumers are your partners
- AWE “Water What you Pay For” Video

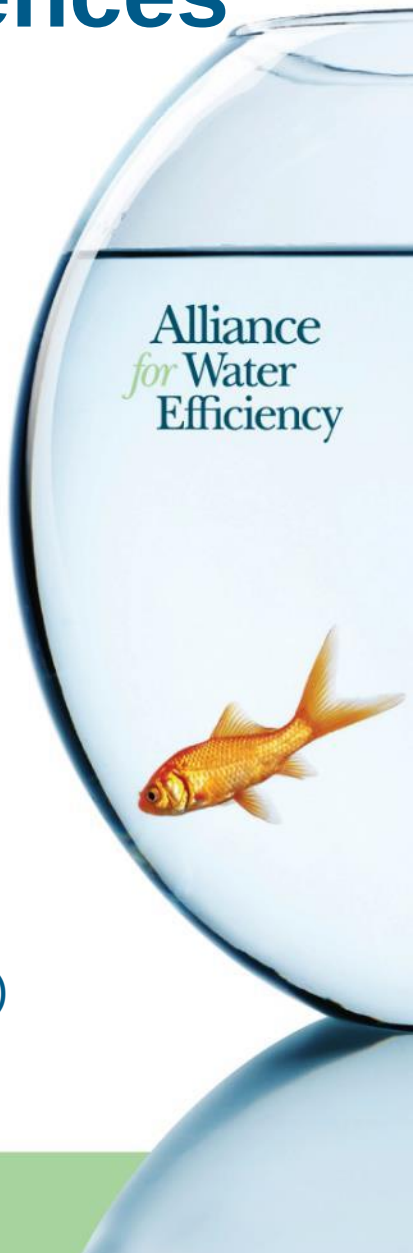
Remove Unintended Consequences

1. Reduced water sales -- and thus reduced utility revenue
2. Perception of rate hikes being caused by consumer conservation
3. Reduced flows in plumbing fixtures leading to documented pathogen growth
4. Potential drain line blockages in commercial buildings
5. Slower main line flows causing need for greater flushing and thus wasting water
6. Accelerated sewer line corrosion?



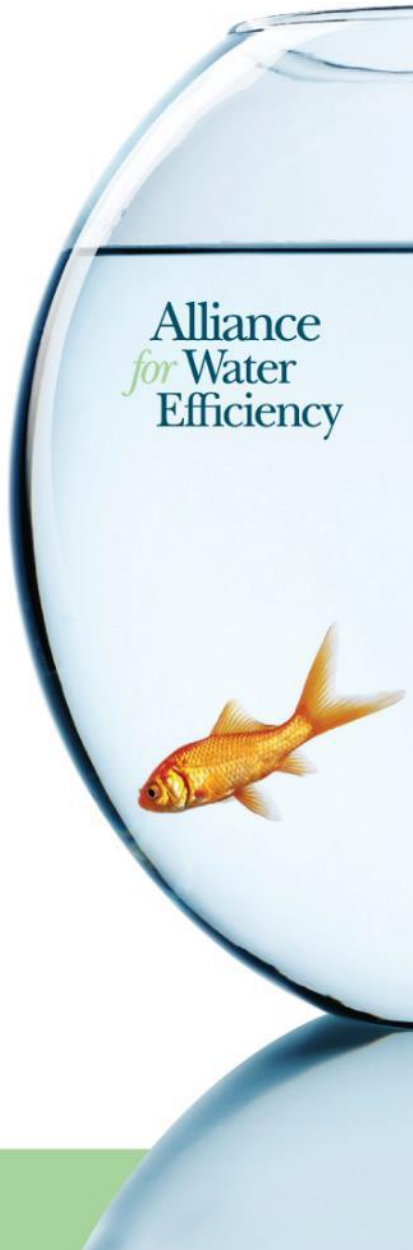
Remove Unintended Consequences

- Water Aging
- Pathogen growth (legionella)
- CDC statistics: 58% of all waterborne diseases recorded in the US are legionella; 98% of the deaths are legionella
- Research needs to be done
- Solutions?
  - ✓ Water Heater temps 140 degrees
  - ✓ Point of use Disinfection
  - ✓ UV
  - ✓ Regular system flushing (wiping out water efficiency gains)



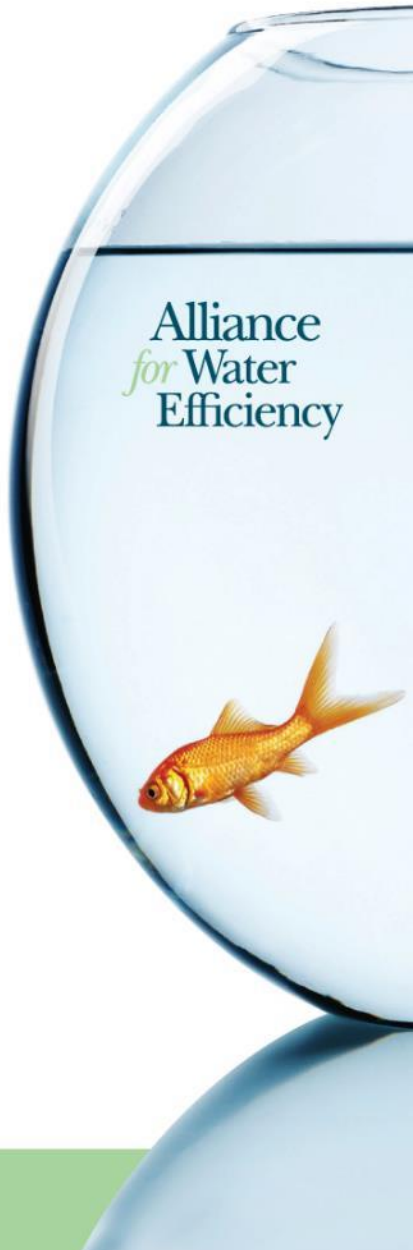
But There Are More…..

- There are **2** major barriers nationally to planning and implementing water conservation programs that are policy oriented
- We don't talk about them much
- But if not solved soon, they could be fatal to the long-term effectiveness and financing of your utility water conservation programs



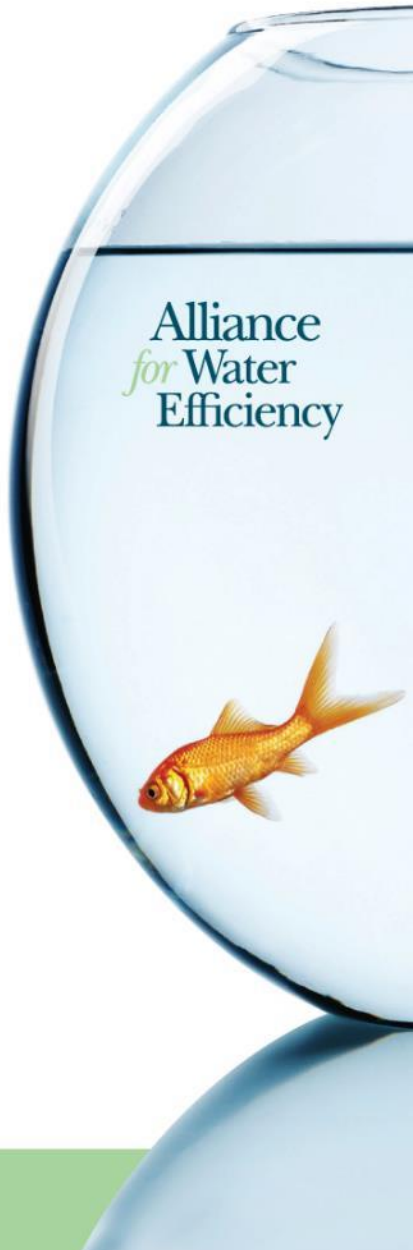
Make Rebates Tax Free

- Water efficiency is **not** federally tax-exempt
- This has always been a problem – not new
- Income from water conservation rebates is federally taxable to the consumer, unlike energy efficiency
- Some states made conservation tax-exempt at the state level (e.g. California)
- Utilities are affected by this
- All rebate income totaling $600 or more in a calendar year must be sent in a 1099 at the end of the tax year



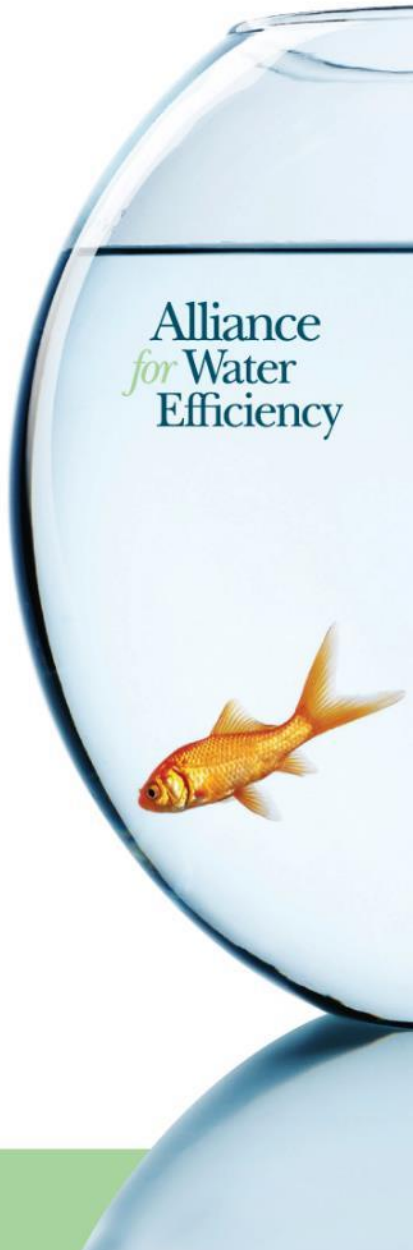
Make Rebates Tax Free

- We have been trying for years to get the attention of Congress to fix this
- AWE has a fact sheet on this issue that it has distributed to Congress since 2010
- Water utilities haven't much appreciated the need for a legislative fix because so little of their consumer rebates in the past aggregated to the $600 threshold
- Legislation was attempted in the 1990's by a Congressional Representative from Seattle – but no success



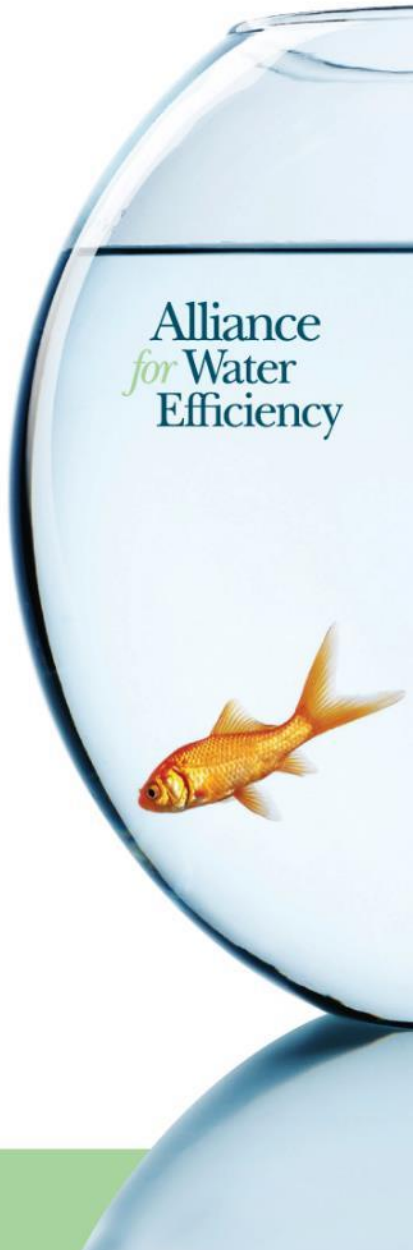
Make Rebates Tax Free

- Landscape transformation rebates (often known as “cash for grass” rebates) are becoming popular, particularly in the arid West
- Many individual consumers now receiving much more than $600 a year
- Water utilities are now realizing their federal tax obligations to send out 1099s to consumers
- Consumer reaction has been **very** negative
- A disincentive to customer participation



Example

- In 2015, the Metropolitan Water District of Southern California provided nearly half a billion dollars in consumer rebates for landscape transformation in response to the drought
- When MWD's 1099s for those rebates hit consumers, their anger exploded
- They believed they were doing a public service by taking out their lawn and conserving water
- Rightfully maintained that this "benefit" should not be personally taxable to them.



WHOOPS

Water-Conservation Rebate Recipients Surprised To Learn Rebates Are Taxable

By Laura Northrup @lnorthrup January 28, 2016

LOCAL / L.A. Now

Turf rebate recipients will have to decide how to report funds on federal taxes

In Case You Missed It

On debate day, a look back at the most famous moment in a vice

U.S. tax policy undercuts CA water conservation push

27 Jan, 2016
Chris Reed

Print this article
Font size - 16 +

Even before the current marathon drought, turf replacement subsidies have long been touted by the state government as a powerful way to get California homeowners to stop having water-guzzling lawns. But the federal government sees these subsidies as taxable income. This is from a recent Los Angeles Times report:

> *Southern Californians who received cash rebates for replacing their lawns with drought-tolerant landscaping will soon get a federal tax form in the mail reporting the amount, but water officials said Thursday it is still not clear whether the reimbursement will be taxable.*
>
> *Officials from the Metropolitan Water District of Southern California — which funded a $340 million incentive program — say they are sending 1099 forms to turf rebate recipients of $600 or more and leaving reporting up to participants and their tax advisers.*
>
> *"We're doing what we believe is our obligation, which is sending the 1099s," said Deven Upadhyay, an MWD manager. Recipients "would have to work with their own tax adviser in terms of the way that they might characterize it in terms of the way they file their own taxes."*

Share this article:

Recent News

Wells Fargo punishment spreads from CA October 5, 2016

CA golf club suit deepens Trump woes October 4, 2016

CalWatchdog Morning Read – October 4 October 4, 2016

Gov. Jerry Brown signs host of significant legislation October 4, 2016

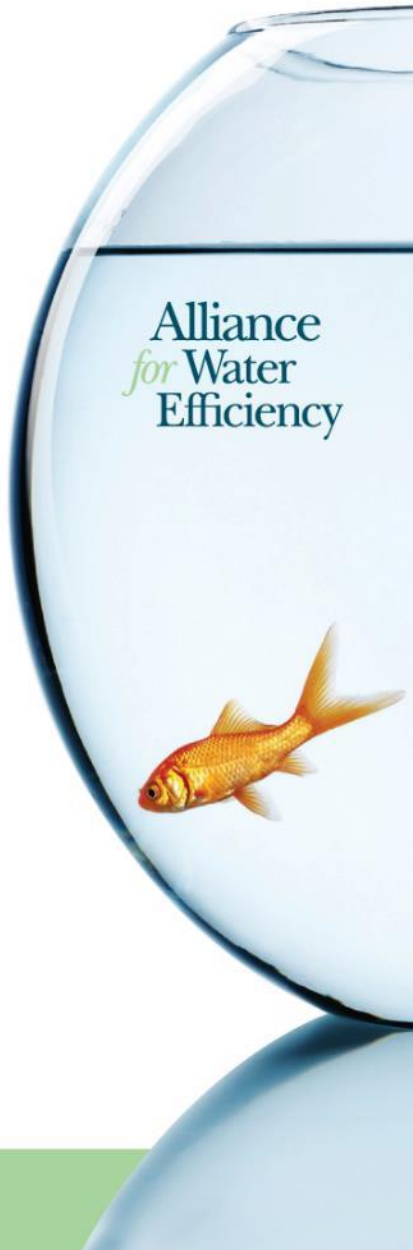
Janet Napolitano rebukes policing speech on college campuses October 3, 2016

CalWatchdog Morning Read – October 3 October 3, 2016

Old is new as California sees more European immigrants October 2, 2016

Enact a Solution

- Energy efficiency has been exempt from federal taxation for three decades. Section 136 in the IRS Tax Code
- Thus, energy utilities don't face sending out thousands of 1099s every year to angry customers.
- If water efficiency isn't treated similarly, consumer participation in water conservation programs will wane and eventually disappear.
- Utility CFO's will not want to deal with the 1099 issue as well as angry customers



Create a Coalition

- Formed by Western Urban Water Coalition and AWE
- Purpose: to address and fix the tax-exemption barrier for water conservation and green infrastructure
- Resolutions needed for Congress
- Need Texas support! Chairman Brady!

CPWC

COALITION TO PROMOTE WATER CONSERVATION

amwua
ONE FOR WATER
Arizona Municipal Water Users Association

A RESOLUTION OF THE AMWUA BOARD OF DIRECTORS REGARDING WATER CONSERVATION AND STORMWATER MANAGEMENT REBATE TAX PARITY

WHEREAS, the Arizona Municipal Water Users Association (AMWUA), a non-profit association of the municipalities of Avondale, Chandler, Gilbert, Glendale, Goodyear, Mesa, Peoria, Phoenix, Scottsdale, and Tempe, works to protect its members' ability to provide assured, safe, and sustainable water supplies to their communities;

WHEREAS, members of AMWUA offer rebates to individuals who install fixtures, appliances, technologies, and physical improvements that increase water use efficiency, lessen water demand, and reduce stormwater runoff from private property in order to encourage the adoption of such measures;

WHEREAS, Arizona, the Colorado River Basin, and much of the United States are experiencing increasing stress on water supplies due to drought, climate variability, and other factors;

WHEREAS, conservation and stormwater management measures help to ensure the reliability and sustainability of water supplies, which are critical to the well-being of our communities and economies;

WHEREAS, water conservation and stormwater rebates are not specifically excluded from income under the U.S. Internal Revenue Code and are therefore taxable income to the recipient;

WHEREAS, in 1992, Congress declared similar rebates for energy conservation exempt from taxable income;

WHEREAS, water utilities must issue notice of miscellaneous income (Form 1099) to their customers who receive rebates in excess of $600 a year;

WHEREAS, such rebates are not income, but defray upfront costs as an incentive to spur private investment in improvements to increase efficiency, reduce demand, and improve stormwater management;

WHEREAS, taxing conservation and stormwater rebates is a disincentive to the millions of Americans who may invest in water conservation and stormwater management;

NOW, THEREFORE, BE IT RESOLVED THAT THE AMWUA BOARD OF DIRECTORS:

Request Congress pursue revisions to the Internal Revenue Code to exempt water conservation and stormwater management rebates from taxation, the same treatment currently afforded for energy efficiency and conservation measures under the tax code.

Request Congress review the U.S. Treasury Department's proposal to add exemptions for water conservation and stormwater management measures to the tax code as outlined in its 2016 recommendations to Congress as well as the Congressional Joint Tax Committee's determination that the impact on the federal budget would be "negligible."

Recommend other water-related organizations consider supporting amendments to the Internal Revenue Code to make consumer rebates for water conservation and stormwater management exempt from taxation as income, creating tax parity between the water and energy programs.

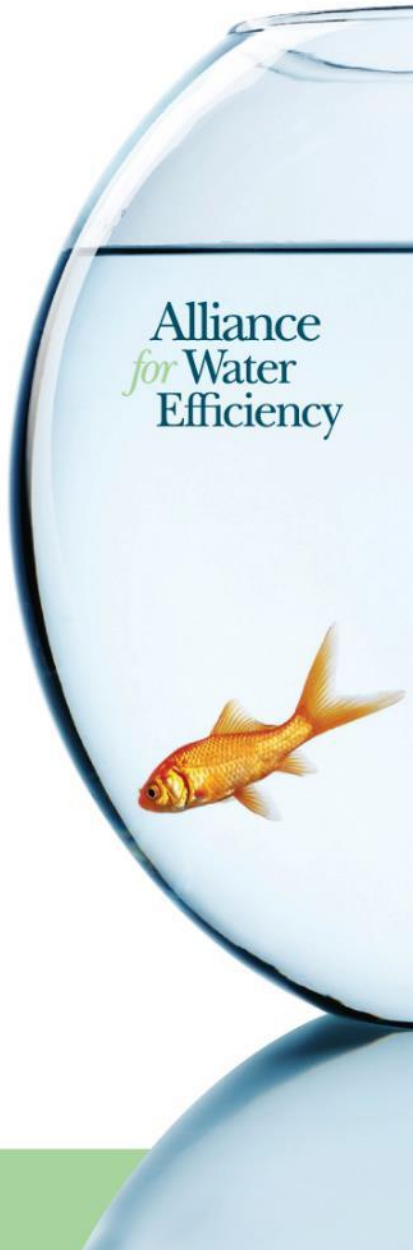
Passed and adopted this twenty-sixth day of May 2016.

Thelda Williams

Councilwoman Thelda Williams, Phoenix
President, AMWUA Board of Directors

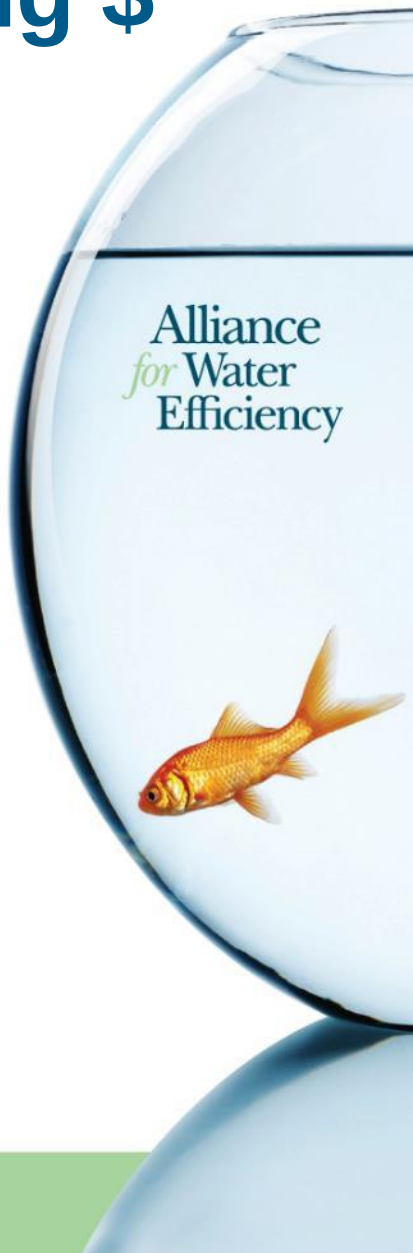
Financing Water Conservation

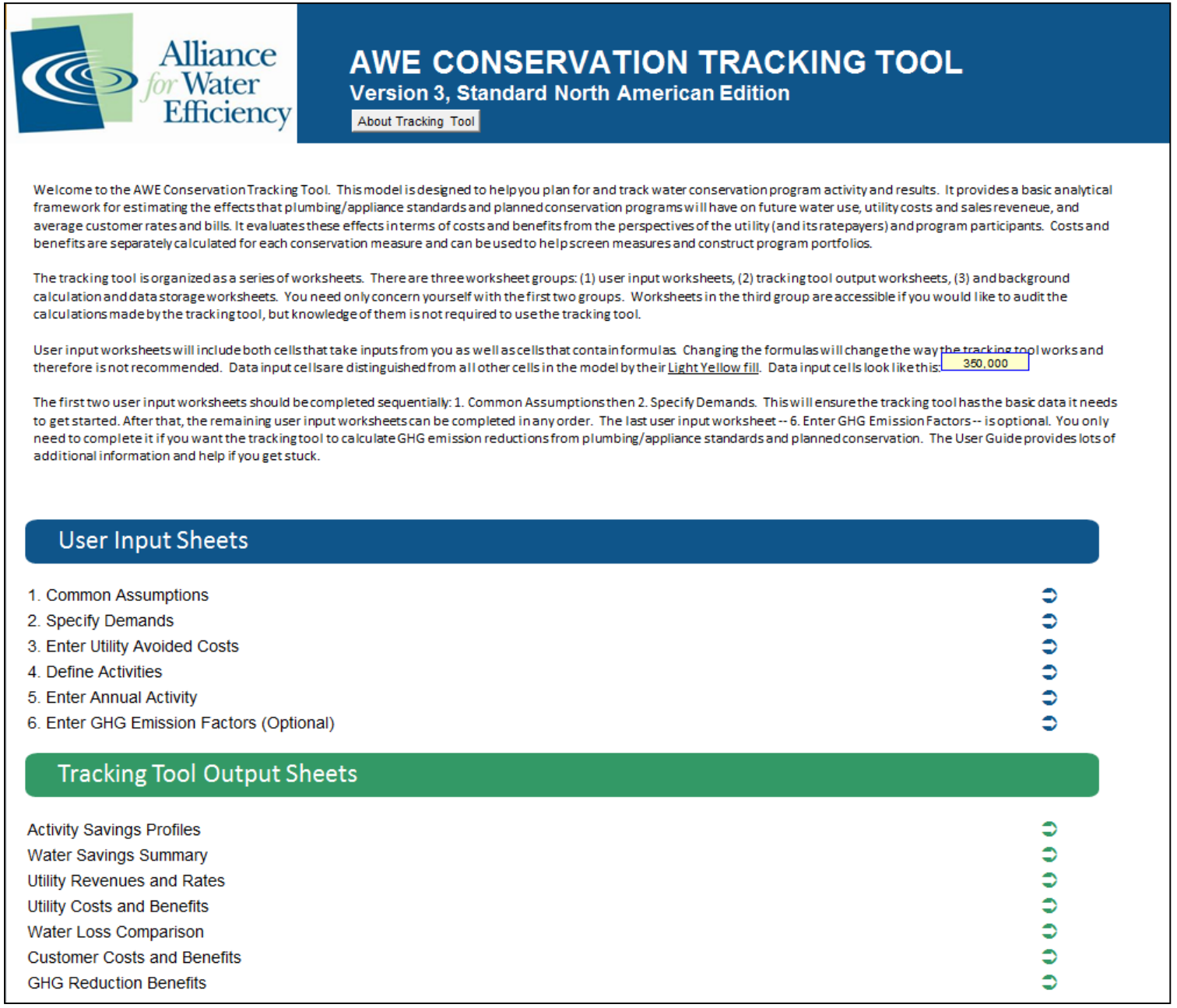
- Water utilities cannot debt finance water conservation programs as part of their capital improvement programs
- We used to be able to do this
- Problem is definitional standards issued by the Government Accounting Standards Board (GASB)
- Unless the “asset” being debt financed is owned or controlled by the water utility (such as a meter or a pressure valve) the “asset” must be paid for with current year operating funds



Fund with Capital Not Operating $

- Funding through the utility operating budget is absolutely the worst way to finance a long-term benefit program like water conservation
- You would never consider paying for a water supply source all at once in the first year
- For extremely large utilities this doesn't have much impact, as their operating budgets are large
- But for small to medium utilities it is a huge impediment
- And it will cause the need for rate hikes





Tracking Tool Navigation Worksheet

AWE CONSERVATION TRACKING TOOL: UTILITY REVENUES & RATES WORKSHEET

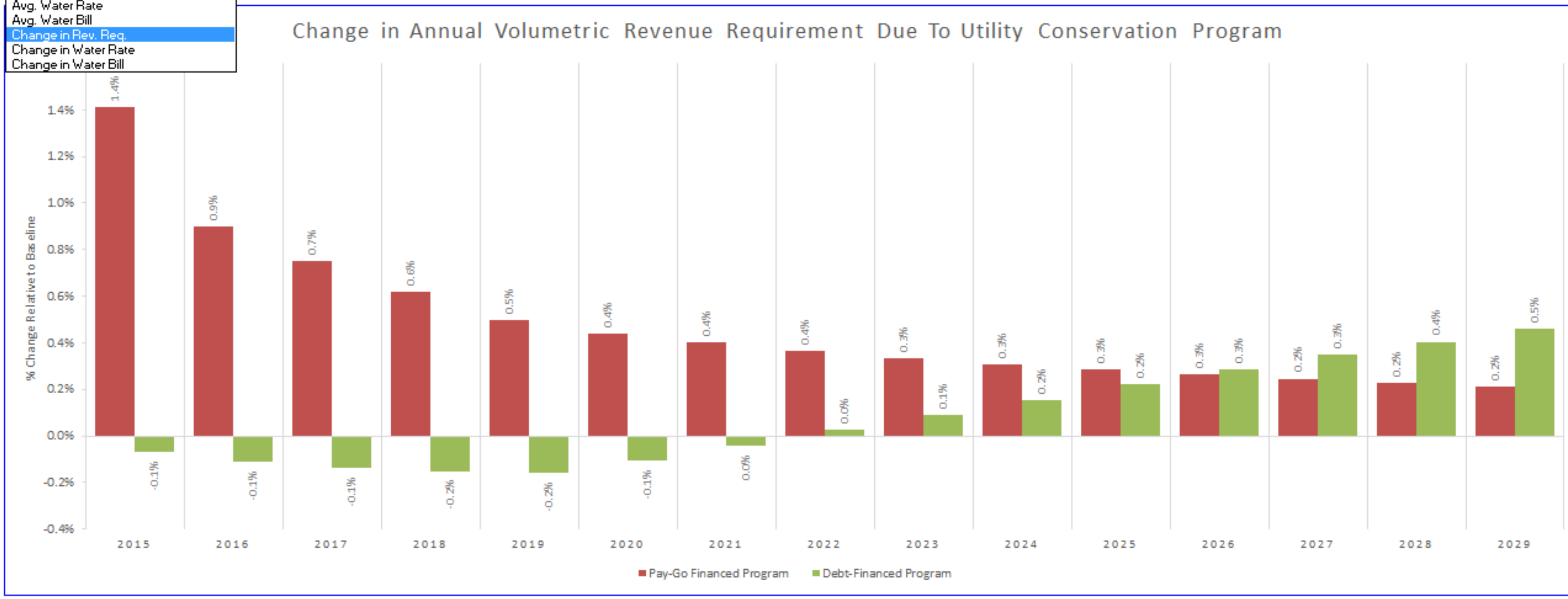
Review revenue requirement and rate impacts: This worksheet calculates the impact of planned conservation on annual revenue requirement, average rates, and average bills. It assumes the volumetric revenues generated by the baseline demand and rates forecasts correspond to the utility's volumetric revenue requirement. It then adjusts forecasted annual water sales and revenue requirement using the water savings, conservation program cost, and utility avoided cost estimates calculated earlier. The adjusted revenue requirement equals the baseline revenue requirement plus annual conservation program cost minus annual avoided water supply cost. The adjusted average volumetric rate equals adjusted revenue requirement divided by adjusted annual water sales. The adjusted average monthly volumetric bill equals adjusted revenue requirement divided by number of accounts divided by 12. Calculations are done for two alternative financing strategies for planned conservation. The first strategy treats planned conservation as an operating expense. The model assumes planned conservation is paid for in the year it occurs (Pay-Go financed). The second strategy treats planned conservation as a capital expense. The model assumes planned conservation is debt financed. You can set the debt financing term using the drop-down list.

Select Chart to View

Change in Rev. Req.

- Revenue Requirement
- Avg. Water Rate
- Avg. Water Bill
- Change in Rev. Req.
- Change in Water Rate
- Change in Water Bill

Debt Financing Term (Yrs): 15 | Years to Display in Chart: 15 | Chart Explanation



Baseline Volumetric Revenue Requirement, Average Rate, & Average Bill

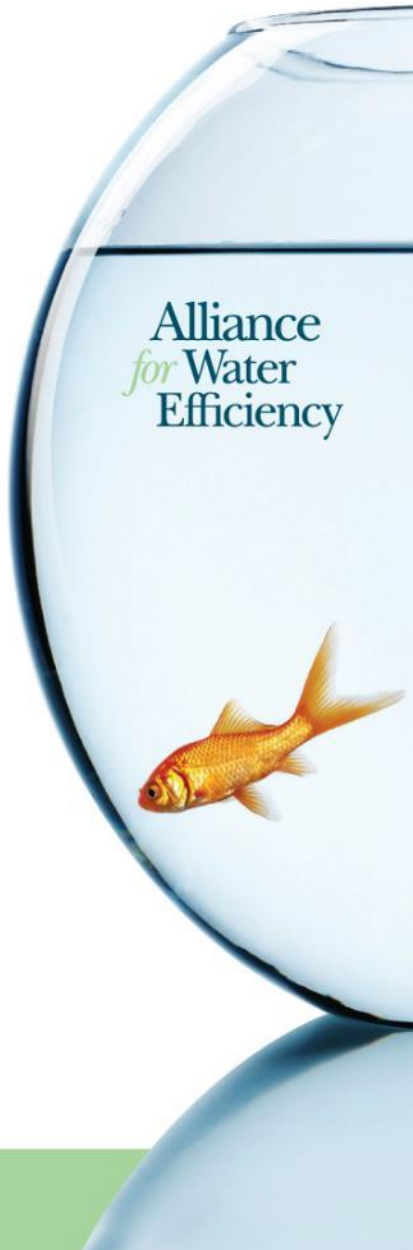
Baseline Water Sales Forecast (from 2. Specify Demands)

Customer Class	Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Single Family	AF	43,779	43,800	43,827	43,851	43,880	43,913	44,069	44,229	44,393	44,560	44,731	45,024	45,321
Multi Family	AF	3,324	3,309	3,295	3,281	3,268	3,257	3,254	3,252	3,250	3,250	3,250	3,259	3,269
CII	AF	13,458	13,481	13,504	13,528	13,553	13,578	13,641	13,705	13,769	13,833	13,898	14,000	14,103
Irrigation	AF	6,729	6,748	6,767	6,787	6,806	6,825	6,864	6,902	6,940	6,979	7,017	7,075	7,133
Not in use	AF	0	0	0	0	0	0	0	0	0	0	0	0	0
Not in use	AF	0	0	0	0	0	0	0	0	0	0	0	0	0
Not in use	AF	0	0	0	0	0	0	0	0	0	0	0	0	0
Not in use	AF	0	0	0	0	0	0	0	0	0	0	0	0	0
Not in use	AF	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	AF	**67,289**	**67,338**	**67,394**	**67,447**	**67,507**	**67,572**	**67,827**	**68,087**	**68,352**	**68,622**	**68,896**	**69,359**	**69,826**

Activity Savings Profiles | Water Savings Summary | **Utility Revenues and Rates** | Utility Costs and Benefits | Water Loss Comparison | Customer Costs and Benefits

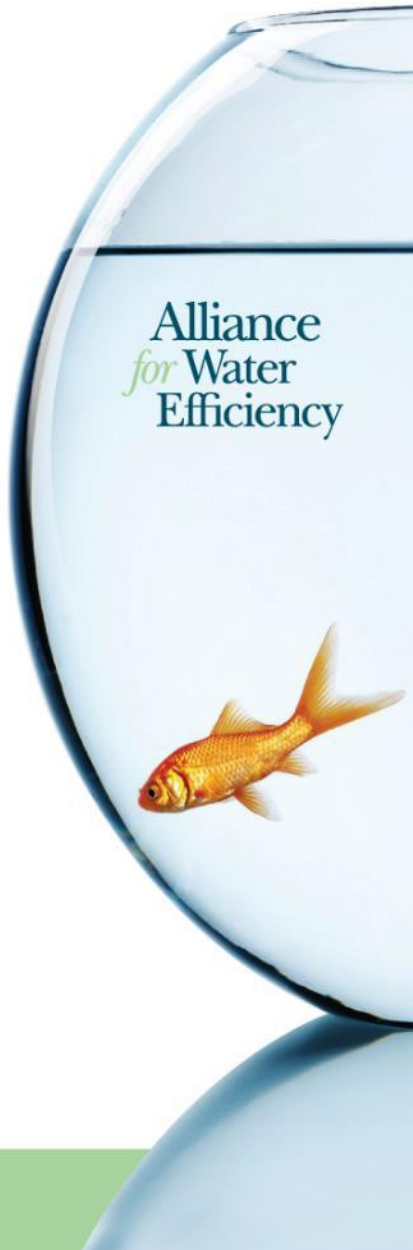
A Solution?

- Debt-financing is the smart way to fund long-term benefit water conservation programs
- Otherwise, conservation programs will shrink in size to what is affordable from a tight annual operating budget – a budget which is also shrinking due to reduced sales revenues
- Upfront operational spending plus resulting sales reductions means needed rate increases
- Conservation programs are downsized or eliminated as a result



GASB

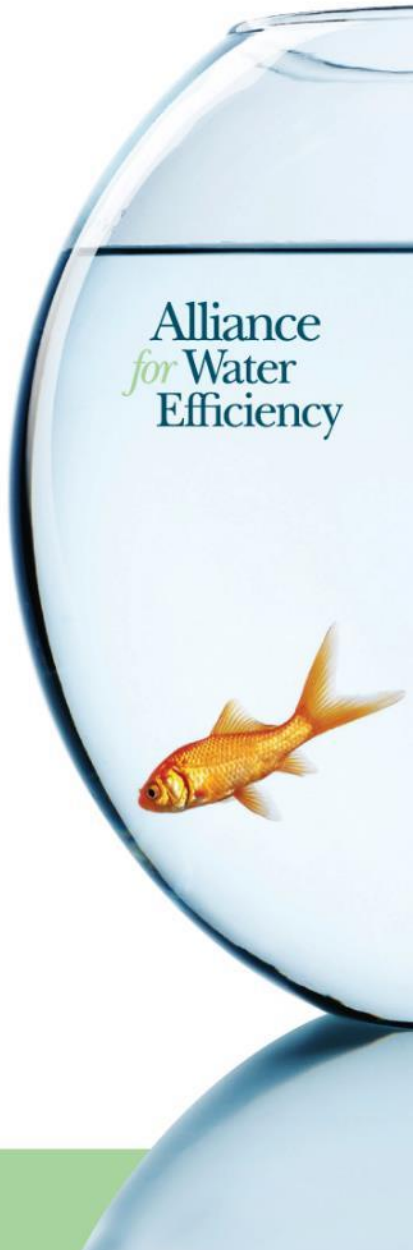
- Conservation programs and financing can be encouraged under GASB rules if the benefits could be treated as “assets”
- GASB defines an asset as a “resource with present service capacity that the government presently controls”
- Most water conservation projects do not reflect “control” in a traditional sense, and therefore are not treated by water utility CFO’s as assets that may be capitalized



How to Fix This?

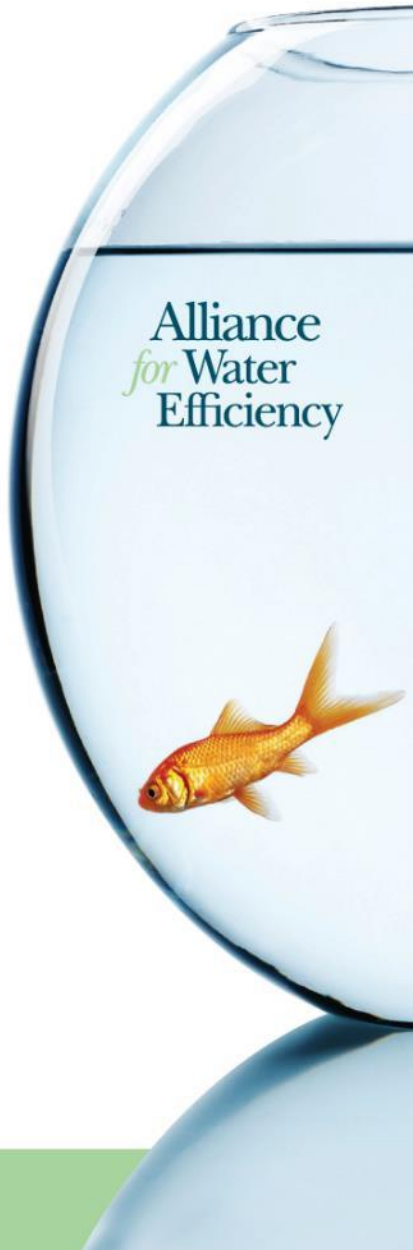
- Partnership with Water Now Alliance and CERES
- White paper being developed
- Two options for fixing this:

1. GASB guidance provides that “a regulated business-type activity should capitalize all or part of an incurred cost that otherwise would be charged to expense” under certain criteria, which opens up the ability to treat certain water conservation program costs as “regulatory assets.”



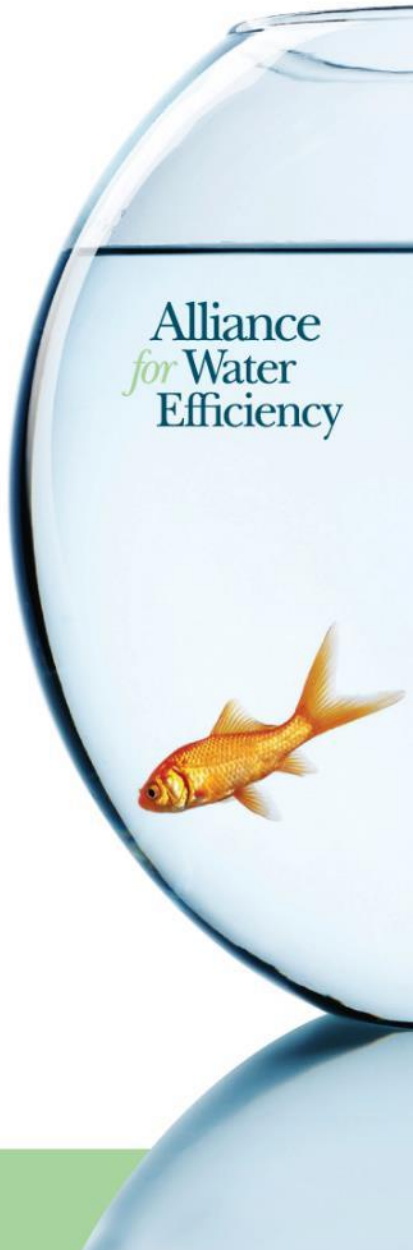
Another Option: Legal Control

- For green infrastructure or cash-for-grass programs, use easements and real property leases to limit future changes to the relevant property
- Example: 17,000 easements have been issued by the Southern Nevada Water Authority for cash for grass rebates; the program is debt-financed
- For water efficient appliances or grey-water systems, retain full ownership through personal property leases or an interest in the asset with a security filing



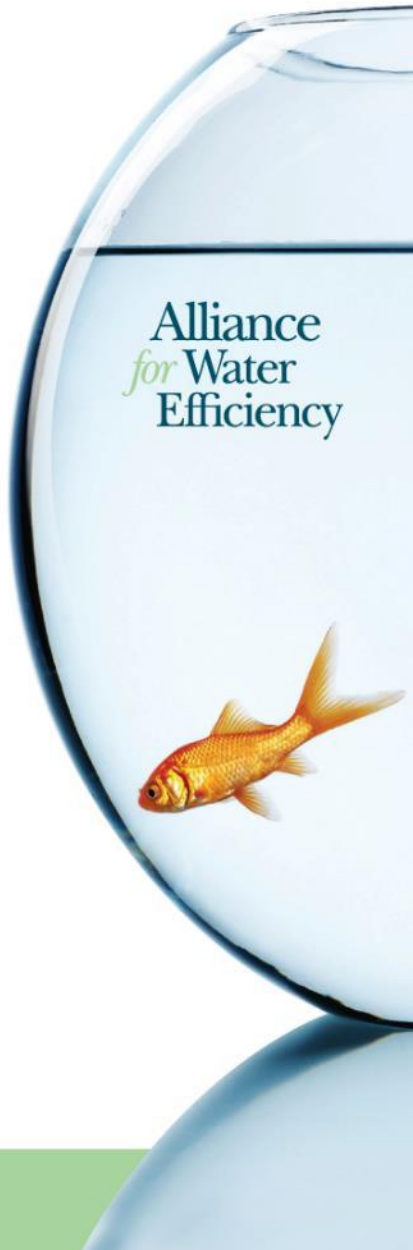
Moving Forward

1. Work with Government Finance Officer Association on recommendations for addressing these issues
2. Seek formal concurrence on the solutions with GASB officials
3. Develop specific guidance for nervous water utility CFOs
4. Enable once again debt financing of conservation and green infrastructure

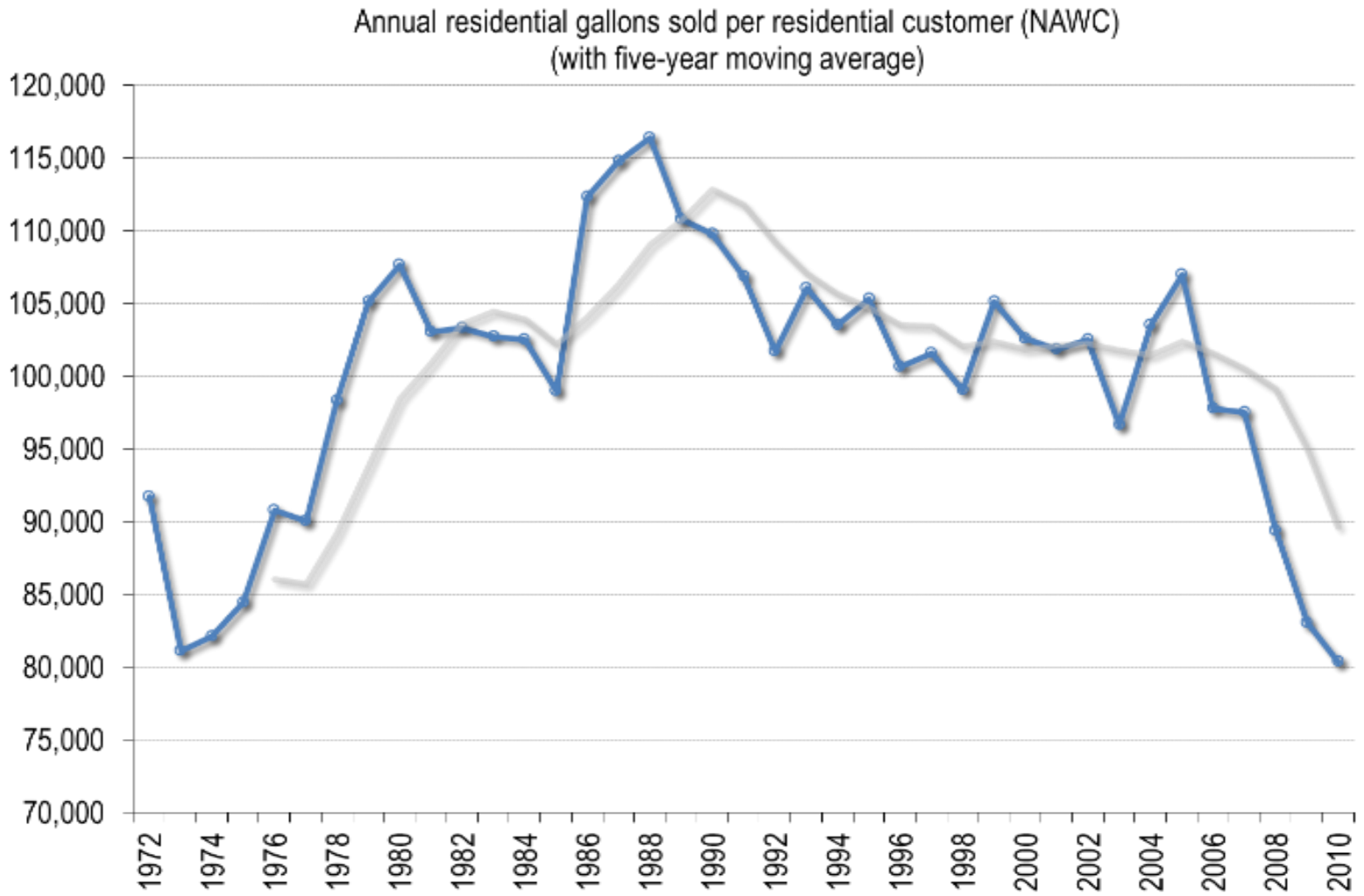


Solving the Rates Dilemma

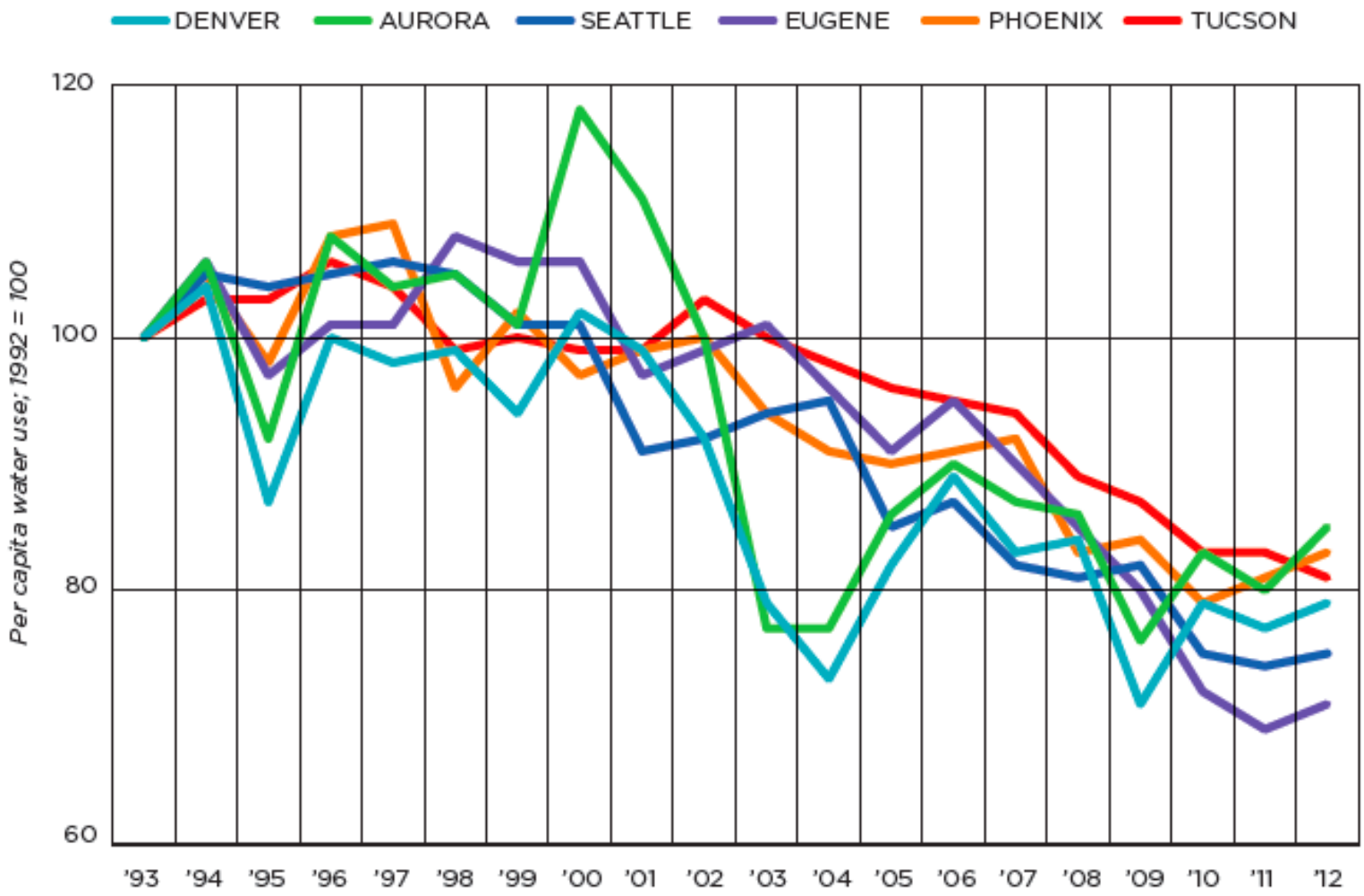
- Biggest problem we have right now
- There should be no “conservation conundrum”
- If we design rates correctly, we can incentivize conservation without sacrificing revenue stability
- AWE launched Financing Sustainable Water initiative to help utilities with this problem



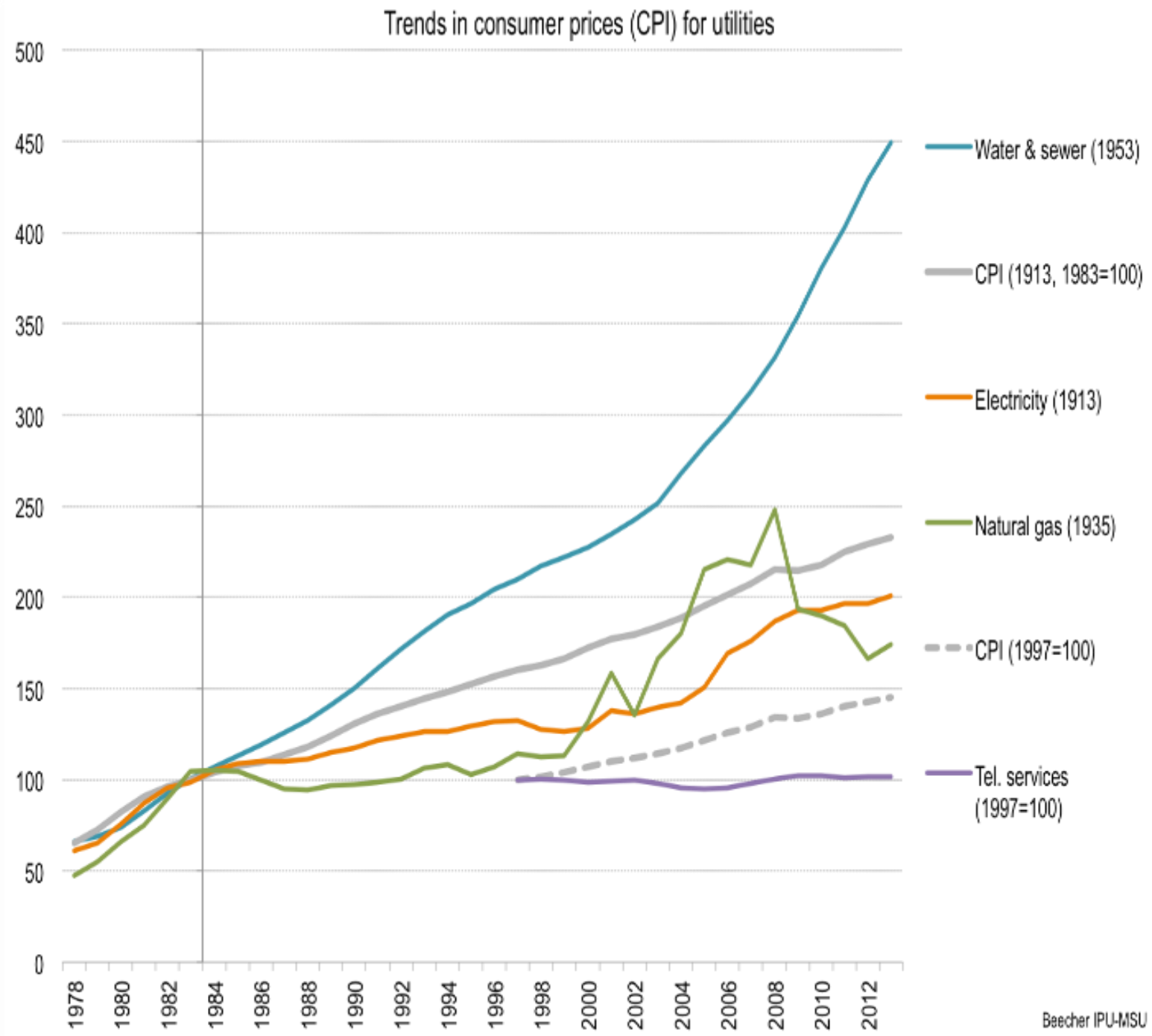
Residential Water Sales



Water usage in western U.S. cities (Frost, 2013)



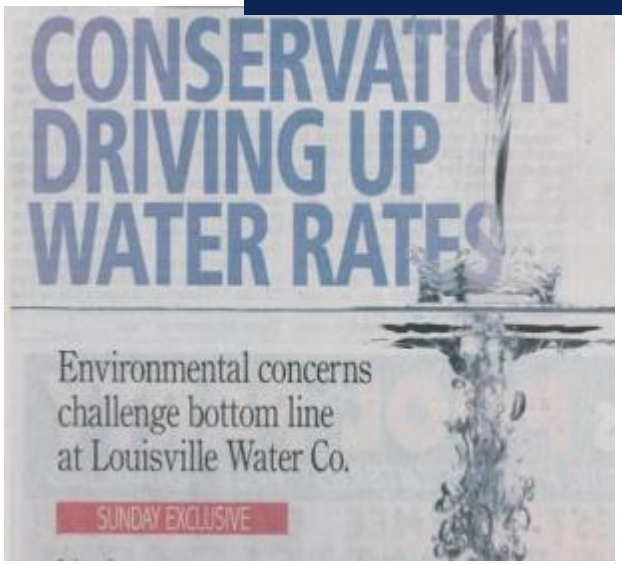
SOURCES: Denver Water, Aurora Water, Seattle Public Utilities, Eugene Water and Electric Board, Phoenix Water Service, Tucson Water


Trends in consumer prices (CPI) for utilities
500
450
400
350
300
250
200
150
100
50
0
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
Water & sewer (1953)
CPI (1913, 1983=100)
Electricity (1913)
Natural gas (1935)
CPI (1997=100)
Tel. services (1997=100)
Beecher IPU-MSU

The Political Reality

- We don't like to revise our rates
- It is politically unpopular, so we change rates as little as possible
- The inevitable inflationary increase is postponed until it is a crisis, much less increases in other costs
- Conservation is often blamed for financial challenges – even when there are no active conservation programs in place
- This sends the wrong messag[illegible] to consumers
- Local Officials are in a bind

courier-journal.com
A GANNETT COMPANY



THE GLOBE AND MAIL

Reduced water use drains Toronto's funds for infrastructure upgrades

Raleigh Public Record

Raleigh's Water Conundrum: Conservation v. Rates

U.S. | THE TEXAS TRIBUNE

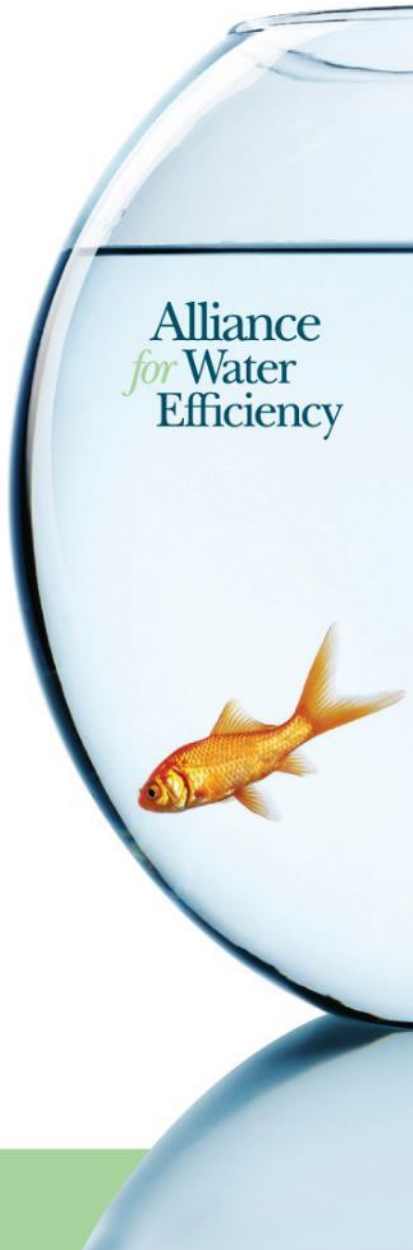
Texans Answer Call to Save Water, Only to Face Higher Rates

By NEENA SATIJA FEB. 8, 2014

"The losses have prompted credit ratings agencies to look closer at the finances of public utilities in Texas. One agency, Fitch, downgraded some of Fort Worth's water and sewer debt last year, and last week the firm downgraded the debt of the city's wholesale water supplier. Fort Worth lost $11 million last year because of water conservation."

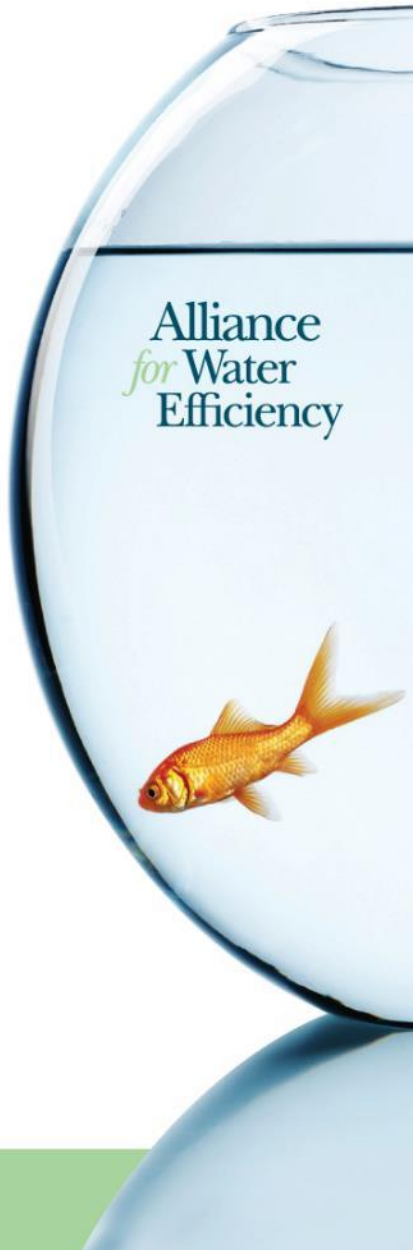
What Really Affects Sales?

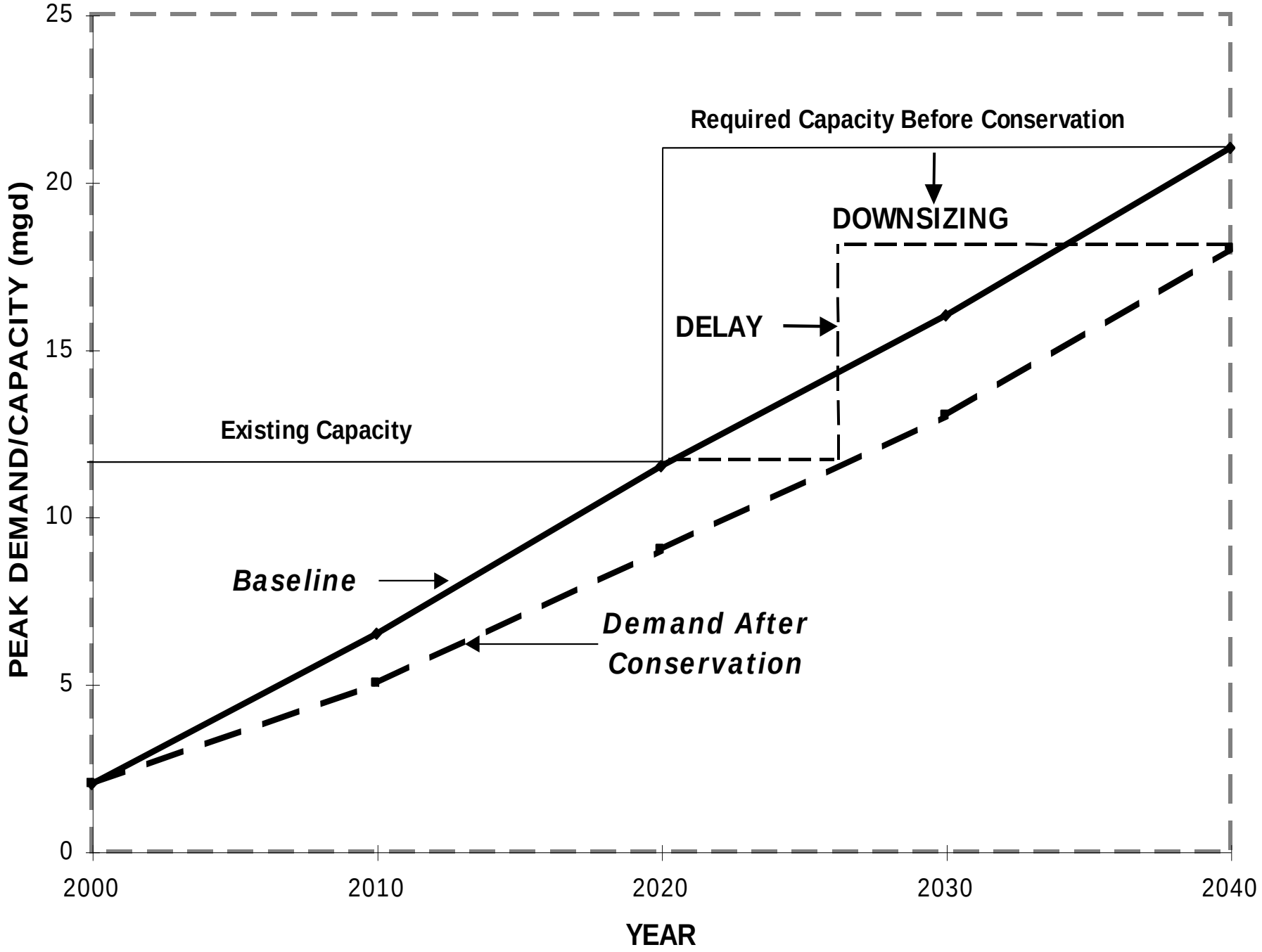
- Reduced demand from:
  - ✓ efficient fixture replacement under the plumbing and appliance codes
  - ✓ active conservation programs
  - ✓ the recession: industrial shift layoffs, home foreclosures
- Reduced peak demand in wet years
- Increased infrastructure costs
- Rise in other fixed costs
- Continuing Inflation



Conservation Is a Benefit

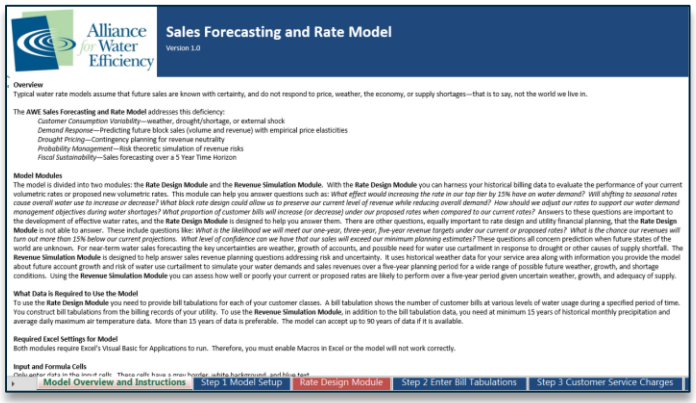
- It is a long-term cost reducer to the utility
- Revenue loss is often due to other drivers
- Every gallon saved is water that does not have to be pumped, treated and delivered
- Conservation is an investment and short-term effects must be planned for
- Reduced utility costs generally mean reduced customer rates in the long-term due to avoided infrastructure capacity increases




25
20
15
10
5
0
PEAK DEMAND/CAPACITY (mgd)
Required Capacity Before Conservation
DOWNSIZING
DELAY
Existing Capacity
Baseline
Demand After Conservation
2000
2010
2020
2030
2040
YEAR

Financing Sustainable Water

- **Building Better Rates in an Uncertain World:** A Handbook to explain key concepts, provide case studies and implementation advice
- **AWE Sales Forecasting and Rate Model:** An innovative, user-friendly tool to model scenarios, solve for flaws, and incorporate uncertainty into rate making
- **FinancingSustainableWater.org:** Web-based resources to convene the latest research and information in one location



Compare Bill Impacts

Affordability Indicator

Avg and median bill impacts

3. Bill impacts of Proposed rates

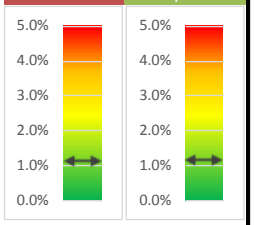
Under your Proposed rates, the volume charge may go up for some customers and down or stay the same for others. The Bill Impacts Table shows the percentage of bills that will go the same, or go up -- and by how much. Charts showing the distribution of bill impacts for each customer class are provided on the Bill Impacts worksheet.

% Change in Average and Median Annual Water Service Cost by Customer Class

Customer Class	Average Annual Water Service Cost			Median Annual Water Service Cost		
	Current	Proposed	% Change	Current	Proposed	% Change
Single Family	$777	$804	3.4%	$650	$672	3.3%
Multi Family	$4,254	$4,294	0.9%	$1,930	$1,942	0.6%
CII	$3,323	$3,382	1.8%	$1,481	$1,504	1.5%
Landscape	$5,599	$6,007	7.3%	$2,503	$2,720	8.7%
Not in use						
Not in use						

Affordability index equals the median annual water cost for the primary residential customer class divided by median household income.

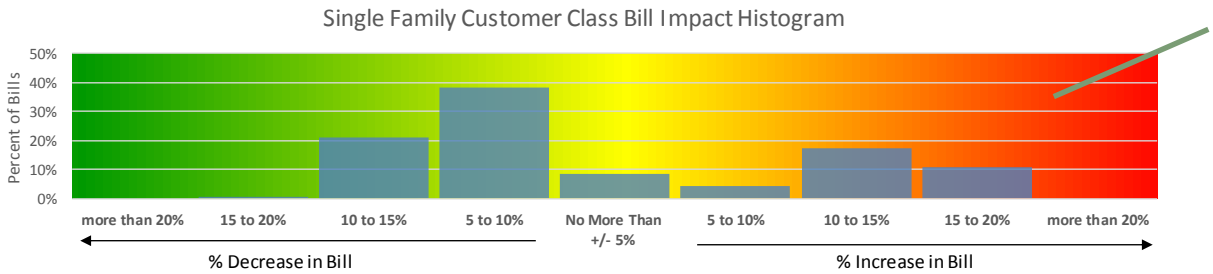
Affordability Index



Bill Impacts Table

Customer Class	% of bills decreasing by				No More Than	% of bills increasing by			
	more than 20%	15 to 20%	10 to 15%	5 to 10%	+/- 5%	5 to 10%	10 to 15%	15 to 20%	more than 20%
Single Family	0%	0%	21%	38%	9%	4%	17%	11%	0%
Multi Family	0%	1%	38%	25%	4%	4%	18%	12%	0%
CII	0%	0%	25%	20%	28%	7%	9%	10%	0%
Landscape	0%	0%	26%	12%	33%	2%	6%	20%	0%
Not in use									
Not in use									

Bill Impact Histograms



Assess Customer Affordability

- Always an issue with consumers and regulators
- Need to understand the depth of the issue in your community
- See AWE Sales Forecasting and Rate Model for an example
- Other resources: UNC EFC Water Rates Affordability Assessment Tool

% Change in Average and Median Annual Water Service Cost by Customer Class

Customer Class	Average Annual Water Service Cost			Median Annual Water Service Cost		
	Current	Proposed	% Change	Current	Proposed	% Change
Single Family	$777	$805	3.5%	$650	$672	3.3%
Multi Family	$4,254	$4,393	3.2%	$1,930	$1,994	3.3%
CII	$3,323	$3,464	4.3%	$1,481	$1,556	5.0%
Landscape	$5,599	$6,094	8.8%	$2,503	$2,771	10.7%
Not in use						
Not in use						

Affordability index equals the median annual water cost for the primary residential customer class divided by median household income.

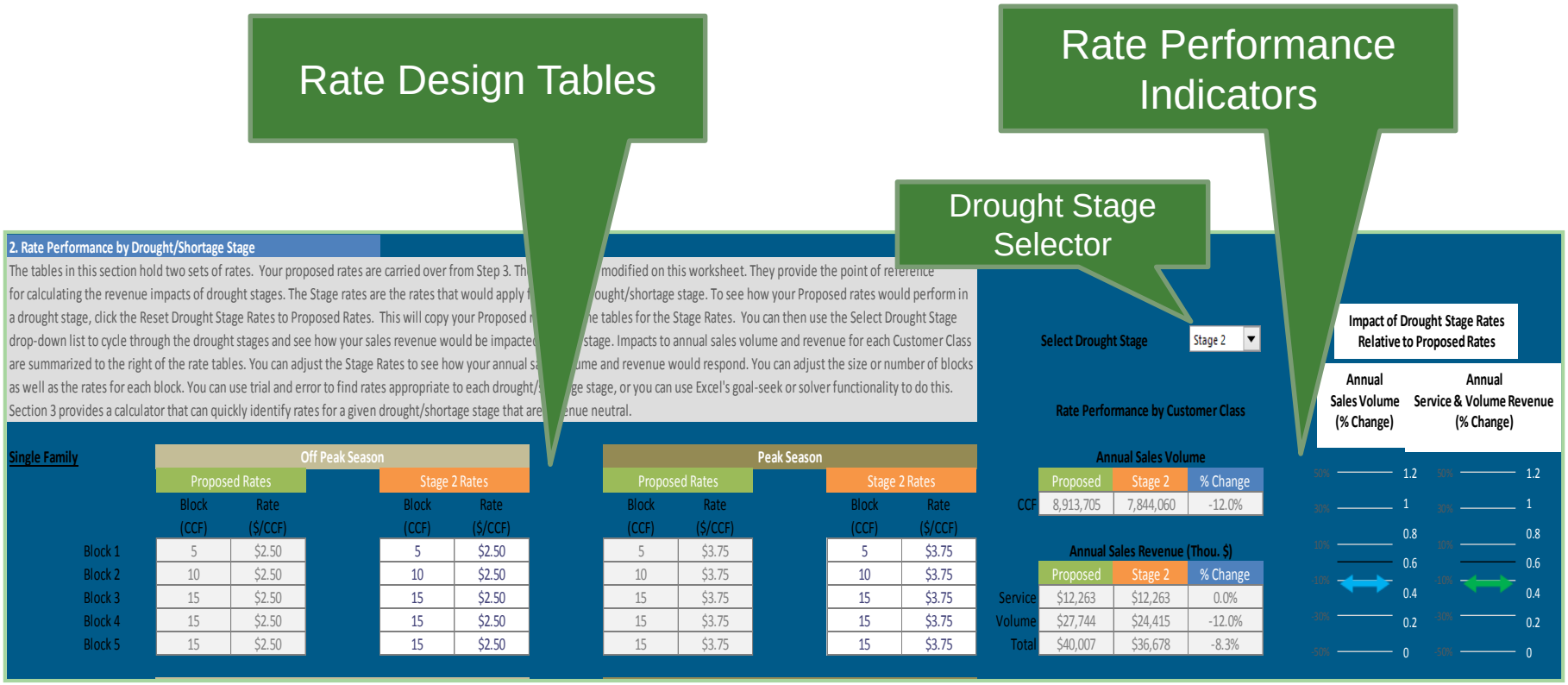
Affordability Index

Bill Impacts Table

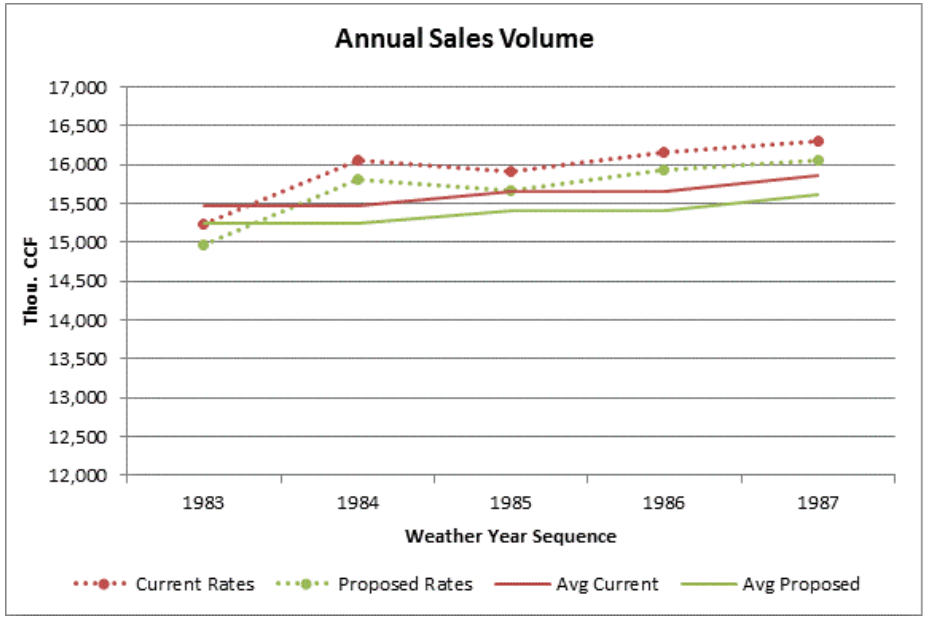
Customer Class	% of bills decreasing by				No More Than	% of bills increasing by			
	more than 20%	15 to 20%	10 to 15%	5 to 10%	+/- 5%	5 to 10%	10 to 15%	15 to 20%	more than 20%
Single Family	0%	0%	21%	38%	9%	4%	17%	11%	0%
Multi Family	0%	0%	20%	26%	19%	1%	6%	28%	0%
CII	0%	0%	15%	14%	23%	15%	14%	18%	0%
Landscape	0%	0%	19%	10%	13%	28%	4%	26%	0%
Not in use									
Not in use									

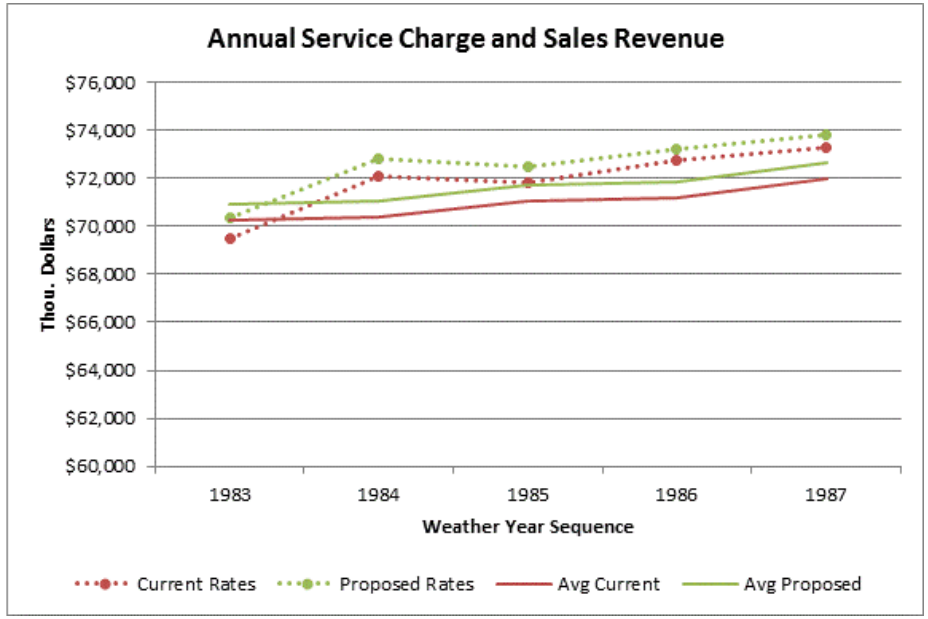
Multi Family Customer Class Bill Impact Histogram

Design Drought Rates



How Certain are Future Sales?

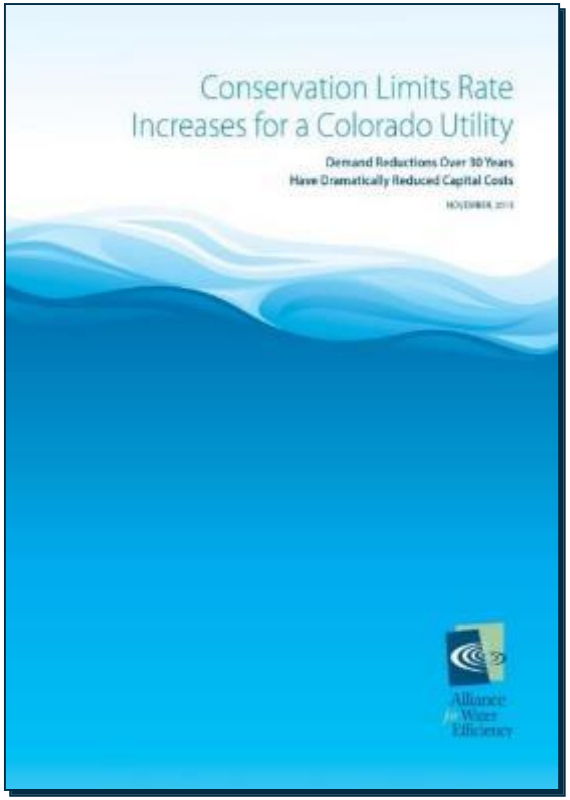




Examine Probabilities

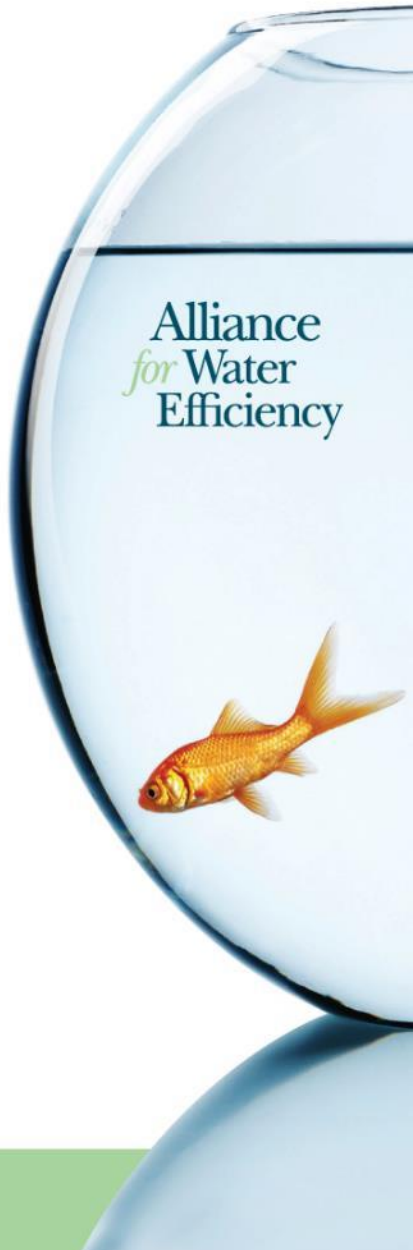
Westminster's Story

- Citizens complained about being asked to conserve when rates would just go up anyway
- Westminster reviewed marginal costs for future infrastructure if conservation had not been done
- Since 1980 conservation has saved residents and businesses 80% in tap fees and 91% in rates compared to what they would have been without conservation



Summary Concepts

- Revenue instability is in ALL rate structures
- Efficiency objectives should be designed in
- One size does not fit all
- Better rate analysis requires good data
- Embracing uncertainty enables better decisions
- Sound financial policies can support fiscal sustainability
- Customer understanding and empowerment is key



Rates. Revenue. Resources.

Financing Sustainable Water is an initiative of the Alliance for Water Efficiency that was created to provide practical information to guide utilities from development through implementation of rate structures that balance revenue management, resource efficiency and fiscal sustainability. Headquartered in Chicago, the Alliance serves as a North American advocate for water efficient products and programs, and provides information and assistance on water conservation efforts. Learn More

WATER MANAGERS
Sustainable financial management guidance

ELECTED OFFICIALS
Set your water utility up for success

CONCERNED CITIZENS
Learn how you can help create a sustainable water future

MEDIA
Get key facts on today's water challenges

RATES HANDBOOK
Building Better Rates for an Uncertain World

RATE MODEL
Sales Forecasting and Rate Model

RECENT NEWS

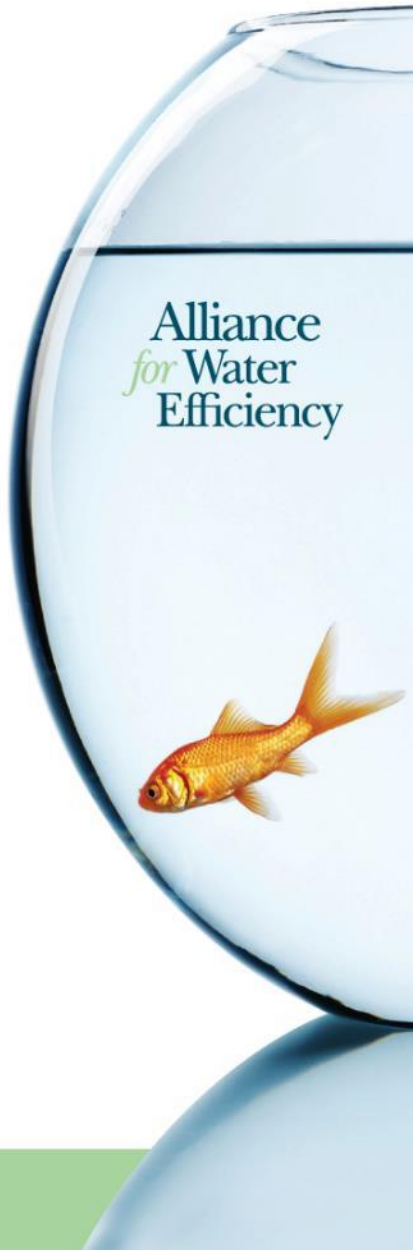
- Water or Water Service?
- Demand Forecasting 101

FEATURED RESOURCES

- Case Study
  Budget-based Rates
- Case Study Hover Example
  New case study title here

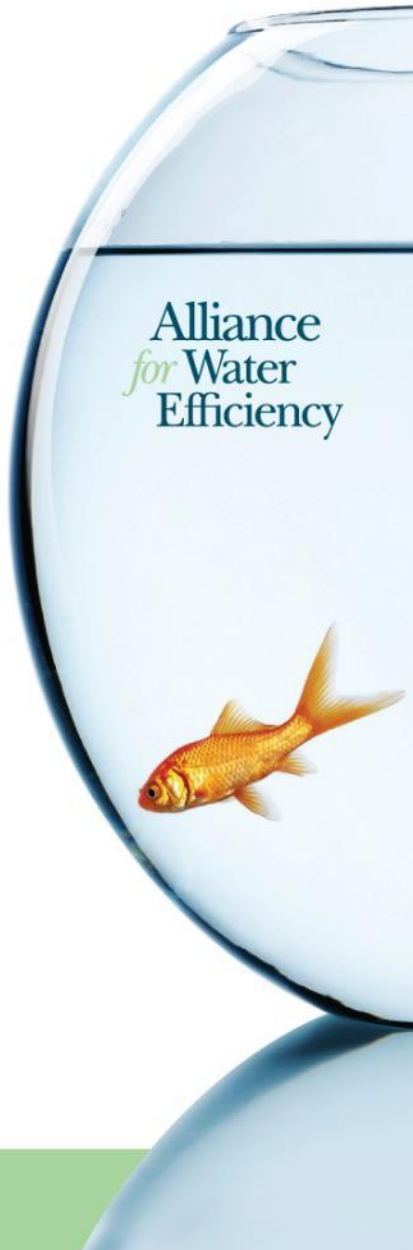
AWE's Role in National Issues

- Help water conservation programs thrive for our members
- Create opportunities for policy advocacy on enact solutions to these two barriers
- Build coalitions with our membership (such as in Congress)
- Partner with other organizations
- Train our members in implementing the solutions crafted



Join the Leader Board

- AWWA Water Conservation Standard G-480 for water utilities
- AWE willing to measure and report utility compliance for AWE members
- “Leader Board” on AWE website
- Georgia and Oregon so far
- No Texas utilities!



Alliance for Water Efficiency

Promoting the Efficient and Sustainable Use of Water

Join the AWE Mailing List

The Alliance for Water Efficiency maintains a mailing list to keep in contact with its members and all those interested in the latest happenings in water conservation. To receive updates on all AWE activities, the efforts of like-minded organizations, and up-to-date news on all things related to water efficiency, click here to sign up for the mailing list.

CLICK To Join Our E-Mail List HERE

Senate Joins the House in Authorizing a WaterSense® Program at U.S. EPA

The U.S. Senate has joined the House in approving a WaterSense program at the Environmental Protection Agency. Senate approval of a broad, bipartisan energy efficiency bill included an amendment creating a WaterSense program sponsored by Sen. Tom Udall, D-NM, and five other senators. Learn more here.

PERC Releases Phase 2.1 of Report

Plumbing Efficiency Research Coalition

The Plumbing Efficiency Research Coalition (PERC) is pleased to announce the publication of the Phase 2.1 supplemental report on the drainline transport of solid waste in building drains. The *Drainline Transport of Solid Waste in Buildings – Phase 2.0* was originally released in September of 2015. The PERC 2.1 findings appear as a new appendix to the PERC 2.0 report, and the combined reports are available for download free of charge on the PERC website. Learn more here.

Residential End Uses of Water Study (2016, 1999)

Water Research

The Residential End Uses of Water, Version 2 is the much-

Calendar of Events

5/20/2016	River Rally 2016
5/25/2016	AWE and EPA WaterSense Webinar
6/1/2016	IWA Efficient2017 Call for Abstracts Deadline
6/14/2016	Water Summit 2016
6/19/2016	AWWA Communication, Educ., & Legislation Committee Meeting

How Much Water Do You Use?

Click Here to Learn More

Important Information

- Water Efficiency Watch Newsletter - May 2016
- AWE Business Guide
- AWE Webinar Page
- Jobs, Internships, and RFP/RFQ Board
- AWE Water Star Award
- AWE Reports
- Related Publications
- Water: What You Pay For
- AWE Water Conservation Tracking Tool
- Financing Sustainable Water
- Home-Water-Works Water Calculator

Alliance *for* Water Efficiency

A Voice and a Platform

Promoting the efficient and sustainable use of water

www.a4we.org

(773) 360-5100

CHICAGO