

# This presentation premiered at WaterSmart Innovations

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# Evaluating and Comparing State Water Efficiency Policy: Does your state make the grade?

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Water Smart Innovations Conference  
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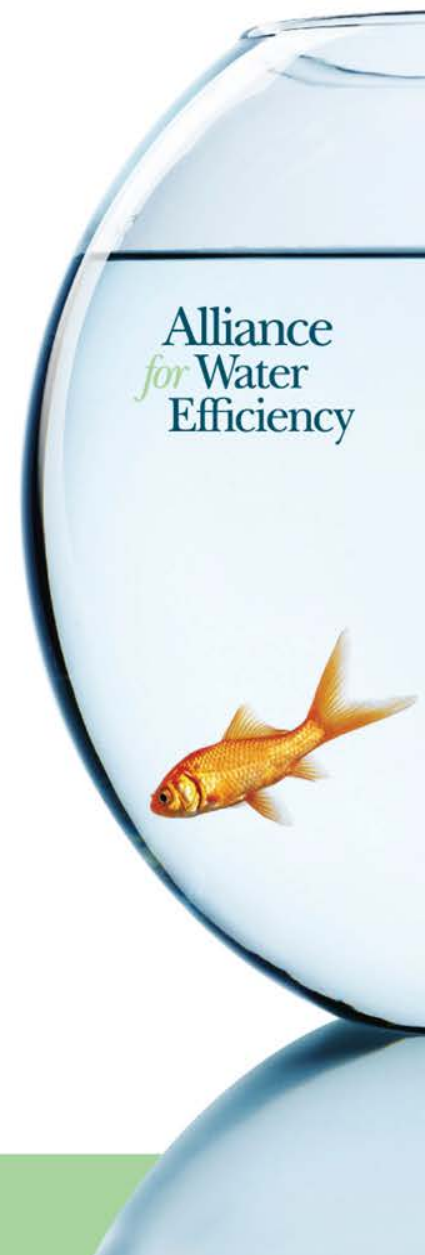
A VOICE AND  
A PLATFORM  
PROMOTING THE  
EFFICIENT AND  
SUSTAINABLE  
USE OF WATER



Alliance *for* Water Efficiency

# Background

- Original State/Province Survey Project
- Funded by a grant from EPA
- Launched October, 2009
- Covered all 50 states and 13 Canadian provinces and territories
- Asked 11 standard questions
- Posted in the AWE online Resource Library
- Interest expressed during WSI 2010 spurred an update with scoring to be created



[home](#) » [resource library](#)

## State Information - Texas, USA

Texas is the first state to require that retail public water utilities file a standard water loss audit with the state, with a requirement to re-file every 5 years. [The state's water loss guidance to utilities is available for download here.](#) Texas has also become the second state to adopt more stringent standards for new residential water closets, beginning in 2010 and taking full effect in 2014.



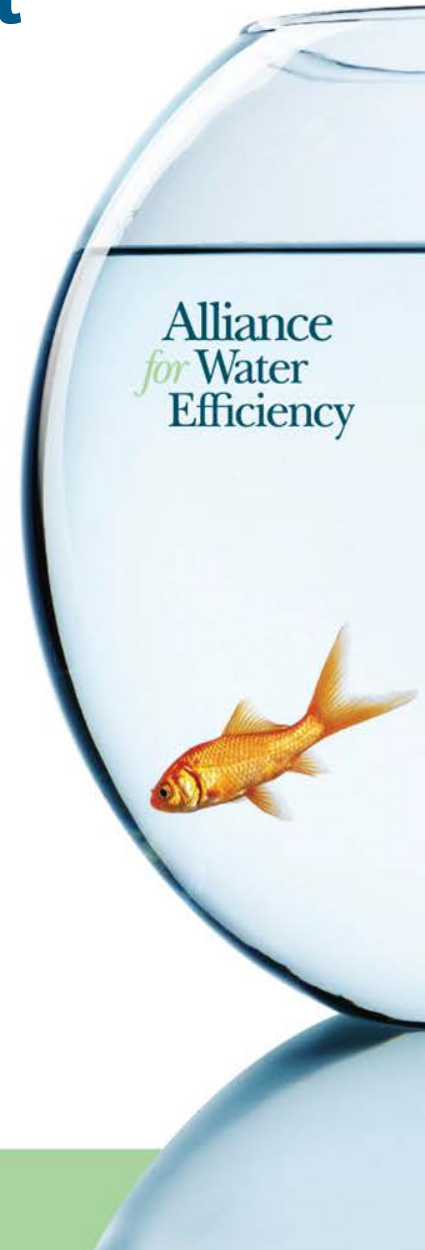
1. What state agency or agencies are in charge of drinking water conservation/efficiency?
2. Does the state require preparation of drought emergency plans by water utilities or cities on any prescribed schedule?
3. Does the state have a mandatory planning requirement for drinking water conservation separate from drought emergency plans?
4. Does the state require implementation of conservation measures as well as preparation of plans?
5. Does the state have the authority to approve or reject the conservation plans?
6. Does the state have minimum water efficiency standards more stringent than federal or national requirements?
7. Does the state regulate drinking water supplies and require conservation as part of its permitting process or water right permit?
8. Does the state allow funding for conservation programs under a State Revolving Fund?
9. Does the state offer other financial assistance? Bonds? Appropriations?
10. Does the state offer direct or indirect technical assistance?
11. Does the state provide Statewide ET microclimate information?

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**1. What state agency or agencies are in charge of drinking water conservation/efficiency?**

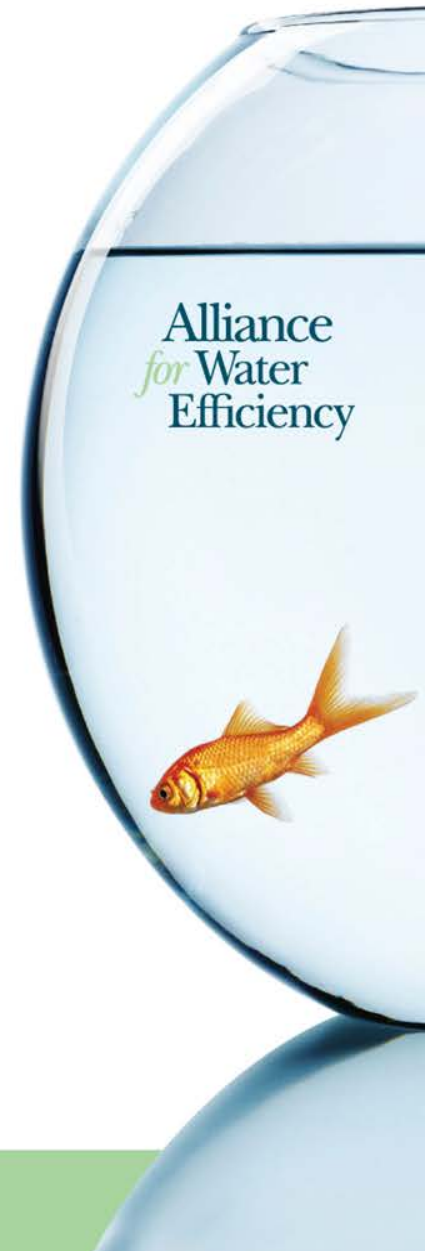
# New “State Scorecard” Project

- Partially funded by the Turner Foundation
- Updated questions
- Advisory Committee of state agency representatives
- Began collecting data in summer of 2011
- Report now finalized
- Information for each state posted online
- Huge thanks to project partner Environmental Law Institute



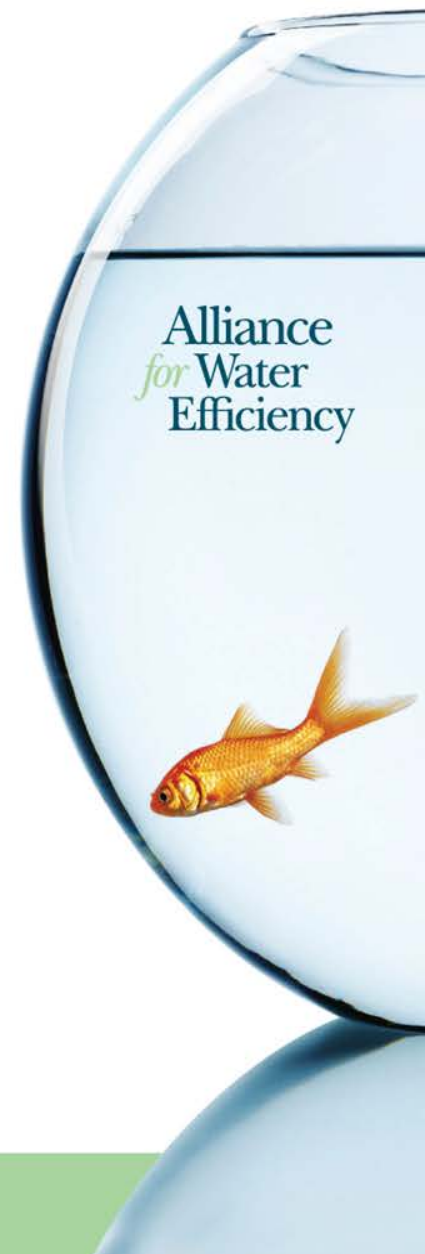
# Changes Made to the Survey

- Added six new questions
- Reworded four of the existing questions
- Expanded the previous question on plumbing standards to be five specific questions
- Combined two questions on financial assistance into one question
- Survey is now 20 questions



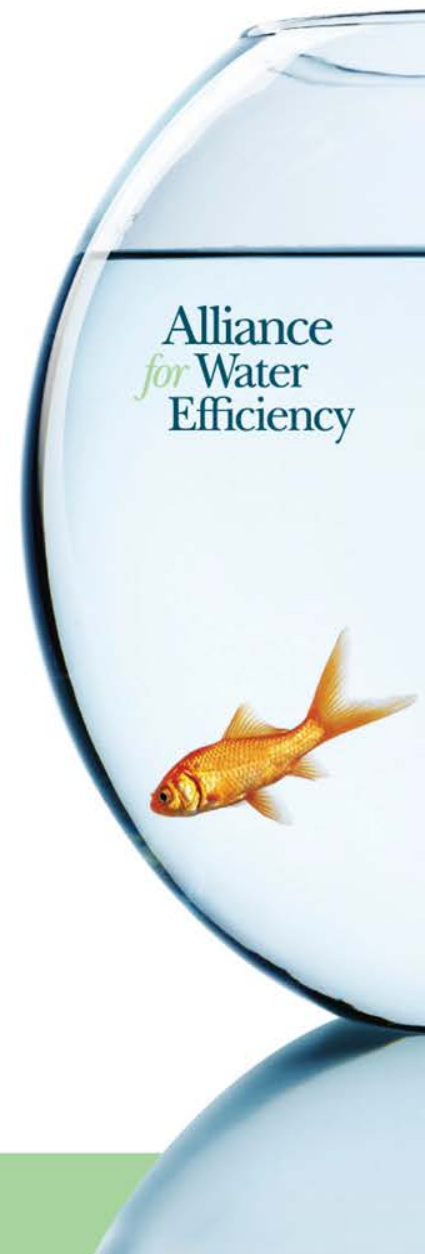
# What Was Asked?

- State plumbing product efficiency standards?
- Water loss policies and regulations?
- Conservation required as part of permitting?
- Mandatory conservation planning for water supply systems?
  - Authority to approve/reject?
  - Frequency?
  - Framework?
  - Implementation required?



# What Was Asked?

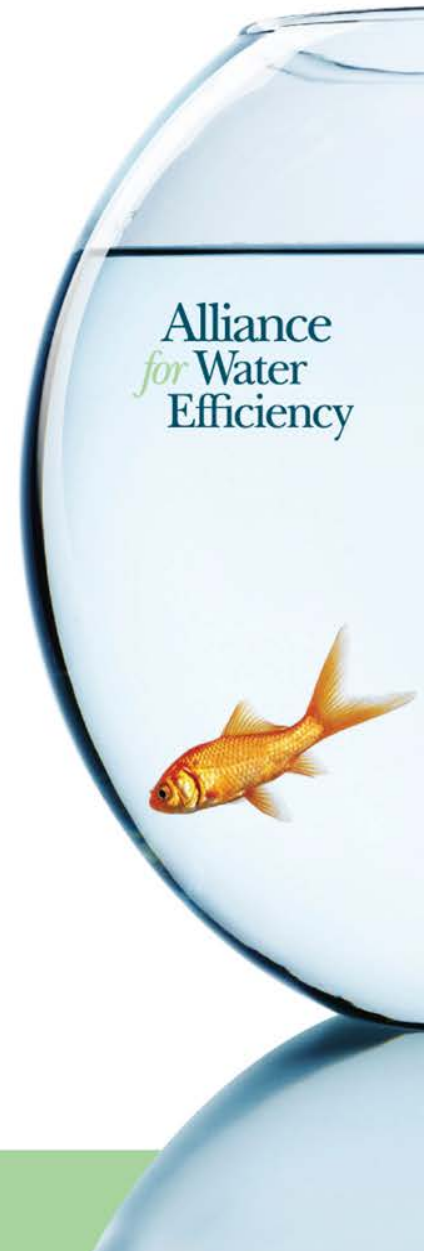
- State funding for conservation programs?
- Technical assistance for urban water conservation programs?
- Volumetric billing required?
- What percentage or number of connections are metered?
- Weather data available for urban landscapes?





# How Were the States Scored?

- Created scoring guidelines for each question
- Allowed up to 3 points of extra credit
- Used a grading scale to assign letter grades



## SCORING GUIDELINES FOR INDIVIDUAL QUESTIONS

1. State agency in charge of drinking water conservation?

All states received 1 point for answering

2. Water consumption regulation for toilets?

0 = No

1 = Yes, but limited applicability (e.g., only applies to new construction)

2 = Yes

3. Water consumption regulation for showerheads?

0 = No

1 = Yes, but limited applicability (e.g., only applies to new construction)

2 = Yes

4. Water consumption regulation for urinals?

0 = No

1 = Yes, but limited applicability (e.g., only applies to new construction)

2 = Yes

5. Water consumption regulation for clothes washers?

0 = No

1 = Yes, but limited applicability (e.g., only applies to new construction)

2 = Yes

6. Water consumption regulation for pre-rinse spray valves?

0 = No

1 = Yes, but limited applicability (e.g., only applies to new construction)

2 = Yes

## SCORING GUIDELINES FOR INDIVIDUAL QUESTIONS

7. Mandatory building or plumbing codes?	<p>0 = No</p> <p>1 = Codes are only applied to a specific subset set of buildings, or conditions (e.g., Texas has code that applies only to state buildings)</p> <p>2 = Codes applied to most or all buildings</p>
8. Water loss regulation or policy?	<p>0 = No</p> <p>1 = Some kind of policy in writing, but without a specific target or requirements, or target is weak</p> <p>2 = Specific target or requirement, but only for new permits, or strong initiative demonstrated by state</p> <p>3 = Robust target and requirements, and required by all suppliers, or if only for new permits with very strong law</p>
9. Conservation activities as part of water permitting process?	<p>0 = No</p> <p>1 = Little more than a plan is required, or a strong law with limited geographic applicability</p> <p>2 = Water rights expressly can be conditioned (or rejected) based on water conservation efforts</p> <p>3 = Robust application or approval requirements (compliance with conservation plans, mandatory conservation conditions, etc.)</p>
10. Drought emergency plans required?	<p>0 = No</p> <p>1 = Yes, but plan only connected to permitting; OR no updating of plan required once it has been submitted</p> <p>1.5 = Yes, plan is required, but the framework for developing the plan is not robust</p> <p>2 = Yes, plan is required and must adhere to a detailed framework</p>
11. Conservation planning required separate from drought plans?	<p>0 = No, or already given credit under question 9</p> <p>1 = Plan is required only for a very limited set of users, or broadly applicable but conservation is only a component of a larger plan</p> <p>2 = Plan requirement is broadly applicable, and it is a standalone conservation plan</p>

## SCORING GUIDELINES FOR INDIVIDUAL QUESTIONS

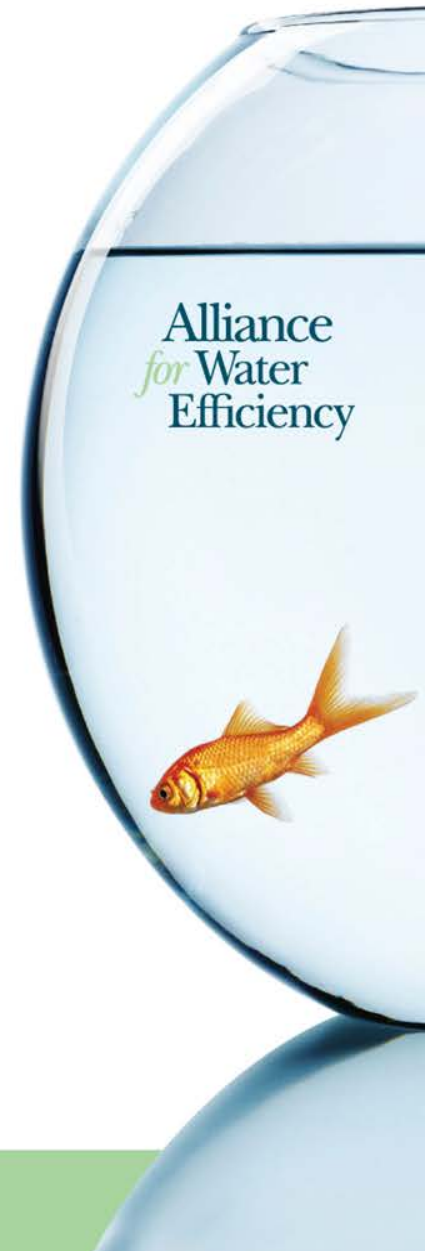
12. Authority to approve or reject conservation plans?	<p>0 = No or N/A</p> <p>0.5 = The plan must be submitted as part of a complete permit application, but its substance is not really part of the application review process</p> <p>1 = Yes, the plan is reviewed as part of reviewing a permit application</p> <p>2 = Yes, the plan is approved via an independent review process</p>
13. How often are plans required?	<p>0 = No or N/A</p> <p>0.5 = 25+ years</p> <p>1 = 11-24 years; or split between two planning processes (i.e., CT)</p> <p>1.5 = 7-10 years</p> <p>2 = 1-6 years</p>
14. Planning framework or methodology?	<p>0 = No; N/A; only unenforceable policy guidelines</p> <p>0.5 = No, but the law requires the agency to draft unenforceable guidelines; OR there is a framework for what plans may include</p> <p>1 = Yes, but the framework is not robust</p> <p>2 = Yes, and the framework is robust</p>
15. Implementation of conservation measures required?	<p>0 = No or N/A</p> <p>1 = There is some language facilitating implementation, but it lacks an enforceable hook</p> <p>2 = The plan is enforceable as a permit condition</p> <p>3 = Robust provisions to facilitate and enforce implementation (e.g., penalties, permit revocation, submitting schedules and reports, drafting an implementation plan, identifying legal and financial sources for implementation)</p>

## SCORING GUIDELINES FOR INDIVIDUAL QUESTIONS

16. State funding for urban water conservation programs?	1 = DWSRF and CWSRF Programs (all states received 1 point) 2 = Funding resources beyond State Revolving Funds
17. Technical assistance for urban water conservation programs?	0 = No 1 = Online or other resources 2 = Direct technical assistance offered by state
18. Does the state require volumetric billing?	0 = No 1 = Yes 2 = Yes, and conservation rates are required
19. Percent of publicly supplied connections that are metered?	Due to a lack of citable references, no states were scored on this question
20. ET microclimate information for urban landscapes?	0 = No 1 = Online state resource including turfgrass ET data available 2 = Online resource specifically targeted for urban landscape irrigation

# Grading Scale

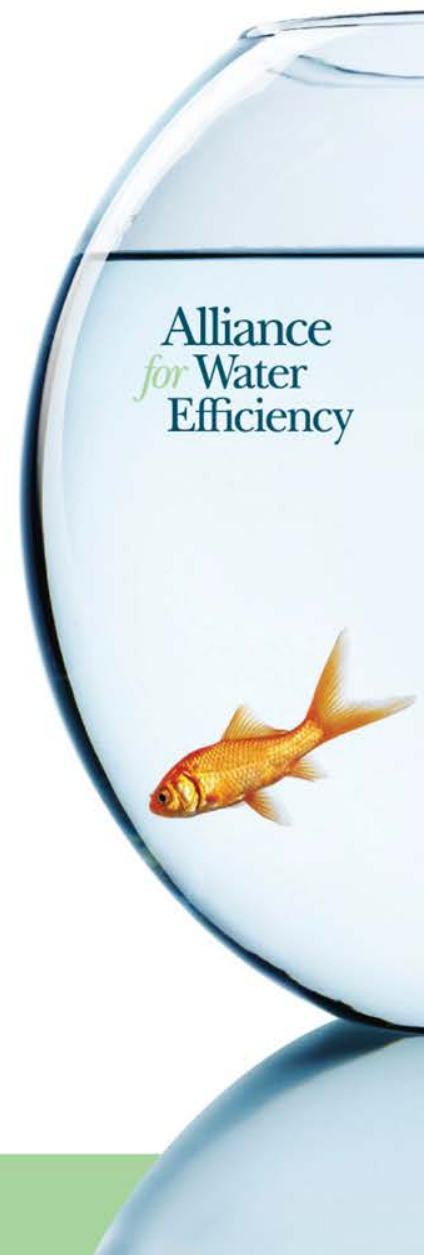
GRADING SCALE	
34 - 40	A+
30 - 33	A
27 - 29	A-
23 - 26	B+
19 - 22	B
16 - 18	B-
12 - 15	C+
8 - 11	C
5 - 7	C-
1 - 4	D
*.5's round up	



# How Did the States Rank?

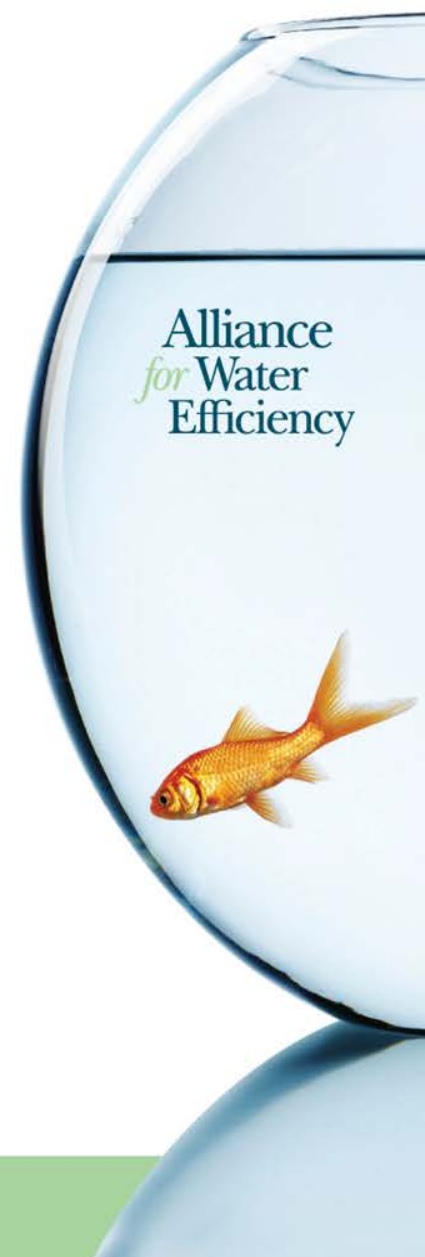
- 2 “A’s”
- 11 “B’s”
- 18 “C’s”
- 19 “D’s”

GRADE	TOTALS
A+	0
A	0
A-	2
B+	1
B	3
B-	7
C+	6
C	6
C-	6
D	19
TOTAL	50



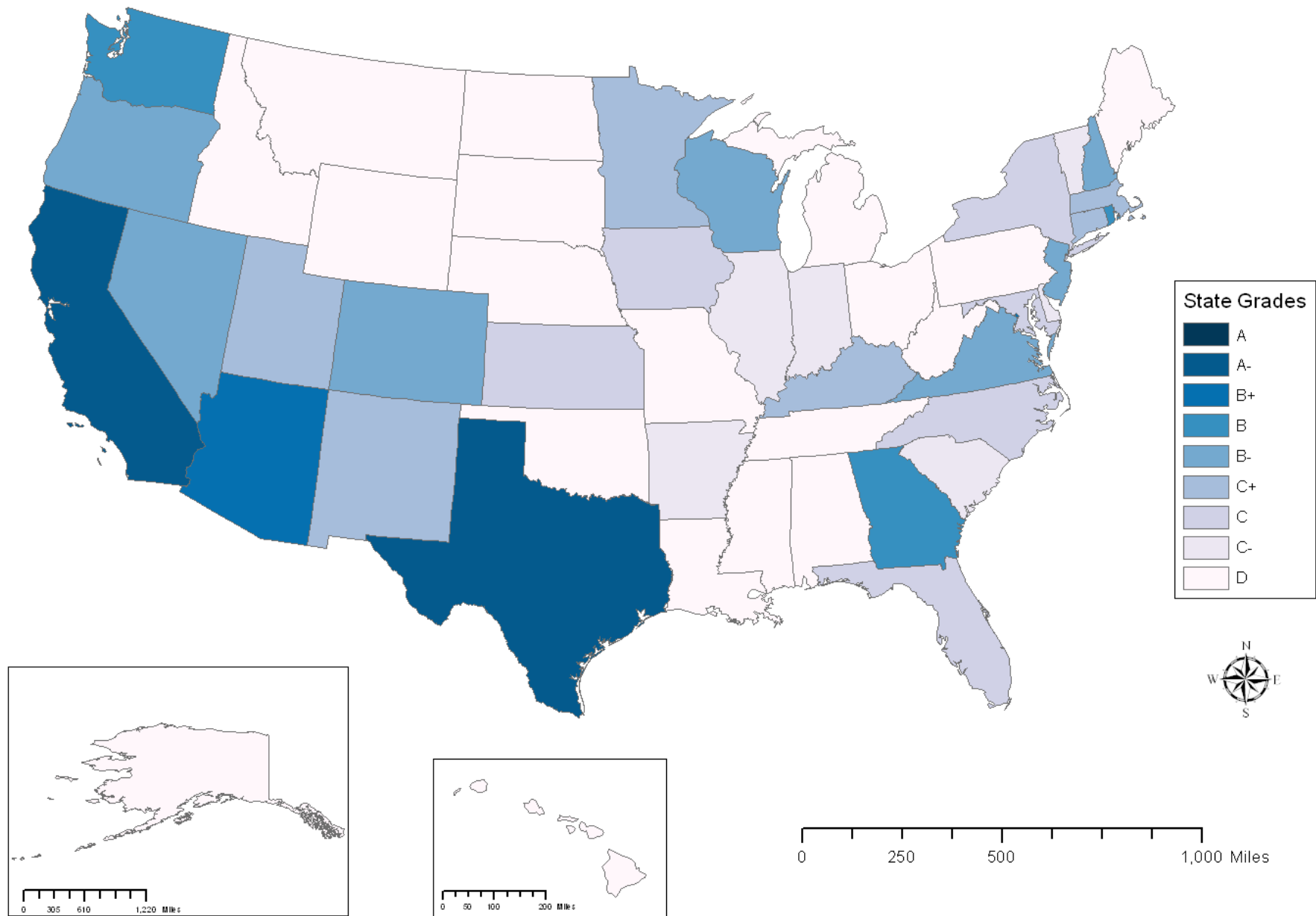
# High Scoring States

State	Points	Grade
California	29	A-
Texas	29	A-
Arizona	23	B+
Washington	21.5	B
Rhode Island	20	B
Georgia	18.5	B
Nevada	17.5	B-
New Hampshire	17	B-
Colorado	16.5	B-
New Jersey	16.5	B-
Virginia	16.5	B-
Oregon	15.5	B-
Wisconsin	15.5	B-





# Water Efficiency and Conservation State Scorecard Grades



# State Policy Highlights

## Plumbing Standards

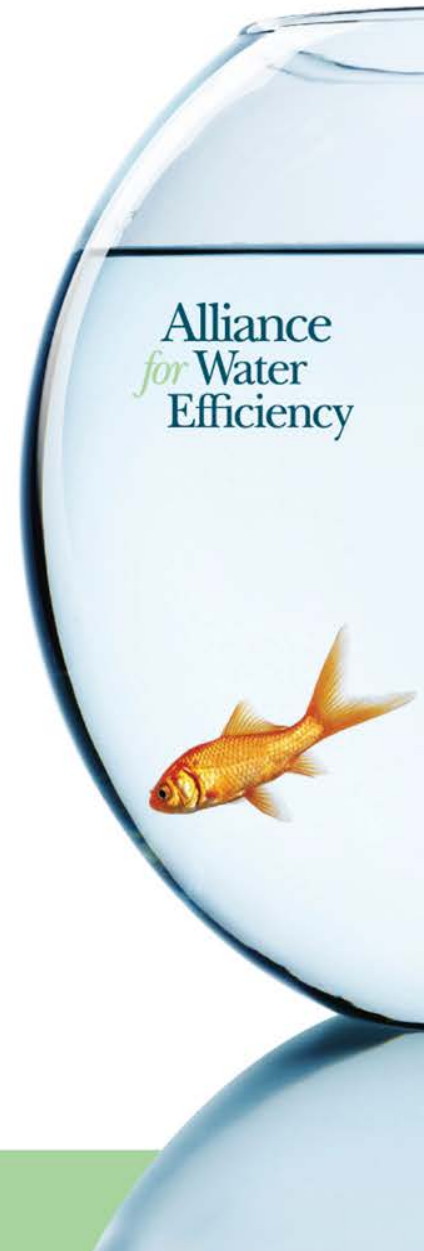
- *Georgia*
- *California*
- *Texas*

## Water Loss

- *New Hampshire, New Jersey, Washington (strong law)*
- *Texas, Tennessee, Georgia (best water loss accounting methodology)*

## Permitting

- *California*
- *Georgia*
- *Massachusetts*



# State Policy Highlights

## Drought Plans

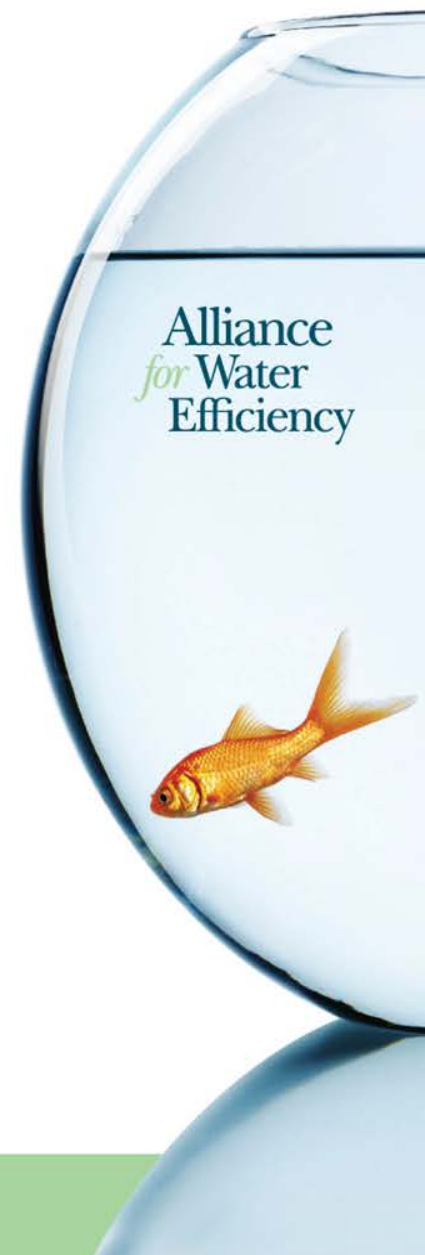
- *Arizona*
- *Texas*

## Conservation Planning

- *California*
- *Colorado*
- *Rhode Island*

## Implementation

- *California*
- *New Hampshire*
- *Oregon*



# State Policy Highlights

## Funding for Water Efficiency

- *Colorado*
- *Oregon*

## Technical Assistance

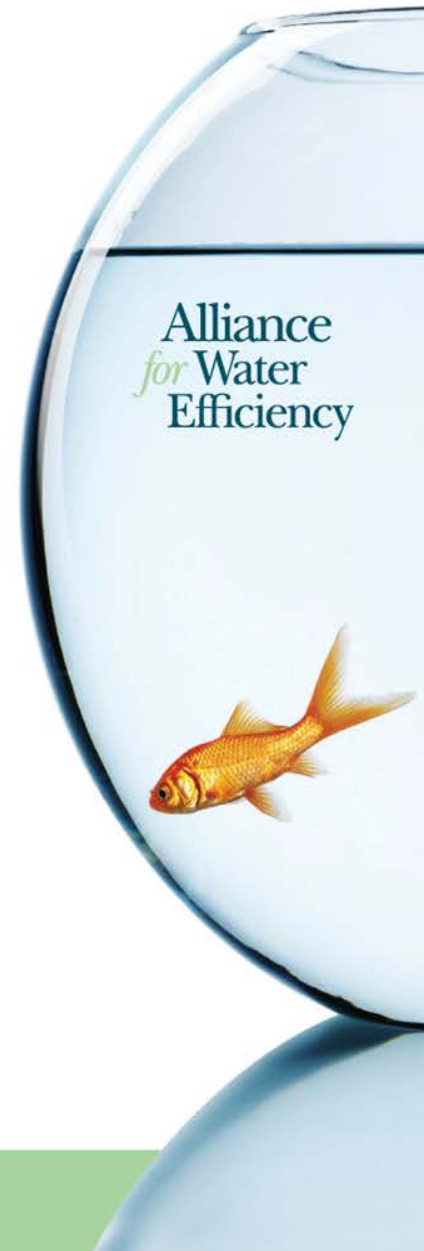
- *Many great examples*

## Volumetric Billing

- *Minnesota*
- *New Jersey*

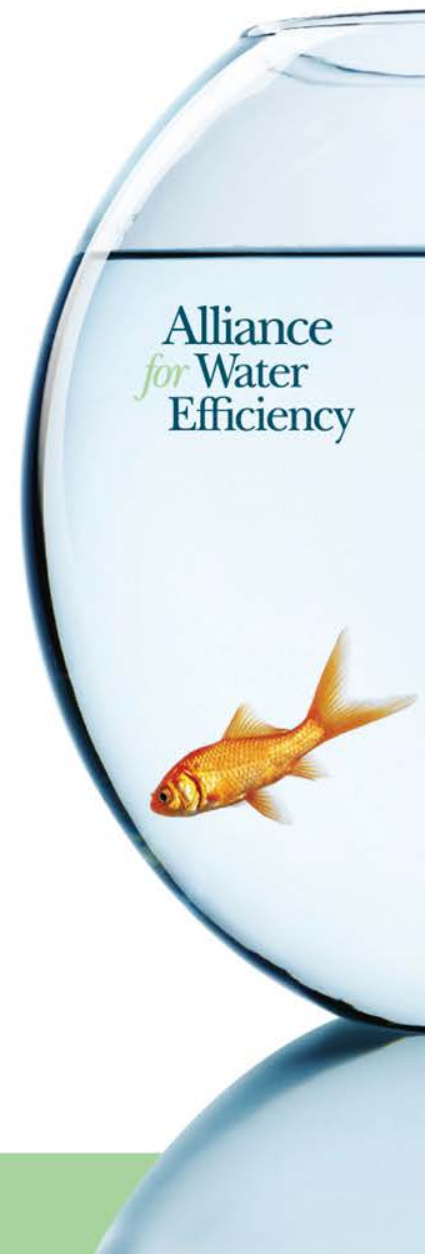
## Climate Data for Urban Landscapes

- *California*
- *New Mexico*
- *North Carolina*



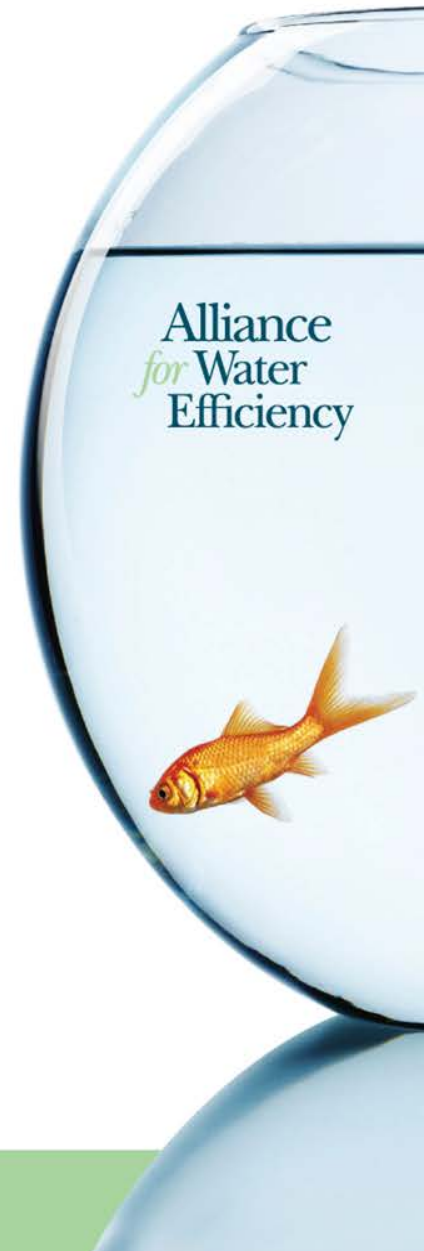
# Public Comment

- 13 official comments received
- General topics addressed
  - Clothes washer preemption
  - Water loss
  - Implementation and water use targets (e.g., CA 20x2020)
  - Scoring methodology
- State scoring addressed
  - Arizona
  - Georgia
  - Massachusetts
  - Nevada
  - New Mexico
  - Washington
  - Wisconsin
- Separate document with comments and AWE response



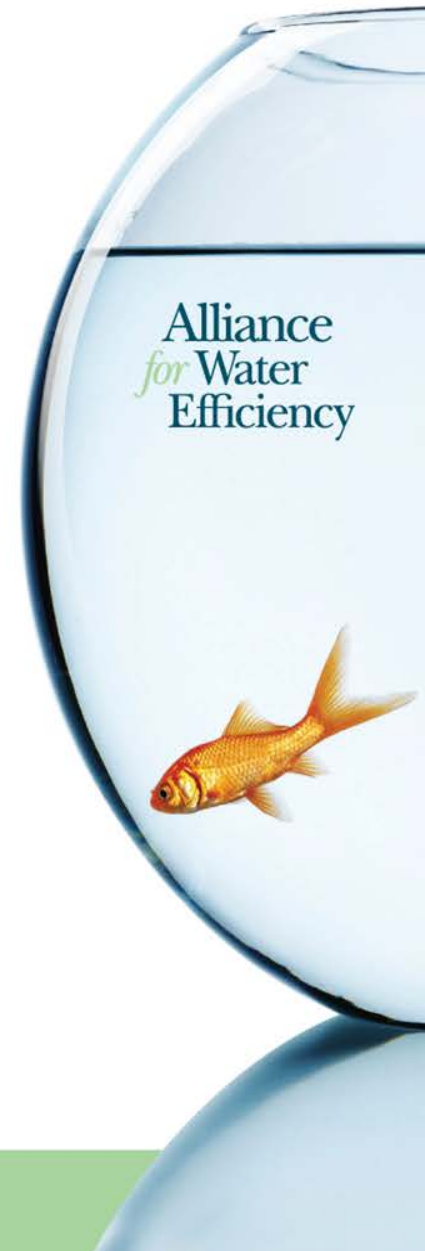
# State Specific Public Comment Results

- Arizona – 1 additional point was added and grade changed from “B” to “B+”
- Georgia – 1 additional point was added, grade remained a “B”
- Massachusetts – 1 point was added, letter grade remained a “C+”
- Nevada (two sets of comments) – 3.5 points added, grade changed from “C+” to “B-”
- New Mexico – 3.5 points added, grade changed from “C” to “C+”
- Washington – 1.5 points were added, letter grade remained a “B”
- Wisconsin (two sets of comments) – 1 point of extra credit was removed and 1 point of extra credit was added. Grade remained a “B-”



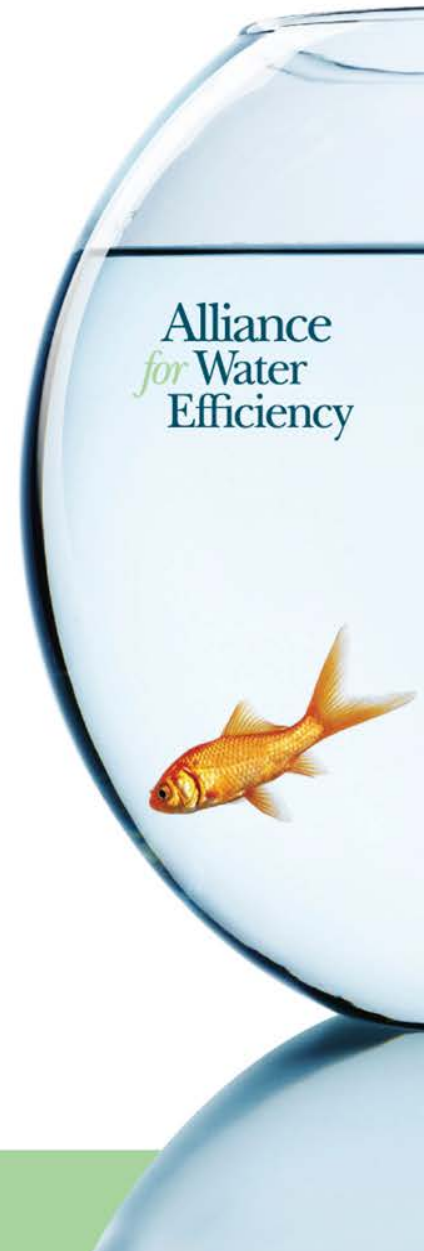
# Challenges

- Question development
- Data collection
- Equitable scoring
- Law versus policy versus implementation
- Information quickly outdated



# Online State Information

[www.a4we.org/2012-State-Information.aspx](http://www.a4we.org/2012-State-Information.aspx)







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