Taking Stock: How Does Texas Measure Up in the 2017 AWE State Scorecard?

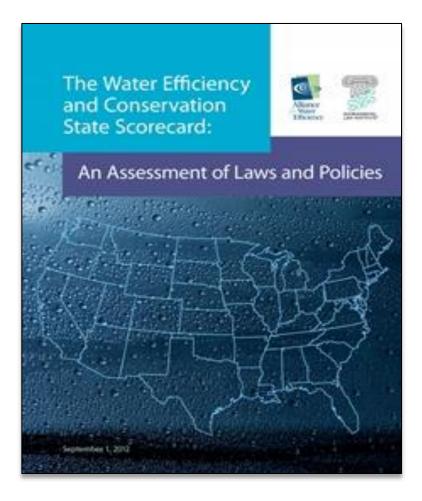
Mary Ann Dickinson President and CEO Alliance for Water Efficiency

Alliance for Water Efficiency

A VOICE AND A PLATFORM PROMOTING THE EFFICIENT AND SUSTAINABLE USE OF WATER

State Laws and Policies Review

- In 2012, the AWE State Scorecard Report inventoried state laws and regulations regarding water efficiency
- Funded by the Turner Foundation
- No state earned an "A"
- Overall the US earned a "C"
- Texas and California earned an A-



Changes to the 2017 Scorecard

- Greatly expanded the survey!
- Example: Water loss control question in 2012 vs. 2017
- New Climate resiliency preparedness section
 - With focus on implications for suppliers/utilities

- 8. Does a state statute(s)/regulation(s) limit water loss in utility distribution systems?
 - 🗆 Yes 🛛 🗆 No
 - a. If yes, is it a:
 - 🗖 Requirement
 - Requirement only in order to receive state funding
 - Voluntary target
 - b. To what water suppliers do the laws apply?

Click here to enter answer

c. If there is a numeric limit on leakage or a formula for calculating acceptable levels of leakage, what is it?

Click here to enter answer

- d. Is submitting audit information required?
 - 🗆 Yes 🛛 🗆 No
 - i. If yes, at what frequency must it be submitted?
 - Click here to enter answer
 - ii. If yes, is audit data validation required?

Click here to enter answer

e. Is leak detection required?

🗆 Yes 📃 No

f. Is leak correction required?

🗆 Yes 📃 No

g. Where in state law are these details located?

Click here to enter answer

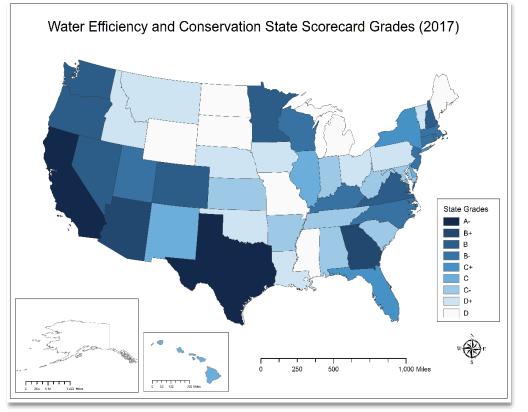
Efficiency and Conservation Grades

Table 2 - Change in Efficiency and Conservation Grades

	EFFICIENCY AND CONSERVATION GRADE CHANGES*						
STATE	2017 GRADE	2012 GRADE	STATE	2017 GRADE	2012 GRADE		
Alabama 个	C-	D	Montana 个	D+	D		
Alaska	D	D	Nebraska 个	D+	D		
Arizona	B+	В+	Nevada 个	В	В-		
Arkansas	C-	C-	New Hampshire ↑	В	В-		
California	A-	A-	New Jersey	В-	В-		
Colorado 个	В	В-	New Mexico	с	C+		
Connecticut 个	В-	C+	New York 个	C+	C+		
Delaware 个	с	C-	North Carolina ↑	В-	C+		
Florida 个	C+	с	North Dakota	D	D		
Georgia 个	B+	В	Ohio 个	D+	D		
Hawaii 个	С	D	Oklahoma 个	D+	D		
Idaho 🛧	D+	D	Oregon 个	В	В-		
Illinois 个	С	C-	Pennsylvania 个	D+	D		
Indiana	C-	C-	Rhode Island	В-	В-		
lowa	D+	С	South Carolina	C-	C-		
Kansas	C-	с	South Dakota	D	D		
Kentucky 个	B-	C+	Tennessee 个	C-	D		
Louisiana 个	D+	D	Texas	A-	A-		
Maine	D	D	Utah 个	В-	C+		
Maryland	C-	с	Vermont	D+	C-		
Massachusetts 个	В-	C+	Virginia 个	В	В-		
Michigan	D	D	Washington	В	В-		
Minnesota 个	В	C+	West Virginia ↑	C-	D		
Mississippi	D	D	Wisconsin	В-	В-		
Missouri	D	D	Wyoming	D	D		

- Aligned grading scale for easier cross-year comparison
- Grades improved in 27 states
- 7 rose by more than 1/3 step
- 6 states were downgraded

Efficiency and Conservation Grades



- Some geographic trends
- Little movement in new laws for fixtures and appliances
- Gains in water loss control initiatives (uptick M36 Use)
- Gains in drought planning (esp. southeast)
- Changes and overall decrease in non-SRF funding support
- More technical assistance
- Volumetric billing improved in 3 states

Texas Summary Review for 2017

Topic Area	Exemplary Laws/Resources	Potential for Improvement		
Fixtures/Appliances	More stringent than federal standards for toilets and urinals	Expand to other appliances/fixtures		
Building Codes	Conservation elements in codes for state buildings	Could expand to more structures		
Water Loss		Define acceptable leakage volume, require validation		
Conditional Use Permits		Use stakeholder input, evaluate plan for sufficiency, condition the permit on the plan		
Drought Planning	Drought contingency plans for public suppliers	Evaluate the plan		
General Conservation Plans		Use stakeholder input, require implementation action		
Non-SRF Funding Options	SWIFT mechanism (unique in the U.S.)			
Technical Assistance	Offers direct assistance and resources	Can always offer more!		
Meters, Billing and Rates	Metered customer connections required, volumetric billing, and rates that do not "encourage the excessive use of water30 TEX. ADMIN. CODE § 288.2(a)(1)."			

Texas: Still work to do!

- Texas' population is expected to grow from 29.5 million to 51 million (70%+) between 2020 and 2070.
- 50%+ of that growth is expected to occur within Regions C and H (Dallas and Houston).
- Water demand is projected to increase by 17%.

What does this mean?

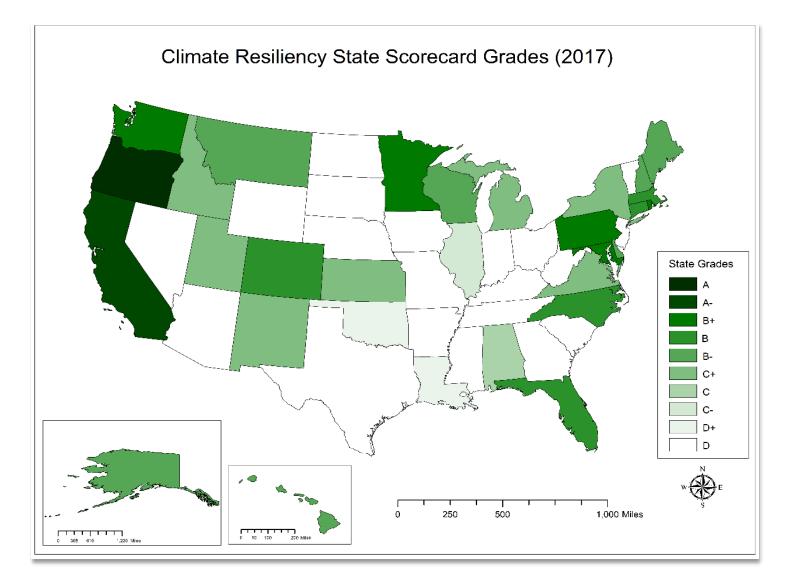
- Texas is a leader, but needs to continue advancing efficiency and conservation
- It could beat CA in the 2022 Scorecard!

	EFFICIENCY AND CONSERVATION				
STATE	POINTS	GRADE			
California	52.5	A-			
Texas	51.5	A-			

Climate Resiliency Grades

- Considered climate preparedness regardless how called
- 6 states with plans require updates every 5 years or less
- 4 states have measurable goals or benchmarks
- Climate impact concerns varied
 - Three states had some kind of guidance or law requiring action on the part of water/wastewater services
- No discernable geographic distinction among states preparing for climate impacts

Climate Resiliency Grades



Texas Resiliency Summary Review

Topic Area	Exemplary Laws/Resources	Potential for Improvement			
Existence of a climate action, adaptation or resiliency plan OR laws providing legal authority regarding climate resiliency planning		Find avenues to be more overt in addressing the impacts of climate change			
Climate change-related actions required of the water and/or wastewater industry(s)		Explore requirements that will help these industries mitigate against climate change challenges—check out the report's Policy Highlight section for examples!			
Specific benchmarks or goals to measure progress toward water resource resiliency		Create defined benchmarks or goals that will enable the state to actively measure progress across years. Implementation strategies for resiliency planning would also be useful in measuring progress toward climate preparedness and the ability to mitigate against climate change related impacts			

Resiliency in Texas: Work to do!

- Drought, storms and other severe and unpredictable weather is likely to continue
- Need to do more to address the impacts of climate change on water resources, infrastructure -regardless of what is called or how those challenges are framed

The Washington Post

FEMA director says Harvey is probably the worst disaster in Texas history



The Washington Pos

Crippled water system, chemical plant blaze, vivid examples of Harvey's cascading effects

What Climate Change Means for Texas

Water Resources

Despite the increase in heavy storms, changing climate is likely to make water less available overall. As warmer temperatures increase evaporation and water use by plants, soils are likely to continue to

Drier soils will increase the need for farmers to irrigate their crops. but sufficient water might not be available. Approximately 14 percent of the farmland in Texas is irrigated; in the Panhandle and the plains to the south, most irrigation water is ground water from the High Plains Aquifer System. As a result, this aquifer is becoming depleted. Since the 1950s, the amount of water stored in the aquifer has declined by more than 50 percent in some parts of the state.

become drier. Average rainfall is likely to decrease during winter, spring, and summer. Seventy years from now, the longest period

without rain each year is likely to be at least three days longer than it is today. Increased evaporation and decreased rainfall are both likely to reduce the average flow of rivers and streams.

E&C and Climate Resiliency Grades

Table 1 - Summary of Efficiency and Conservation Grades and Climate Resiliency Grades

	EFFICIENCY AND CONSERVATION		CLIMATE RESILIENCY			EFFICIENCY AND CONSERVATION		CLIMATE RESILIENCY	
STATE	POINTS	GRADE	POINTS	GRADE	STATE	POINTS	GRADE	POINTS	GRADE
Alabama	10.5	C-	5	с	Montana	8	D+	11.5	В-
Alaska	2	D	10.5	В-	Nebraska	7	D+	0	D
Arizona	41.5	B+	0	D	Nevada	37.5	В	0	D
Arkansas	12.5	C-	0	D	New Hampshire	35.5	В	10.5	В-
California	52.5	A-	19	A-	New Jersey	29	В-	0	D
Colorado	32.5	В	13	В	New Mexico	16	С	8.5	C+
Connecticut	26	B-	12.5	В	New York	23.5	C+	8.5	C+
Delaware	16.5	С	11	В-	North Carolina	26	В-	13	В
Florida	24.5	C+	13.5	В	North Dakota	5	D	0	D
Georgia	40.5	B+	0	D	Ohio	9	D+	0	D
Hawaii	16	С	11.5	В-	Oklahoma	7	D+	.5	D+
Idaho	7	D+	9	C+	Oregon	37.5	В	21	A
Illinois	18	С	2.5	C-	Pennsylvania	6	D+	16	B+
Indiana	13	C-	0	D	Rhode Island	29.5	B-	16.5	B+
lowa	8.5	D+	0	D	South Carolina	12.5	C-	0	D
Kansas	10.5	C-	8.5	C+	South Dakota	5	D	0	D
Kentucky	30	В-	0	D	Tennessee	13	C-	0	D
Louisiana	9	D+	.5	D+	Texas	51.5	A-	0	D
Maine	4	D	11.5	В-	Utah	26	В-	8	C+
Maryland	14	C-	16	B+	Vermont	8.5	D+	0	D
Massachusetts	26.5	В-	13	В	Virginia	33.5	В	9.5	C+
Michigan	3	D	9	C+	Washington	35	В	16.5	B+
Minnesota	34	В	16	B+	West Virginia	12	C-	0	D
Mississippi	4	D	0	D	Wisconsin	27	В-	11	В-
Missouri	3	D	0	D	Wyoming	1	D	0	D

Only 11 states received some combination of "A"s and "B"s for both conservation and efficiency laws and climate resiliency plans and/or laws

Conclusions

- Overall, we see national improvement in most E&C topic areas from the survey, but:
 - There's still lots of work to do, especially around non-SRF funding options
- Texas is a leader in the country in E&C, and needs to continue leading the way!
- Texas also needs to begin addressing climate change related impacts more directly
 - Especially concerning how climate change impacts water supplies and water/waster systems

National Policy and Advocacy

- WaterSense[®] authorization
- Tax-free water conservation rebates
- Eliminating accounting barriers to efficiency investments
- Water/energy nexus research
- Standards and codes
- Testifying in Congress
- Assisting states with their legislative priorities on efficiency



SUBCOMITTEE HEARING: Nexus of Energy and Water for Sustainability Act of 2014

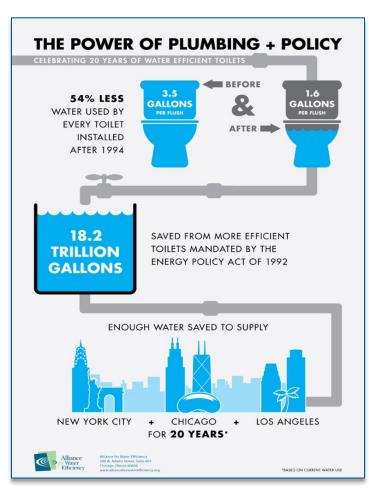


WaterSense: From the Beginning

- The 1992 Energy Policy Act: standards for plumbing fixtures for the first time
- Toilets, Urinals, Showerheads, Faucets
- Plumbing standards then embedded in national codes (UPC, IPC)
- 4 States have enacted more stringent state water efficiency standards:
 - o California
 - Texas
 - o Georgia
 - o Colorado

Alliance Water Efficiency

Savings From National Standards



- Toilets alone, assuming a 4% change-out rate
- Free 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

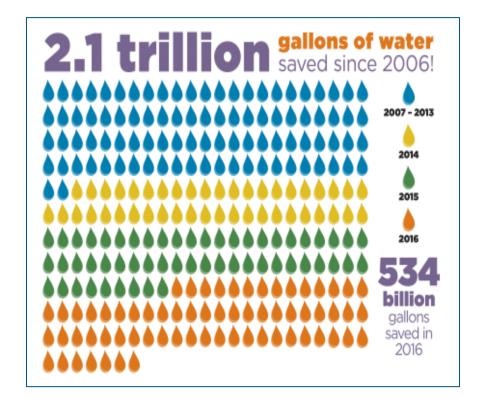
Launching the WaterSense Program

- We had Energy Star Envy and lobbied EPA for a water labeling program
- Announced in San Antonio in June 2006
- Voluntary program, not regulatory
- Despite minimal funding, it has transformed the market and been remarkably successful
- How much has it saved?



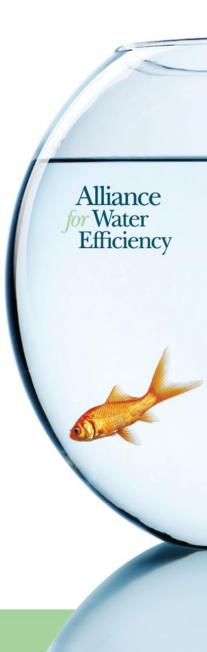
WaterSense Benefits

- 2.1 trillion gallons of water saved
- \$46.3 billion in water & energy bills saved
- 284 billion kilowatthours of electricity saved
- 1700 Partner organizations participating



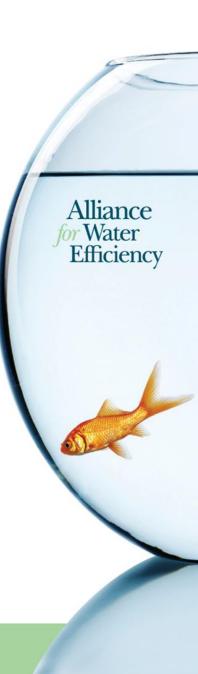
March, 2017

- WaterSense program suddenly in jeopardy
- Has never been authorized by Congress, despite 10 years of attempts
- Funding only discretionary in the EPA Administrator's budget
- The Trump administration's FY2018 "skinny budget" listed 50 programs to be zero funded
- EPA's CFO memo proposed to cut all 8 FTE positions in the WaterSense program as well as \$1.9 million in extramural funding



April, 2017

- AWE sent letter to EPA Administrator Scott Pruitt urging continued funding of the WaterSense program and outlining its numerous benefits
- Letter signed by 187 manufacturers, businesses, water providers, academic institutions, and efficiency advocates
- Response back from Administrator Pruitt: "The President's budget also reflects the EPA's priority to ease the burden of unnecessary federal regulations that impose significant costs for workers and consumers without justifiable environmental benefits."



May, 2017

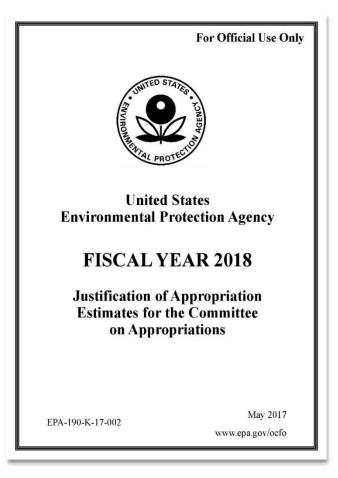
 EPA released "Justification of Appropriation Estimates for the Committee on Appropriations"

• Page 303:

FY 2018 Change from FY 2017 Annualized Continuing Resolution (Dollars in Thousands):

(-\$24,900.0 / -86.8 FTE)

This streamlines the Surface Water Protection program, including the elimination of the \$3.075 million WaterSense program and also activities under the Urban Waters program.



Coalition!

- AWE and numerous industry partners (PMI, IAPMO, Kohler, IA, AWWA) begin launching advocacy efforts on the Hill
- AWE created Fact Sheet, Infographic, and social media messages

SAVE WATERSENSE!



The Trump Administration wants to eliminate the EPA WaterSense[®] program, a vital part of our strategy to achieve a sustainable water future! Here are six reasons to save it:

1. IT SAVES TAXPAYER MONEY

U.S. households have saved \$32.6 billion on utility bills thanks to WaterSense labeled toilets, showerheads, faucets, and irrigation products

3. ITS GOOD FOR BUSINESS 1700+ partners rely on WaterSense to help them

differentiate their products, innovate through efficiency, and pursue sustainability goals

5. ITS A SMART INVESTMENT

Annual budget of less than \$2 million makes it cost-. effective

2. IT SUPPORTS JOBS

More than 2,200 WaterSensecertified irrigation pros can help design a water-wise landscape

4. IT PROVIDES CHOICES

Consumers can choose from 16.000+ labeled products to help save up to \$350 per year

6. IT PROTECTS OUR WATER FUTURE

1.5 trillion gallons saved for our communities, businesses and the environment!

What Can YOU Do to Save WaterSense?

- 1. Share this graphic and spread the word!
- 2. Join our email list to be a WaterSense Ambassador
- 3. Tell your members of Congress you support WaterSense
- 4. Get your organization to sign our letter to Administrator Pruitt
- 5. Donate to the Alliance for Water Efficiency to support our efforts

Start now at www.a4we.org



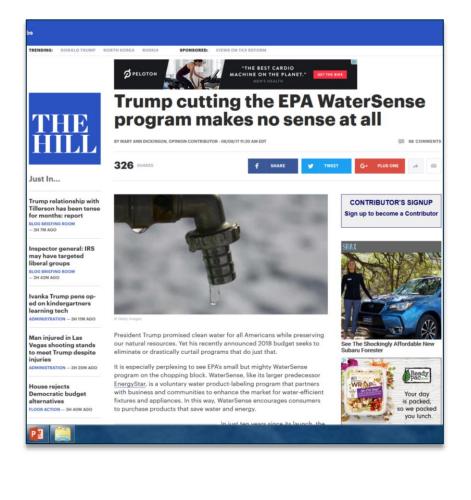
Alliance

*r*Water

Faucet made by Madebyoliver from www.flaticon.co d and plant made by Freepik from www.flat

June 8, 2017

- AWE published Op Ed in The Hill, a top US political website, read by the White House and lawmakers
- Island Press assisted us getting it placed
- Subsequently entered in the Congressional Record by Congressman Jared Huffman



July, 2017

- U.S. House Interior Appropriations Subcommittee oversees funding for EPA
- In July issued its Fiscal Year 2018 agency funding report, rejecting the proposed elimination of the WaterSense program on page 58:

"Water Quality Protection: The Committee recommends \$178,855,000 and rejects the proposed elimination of the WaterSENSE program."

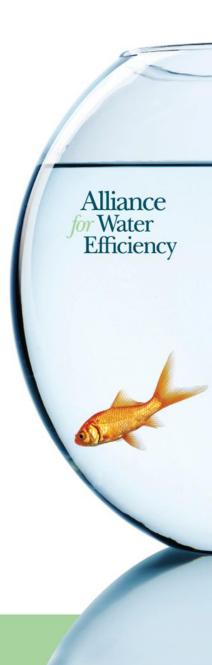
Alliance for Water

Efficiency

The U.S. House of Representatives COMMITTEE ON APPROPRIATIONS

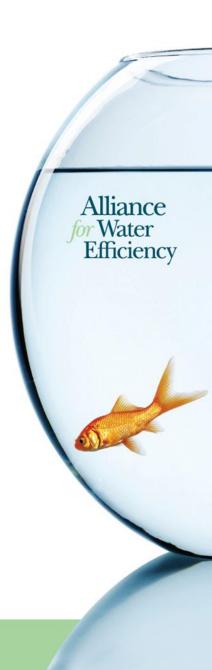
September, 2017

- Congress passed HR 601, a short-term continuing budget resolution for the FY2018 budget
- President Trump signed it on September 8
- Funded the government through Friday, December 8 when a new CR or budget was ultimately passed
- Meanwhile, bills for WaterSense authorization were introduced



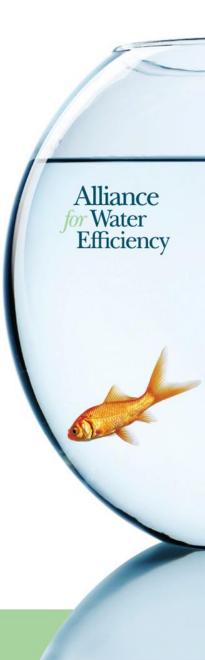
November, 2017

- Senate Appropriations Committee issued FY18 budget report, which states:
- "The Committee rejects the proposed elimination of the WaterSense program, and provides not less than the fiscal year 2017 level."
- The language sends a strong message to EPA from Congress
- But funding by Congress directly cannot occur without authorization



January, 2018

- Another continuing budget resolution for the FY2018 budget passed
- President Trump signed it on January 22
- Funds the government through Thursday, February 8
- Will a budget for FY18 ever get passed?
- WaterSense funding may not last much past March
- Meanwhile, bills for authorization stay stalled



AWE Authorization Effort

Three WaterSense letters sent
✓HR 3248: 64 signers
✓S 1137: 87 signers
✓S 1700: 51 signers
AWE Support Letter on S 1460 (Murkowski)

- Cece Kremer hired to work on getting WaterSense authorization
- Work with WaterSense Coalition Partners

Alliance

r Water Efficiency

What's Next?

- Meet with David P. Ross, EPA Assistant Administrator for Water
- Find a bill to attach WS authorization as an amendment, such as an infrastructure bill

Alliance Water

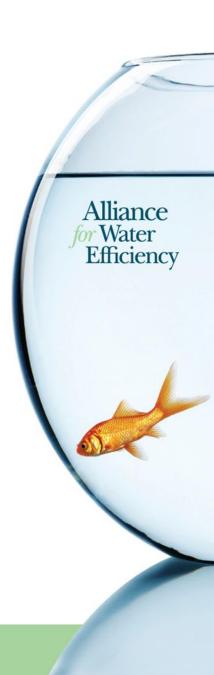
Efficiency

- Attempt to get movement on the other bills
- Sorry, no Texas Members on Senate Appropriations Committee
- But Kay Granger of Fort Worth now a serious contender for the chair of the House Appropriations Committee
 - ✓ Other Texas Members: John Abney, John Carter

Tax Exemption for Rebates

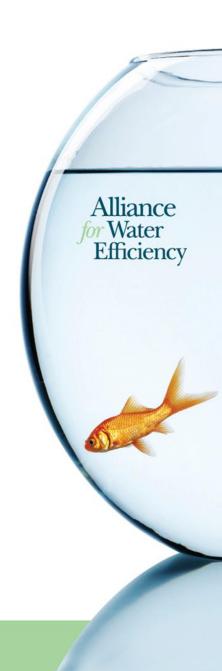
- Water efficiency and conservation rebates not federally tax exempt
- Consumers angry, getting 1099's
- Coalition created to fix this
- House Bill 4615, Senate Bill 1464
- AWE Support Letters with 98 organizations
- Democratic bills going nowhere!
- Kevin Brady key to fixing this





So What Can You Do?

- 1. Watch for news from AWE
- 2. Sign on to letters as requested
- 3. Distribute Saving WaterSense Fact sheets
- 4. Talk about Saving WaterSense on social media
- Send your own letters to your Congressional delegation explaining the benefits of the WaterSense program and tax exempt rebates
- 6. Send us a copy of your letters





Sign on to Request Tax Exemption for Water Conservation Rebates

The Alliance for Water Efficiency is seeking supporters of two Congressional Bills that would make water conservation rebates exempt from federal tax. S. 1464 and H.R. 448 are bills that have been introduced that will make water conservation rebates exempt. Click here for more information, and to sign on to the letters of support.



Register for AWE Webinar

Register now for AWE's webinar on November 15 on "Death Knell Barriers to Water Conservation." This webinar will cover some unintended consequences to your water conservation programs that can end up being the "death" of your



programs if not addressed properly: utility revenue loss from water efficiency and conservation programs; lack of a federal tax exemption for water efficiency and conservation rebates; utility inability to debt finance conservation programs; slowdown in distribution system pipe flows causing the need for greater system flushing; and pathogen growth in efficient premise plumbing systems. Click here to learn more and to register.

Cooling Tower Research Study

The Alliance for Water Efficiency is excited to announce the launch of its



Calendar of Events 11/6/2017 CWWA National Water & Wastewater Conference 11/6/2017 IA 2017 Irrigation Show & Education Conference 11/6/2017 Modernizing North American Water Systems in the Digital Age 11/7/2017 **Onsite Non-Potable Water Systems** Workshop (San Fran, CA) 11/9/2017 Onsite Non-Potable Water Systems Workshop (Sacto, CA)

How Much Water Do You Use?



Important Information Water Efficiency Watch Newsletter October 2017 Business Guide Webinar Archive Page Jobs, Internships, and RFPs Board

AWE/Dickinson Keynote @ WSI '15

Alliance for Water Efficiency

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