

# Water Efficiency Adds Cachet, Without Too Much Cash, to Green Homes:

## The WaterSense Label for New Homes

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U.S. Environmental Protection Agency



# Objectives



- Why Water Efficiency?
- What is WaterSense?
- What's different about a WaterSense labeled new home?
- Constructing and Inspecting a WaterSense labeled new home
- Bringing WaterSense Home

# Why Water Efficiency?



# A Thirsty Nation



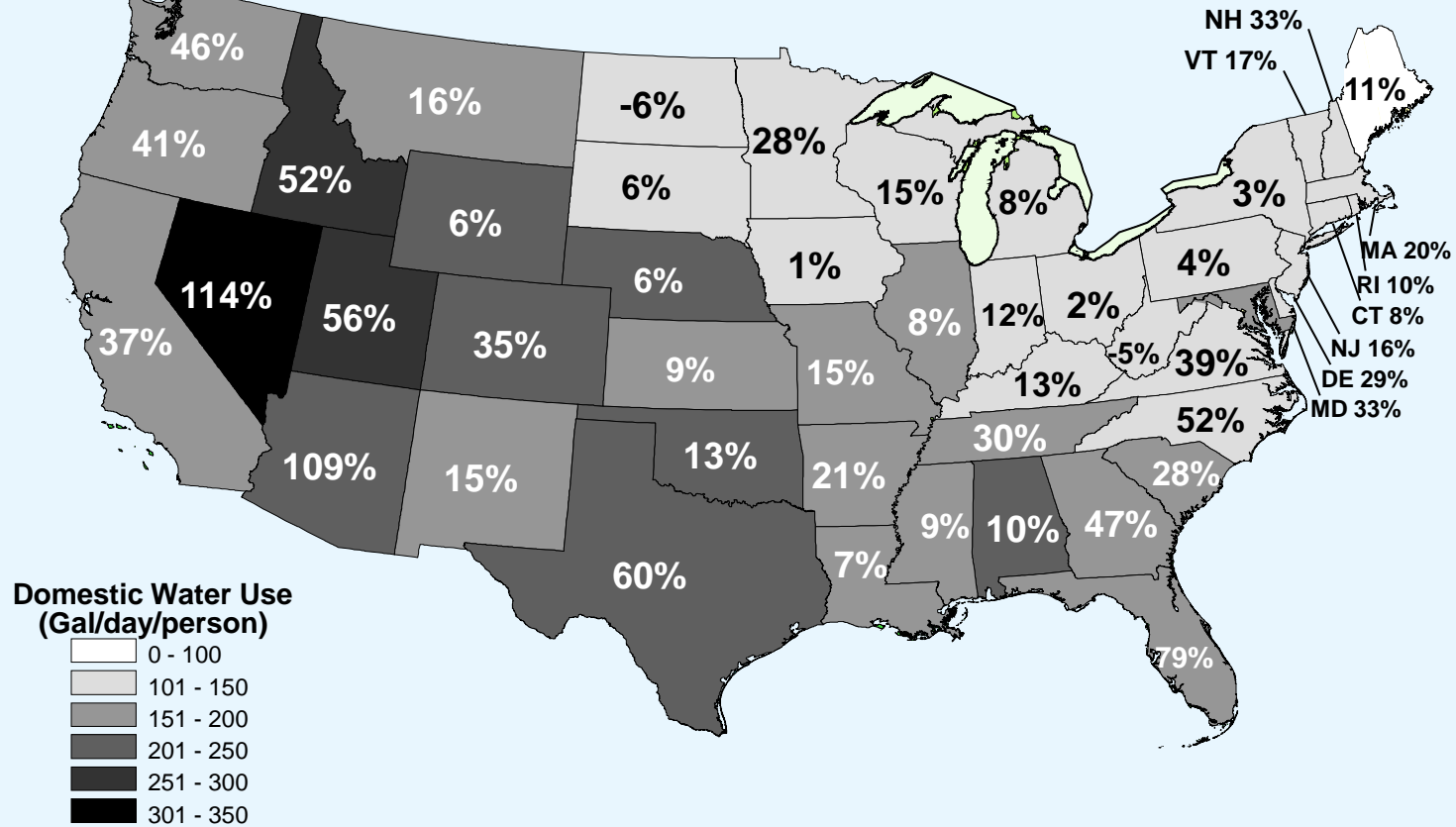
- Between 1950 and 2000, U.S. population doubled while the demand on public supply systems more than tripled.
- At least 36 states are anticipating water shortages between 2003 and 2013.



# Regional Water Impacts



**Domestic Water Use in Gallons per Day per Person and Projected Percent Population Change by 2030**



# Strained Resources

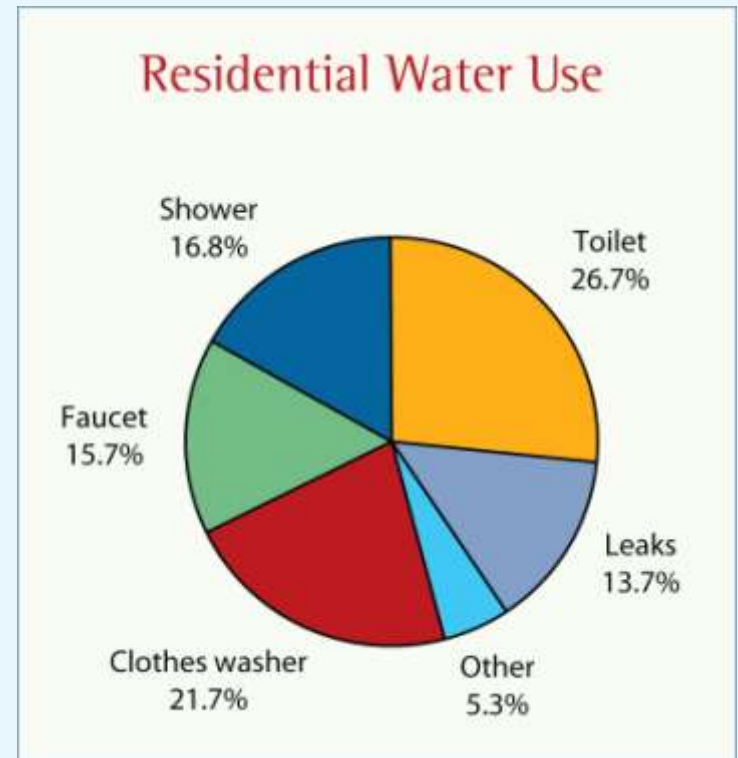


- Updating infrastructure could cost nearly \$500 billion over next 20 years
- Can delay projects by using water efficiently
- Save energy and costs associated with pumping and treating water



# Water Use at Home

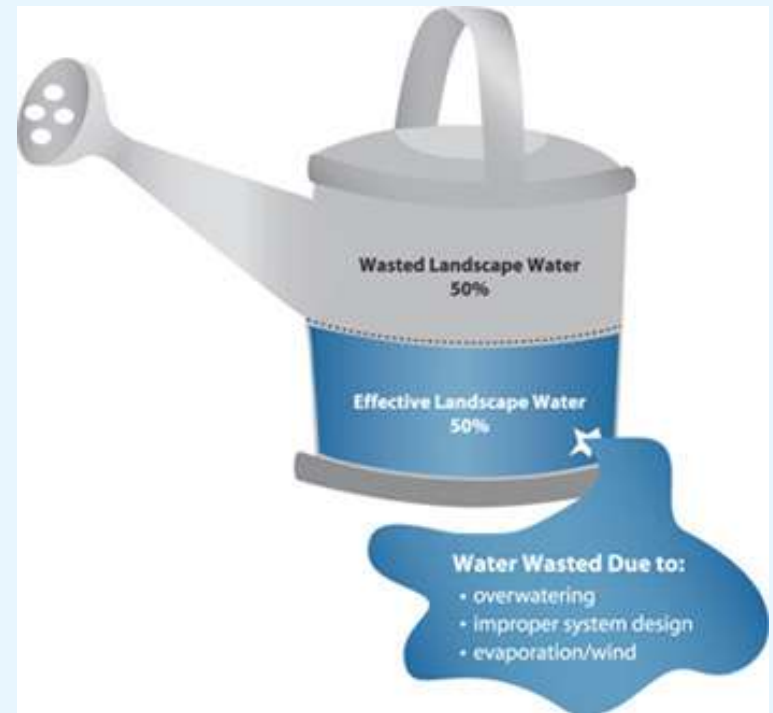
- About 500,000 new homes constructed annually
- Household water use
  - 70% indoors
  - 30% outdoors
  - Outdoor use is higher in some regions
    - Utah: ~60 gpcd indoors & ~134 gpcd outdoors
- Bathroom largest water user inside the home



# Water Waste at Home



- Leaks from U.S. homes could exceed 1 trillion gallons each year
  - Many leaks are easily fixed!
- Up to 50% of water used outside goes to waste due to:
  - Evaporation
  - Wind
  - Inefficient watering practices



# What Is WaterSense?





# What Is WaterSense?

- Voluntary partnership and labeling program sponsored by the U.S. EPA
- Promotes simple changes at home to help save water for future generations
- Simple way for consumers to identify products, new homes, and services that use less water **and** perform well



# What's Special About WaterSense?



- High efficient and performing
  - Products must offer equivalent or superior performance while using about 20 percent less water than conventional models
- A label with integrity
  - Third-party bodies test and certify that products meet WaterSense criteria
  - Backed by the credibility of EPA
- Smart use of taxpayer dollars
  - Manufacturers absorb research, testing, and branding costs
  - Licensed certifying bodies certify the products and police the label's use
  - EPA leverages national network of partners to promote WaterSense

# Where Is the WaterSense Label?



- **Tank-Type Toilets**
  - More than **600** labeled models
- **Faucets/Faucet Accessories**
  - Nearly **2,200** labeled models
- **Urinals**
  - Final specification released October 2009
  - **41** labeled models
- **Showerheads**
  - Final specification released March 2010
  - More than **200** labeled models
- **Professional Certification Programs**
  - Irrigation designers, auditors, and installation/maintenance professionals who pass the certification can become partners
- **Single-Family New Homes**
  - More than 15 labeled homes!



Labeled products are listed at [www.epa.gov/watersense/products/index.html](http://www.epa.gov/watersense/products/index.html)

# WaterSense: Strength in Partnerships



- **Manufacturers** design and create products to meet specs
- **Certification bodies** test and label products
- **Retailers/Distributors** get products on shelves
- **Builders** construct water-efficient homes using products
- **Certification providers** inspect and label homes
- **Irrigation partners** help homeowners water more efficiently
- **Promotional partners** spread the word
  - Water utilities, state, local and tribal governments, nonprofit organizations, and home builder associations



# Program Accomplishments



- Since 2006 WaterSense has helped consumers save a cumulative **46 billion** gallons of water!
  - Resulting in **\$343 million** in water & wastewater cost savings
- In 2009 alone:
  - 36 billion gallons of water saved
  - 4.9 billion kwh of electricity and 1.75 million metric tons of CO<sub>2</sub>
- 2010 Accomplishments to be released in June 2011





# The WaterSense New Homes Program



# WaterSense Labeled New Homes Program



- First national new home labeling program for water efficiency
- Works with other green building programs
- Homes must be inspected and certified by an independent third party to meet EPA criteria



Second WaterSense labeled home built in the pilot program

# WaterSense Labeled New Homes



- 45 builders nation wide
  - Homes labeled in 5 states & more coming on-line
- WaterSense labeled new homes will:
  - Reduce water use in single-family new homes by 20%
  - Educate homeowners about continuing water-efficient behaviors
  - Encourage community infrastructure savings

WaterSense labeled new home under EPA pilot program  
Chapel Hill, NC

# WaterSense Complements Other Green Programs



- One-stop inspection for multiple programs
  - The WaterSense certification process for new homes is similar to ENERGY STAR®
  - Home energy raters and/or LEED providers can conduct water-efficiency home inspections
    - Must be trained on the specification
    - Maintain a relationship with a WaterSense licensed certification provider
    - For more information contact RESNET
  - A one-stop inspection saves builders time and money when seeking multiple certifications

QuickTime™ and a decompressor are needed to see this picture.

# Complements Other Green Programs



- By meeting the WaterSense new home specification, homes could also be earning points with the National Green Building Standard.
- A few examples:
  - Hot Water Distribution
  - WaterSense labeled products
  - ENERGY STAR qualified products
  - Outdoor landscaping criteria
  - Homeowners manual



# WaterSense & Other Green Building Programs



- **WaterSense Labeled New Homes & LEED 2012**
  - Integrated as a whole house water efficiency credit in LEED for homes 2012
    - Currently available as a “pilot credit”
- **Harmonizing Water Budget methodology with LEED and Sustainable Sites Initiative (SSI)**
  - WaterSense Water Budget Tool referenced in all LEED 2012 rating systems
  - Developing online version that is expected to be released in the summer of 2011

# How the WaterSense Program Works



- Builders sign a partnership agreement with EPA
  - Begin constructing new homes to earn the WaterSense label
  - Limited to single-family homes & townhomes, three stories or less
- Each home must pass an inspection overseen by a licensed certification provider
  - Or sampling of homes in a development



# Certification & Labeling Structure



Program Administrators



Licensed Certification Providers



Inspectors



Builders



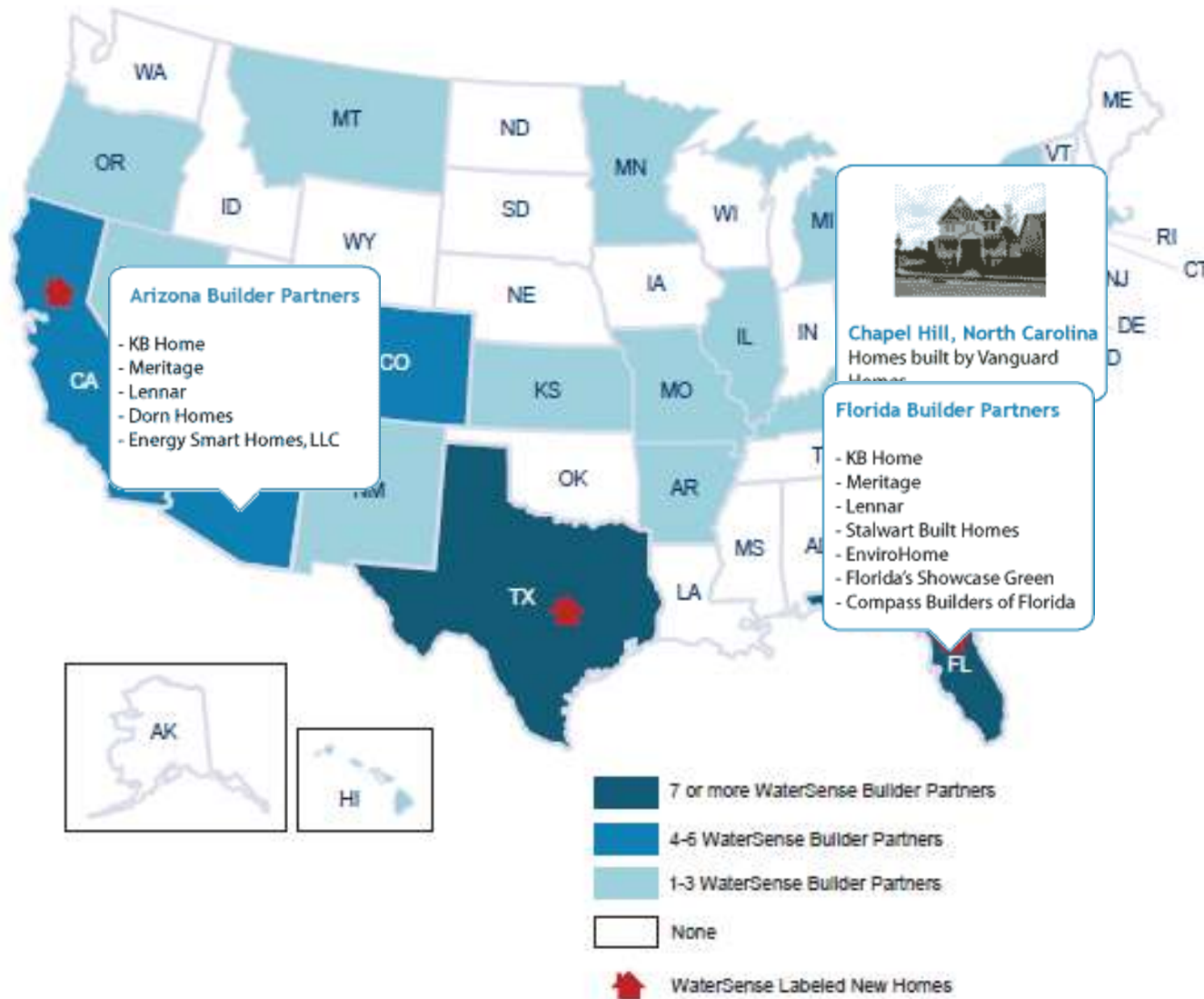
# Certification & Labeling Overview



- Once the home has been inspected and certified to meet EPA's specification:
  - Inspector signs certificate
  - Licensed certification provider signs certificate
  - Builder receives certificate
    - Gives to homeowner
    - Provides homeowner educational manual
    - Other documents as needed, i.e., irrigation system schedules



## Where do WaterSense Partners Build?



# Portland Water House



- Funded by the Portland Water Bureau
- First WaterSense labeled new home in Oregon
- One year as an educational tool – then goes on the market



# KB Home Completes First WaterSense Labeled New Homes



- 15 Homes Labeled in 2010
  - 4 in Roseville, CA
  - IBS 2011 Builder Magazine Concept Home
  - +10 in Orlando, FL
- Has committed to building 3 entire communities to earn the WaterSense label
  - Roseville, California
  - Austin, Texas
  - Orlando, Florida



# 2011 BUILDER Concept Home



Take the Virtual Tour

[http://www.builderconcepthome2011.com/?utm\\_source=showhome&utm\\_medium=eblast&utm\\_content=html17&utm\\_campaign=bch11-017-EPA-WS](http://www.builderconcepthome2011.com/?utm_source=showhome&utm_medium=eblast&utm_content=html17&utm_campaign=bch11-017-EPA-WS)

- Built by KB Home in collaboration with Martha Stewart Living Omnimedia
- First WaterSense labeled new home in Florida
- Achieved multiple green certifications
  - WaterSense labeled
  - ENERGY STAR qualified
  - LEED for Homes Platinum
- Sold after 2 weeks on the market!

# Building & Inspecting a WaterSense Labeled New Home



# New Homes Specification: Indoors



- **Required items:**
  - Water service pressure maximum 60 psi
  - Leak prevention measures
  - WaterSense labeled plumbing fixtures
  - Other water-efficient plumbing fixtures
  - Efficient hot water distribution system
- **Optional items must meet efficiency criteria, if installed:**
  - ENERGY STAR qualified dishwasher or clothes washer (if appliances installed)
  - Evaporative air conditioners
  - Water softeners
  - Drinking water treatment systems



# New Homes Specification: Outdoor



## Front yard + improved-upon areas

- Landscape - 2 Options
  - Water budget *or* 40% turfgrass allocation
  - Vegetated slopes
  - Mulching requirements
- Other water features (*if installed*)
  - Pools/spas - require covers
  - Ornamental water features
- Irrigation system (*if installed*)
  - Design
  - Audit
  - Scheduling



Healthy, beautiful  
landscapes that allow the  
homeowner to save water



# Preparation for Inspection

- Prepare inspection documentation
- Ensure water and hot water heater are on and set to normal level
- Inspection materials
  - Inspection checklist
  - Pressure gauge
  - Watch with second hand or stop watch
  - Digital thermometer such as a digital food thermometer
  - Bucket or flow bags with volume measures marked
  - Dye tablets for toilets
  - Flashlight
  - Digital camera
  - Tape measure
  - Equipment for determining slope such as a clinometer or laser level

# Inspection Checklist



## WaterSense Labeled New Home Inspection Checklist

Site Information			
Builder Name:			
Lot Number/Street Address:			
City:			
State:			
Zip:			
Inspection Information			
Inspection Company:			
Inspector Name:			
Date:			
Time Started:			
Time Ended:			
Sampling Protocol Information		Yes	No
Is this home being sampled and inspected as part of a sampling protocol for multiple homes in a planned community or subdivision?			
Were the first 7 homes in this planned community or subdivision all directly inspected and certified?			
Was this home randomly selected for sampling from a group of 7 homes that are scheduled for completion within 30 days of one another? (Provide additional information as indicated below for the homes covered by this sampling protocol)			
By affixing my signature below, I do hereby declare that I have inspected the home in accordance with the WaterSense Single-Family New Home Specification and the Inspection and Verification Guidance for WaterSense Labeled New Homes and will provide, if requested, the necessary supporting documents.			
Inspector Name:		Company:	
Signature:		Date:	

Version 1.0

6

December 6, 2009

Item	Criteria	Yes	No	N/A	Doc <sup>1</sup>	
<b>Indoor Water-Efficiency Criteria</b>						
Leak	3.1	Pressure test per all water supplies identified on plans				
		No visible leaks from hot water delivery system				
		No visible leaks from bidets/showers				
		No visible leaks from bathroom faucets				
		No visible leaks from kitchen faucets				
		No visible leaks from showerheads				
Service pressure	3.2	Pressure test installed & set < 60 psi OR RVI installed upstream of fixtures & pressure test < 60 psi OR				
		Pressure test < 60 psi & other documentation from water supplier that pressure < 60 psi				Req
Hot water delivery	3.3	Acceptable system type				
		10°F temp. change within 15.5 gallons				Req
Toilets	3.4.1	WaterSense labeled				Req
Urinals	3.4.2	WaterSense labeled				Req
Bathroom sink faucets	3.5.1	WaterSense labeled				Req
		Measured flow rate maximum 1.5 gpm (2 bar test maximum: 0.25 gallons)				
Kitchen sink faucets	3.5.2	Measured flow rate maximum 2.2 gpm (2 bar test maximum: 0.4 gallons)				
Showerheads	3.6	Measured flow rate - Max: 2.5 gpm water per shower compartment < 2.160 sq ft (2 bar test maximum: 0.4 gallons/showerhead) Separate controls for showerheads > 2.160 sq ft				
Disinfectant	3.7.1	ENERGY STAR qualified				Req
Clothes washers	3.7.2	ENERGY STAR qualified				Req
		Water factor < 0.3				Req
Exhaustive cooling system	3.8.1	Acceptable system type				
		Maximum 3.0 gallons/hour hour cooling, maximum 3 blow-downs in 24 hours				Req
		Control blow-down through conductivity or a time-temperature-based approach				Req
Water conservers	3.8.2	Certified to ANSI A136 Standard AA, meeting country efficiency rating standards in Section 7				Req
Drinking-water treatment systems	3.8.3	NSF A400 certified, minimum efficiency rating 85%				Req
Notes on indoor water-efficiency criteria						

<sup>1</sup> Not installed  
Documentation to be provided by the builder

Version 1.0

6

December 6, 2009

# Elements of a WaterSense labeled new home



## ■ Required Elements:

- Leak prevention
- Service pressure
- Hot water delivery system
- Toilets/urinals
- Bathroom faucets
- Kitchen faucets
- Showerheads
- Landscape design
- Homeowner's manual

## ■ Optional Elements:

- Dishwashers
- Clothes washers
- Evaporative cooling systems
- Water softeners
- Drinking water treatment systems
- Irrigation system

# Indoor Requirements & Inspection: Leak Prevention



## Pressure loss test

- Using a pressure gauge, note the water pressure to the home before and after the water to the home is turned off.
- The pressure should remain constant.
- If the pressure drops, this indicates that the home has a leak.
- Work with the inspector to find and fix any leaks before proceeding with the inspection.
- If the home has separate water supply for irrigation, check both the indoor and outdoor water supply for leaks.



# Indoor Requirements & Inspection: Service Pressure



## Service pressure

- Requirement:
    - Static pressure shall be 60 pounds per square inch (psi) or less.
  - Inspection:
    - For homes supplied by groundwater wells verify that a pressure tank is installed and set to 60 psi.
    - For homes with publicly supplied water, verify the static pressure of the home using one of the following methods:
      - Document whether the home has a pressure-regulating valve downstream of the point of connection.
- OR**
- Check the static pressure using a pressure gauge *AND*
  - Gather written documentation from builder that the pressure supplied by the jurisdiction is 60 psi or less.



# Indoor Requirements & Inspection: Hot Water Delivery System



- The average home wastes more than 3,650 gallons of year waiting for hot water to be delivered to the fixture.
- 10-15% of the energy used in hot water systems is wasted through distribution losses.
- Distance from the water heater and volume of water that needs to be discharged are the primary factors.

# Indoor Requirements & Inspection: Hot Water Delivery System



## Hot water delivery system

- Requirement:
  - The hot water distribution system shall store no more than 0.5 gallons of water in any piping/manifold between the hot water source and any hot water fixture.
  - No more than 0.6 gallons of water shall be collected from the hot water fixture before hot water is delivered (accounts for additional water that must be removed from the system before hot water can be delivered).
  - Timer- and temperature-based recirculating systems **do not** meet this requirement.



# Indoor Requirements & Inspection: Hot Water Delivery System



- Hot Water Delivery System Test



# Indoor Requirements & Inspection: Toilets



- Toilets are main source of water use in the home ~30%
- WaterSense labeled toilets can save 4,000 gallons per year
- Family of four replaces its toilets with WaterSense labeled models
  - \$90 per year in utility savings
  - More than \$2,000 over the lifetime of the toilet



# Indoor Requirements & Inspection: Toilets



## Toilets

- Requirement:
  - All toilets shall be WaterSense labeled tank-type toilets.
- Inspection:
  - Obtain the make and model name/number of all toilets installed.
  - Verify that the toilets are included on EPA's list of WaterSense labeled tank-type toilets:
    - Check [www.epa.gov/watersense/product\\_search.html](http://www.epa.gov/watersense/product_search.html).
    - If the product isn't on the list, verify it is labeled by e-mailing the WaterSense Helpline at [watersense@epa.gov](mailto:watersense@epa.gov).
  - Check the angle valve and connections for visible leaks.



Angle valve



# WaterSense Labeled Toilet List



WaterSense An EPA Partnership Program

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## Product Search

The following products\* have been certified to meet WaterSense criteria, which means you can expect exceptional performance while reducing your water use. Search for WaterSense labeled products by category, brand, model name, and/or model number.

WaterSense retailers commit to making WaterSense products available in stores. However, products may not be available in all markets.

For more information about WaterSense labeled products, visit:

- Bathroom Sink Faucets/Accessories
- Toilets

Please review important product information before purchasing WaterSense labeled products.

Product Category: Toilets

Brand Name: All Brands, American Standard, Aquasana

Model Name: 1.0 PA, 02114, 2nd Floor Wall Hung Toilet, 369380 Two Piece Toilet

Model Number:

Number of Products Found: 410

Filtered By: Toilets, undefined

*\*Important note: please double-click on a row to view detailed product information.*

Brand Name	Model Name	Model Number
American Standard	NH50 Dual-Flush Lever Combination	2476 510
American Standard	Yorkville Flo/Wise RH PA Toilet	2876 1
American Standard	Cadet Flo/Wise Pressure Assist EL Toilet	2462 1
American Standard	Cadet3 Flo/Wise RH EL 12" Inset	2826 513
American Standard	Cadet3 Flo/Wise NH RF 12" Inset	2829 513
American Standard	Menorcan Flo/Wise RF Complete Toilet	3468 120
American Standard	Cadet3 Flo/Wise Compact EL One-piece	2566 120
American Standard	Cadet3 Flo/Wise RH EL 12" Complete T	3305 120
American Standard	RH EL Dual Flush Combination	2464 216
American Standard	Cadet3 Flo/Wise NH EL 12" Inset	2832 513

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\*Disclaimer of Endorsement: Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favor by the United States Government.

# Indoor Requirements & Inspection: Toilets



## Toilets

- Inspection:
  - Conduct a dye tablet test to ensure the flapper is functioning properly.
    - Drop dye tablets into the toilet tank and wait 5 minutes.
    - Check the toilet tank to see if the color leaked from the tank into the bowl.
    - If color is observed in the bowl, the flapper is leaking and needs to be replaced.
    - Flush the toilet within 5 to 10 minutes after inserting the dye tables to avoid staining.

# Indoor Requirements & Inspection: Urinals



- Urinals using no more than 0.5 gpf
- WaterSense labeled urinals must be flushing urinals
- Facility replaces its urinals with WaterSense labeled models save ~ 4,600 gallons of water per year
- Nationwide we could save 45 billion gallons annually
  - Enough to supply 450,000 households for a year!

# Indoor Requirements & Inspection: Urinals



## Urinals

- Requirement:
  - All urinals shall be WaterSense labeled urinals.
- Inspection:
  - Obtain the make and model name/number of all urinals installed.
  - Verify that the urinals are included on EPA's list of WaterSense labeled urinals at [www.epa.gov/watersense/product\\_search.html](http://www.epa.gov/watersense/product_search.html), or e-mail the WaterSense Helpline, [watersense@epa.gov](mailto:watersense@epa.gov).
  - Check connections for visible leaks.



# Indoor Requirements & Inspection: Faucets



- Faucets account for >15% of indoor water use
  - More than 1 trillion gallons nationwide
- On average a household can save more than 500 gallons of water per year with WaterSense labeled faucets
- Nationwide we could save 60 billion gallons annually
  - \$350 in water utility bills
  - \$600 million in energy cost for heating water
  - Enough water to supply Miami for more than 150 days!



# Indoor Requirements & Inspection: Bathroom Faucets



## Bathroom faucets

- Requirement:
  - All bathroom faucets or faucet accessories (e.g., aerators) shall be WaterSense labeled.
- Inspection:
  - Obtain the make and model numbers of all bathroom faucets or faucet accessories installed.
  - Verify that the faucets are included on EPA's list of WaterSense labeled bathroom faucets:
    - Check [www.epa.gov/watersense/product\\_search.html](http://www.epa.gov/watersense/product_search.html).
    - If the product isn't on the list, verify it is labeled by e-mailing the WaterSense Helpline at [watersense@epa.gov](mailto:watersense@epa.gov).



Cold water connection



Hot water connection



# WaterSense Labeled Faucet List



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## WaterSense

An EPA Partnership Program

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WaterSense / Product Search

### Product Search

The following products\* have been certified to meet WaterSense criteria, which means you can expect exceptional performance while reducing your water use. Search for WaterSense labeled products by category, brand, model name, and/or model number.

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- Bathroom Sink Faucets/Accessories
- Toilets

Please review important product information before purchasing WaterSense labeled products.

Product Category: Bathroom Sink Faucets/Accessories

Brand Name: All Brands, American Standard, AquaSource (a Lewick brand)

Model Name: 1 Handle Le: Faucet, 1.5 gpm Aerator, 1H Cartridge Lav Airbach, 1H Cartridge Lav Faucet

Model Number:

Number of Products found: 1472

Filtered By: Bathroom Sink Faucets/Accessories, undefined

*\*Important note: please double-click on a row to view detailed product information.*

Brand Name	Model Name	Model Number
American Standard	1.5 Gpm Aerator	7034
American Standard	Cadet	81153
American Standard	Rebath 3	7395-994
American Standard	Rebath 3	7395-083
American Standard	Rebath 3	7395
American Standard	Tropic	7038-801
American Standard	Tropic	7038-291
American Standard	Triumph	7034
American Standard	Hamilton	7034
American Standard	Neo Traditional	60035

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**\*Disclaimer of Endorsement:** Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement.

**DID YOU KNOW?**  
You can save **11,000 gallons a year** by updating your bathroom with a WaterSense labeled toilet. [Learn more >](#)

**LOOK HERE**  
Information for Commercial, State and Local Government, Professionals and more.

# Indoor Requirements & Inspection: Bathroom Faucets



- Bathroom Sink Flow Test



# Indoor Requirements & Inspection: Showerheads



- Showering accounts for 17% of indoor water use - 30 gallons each day
  - Using 1.2 trillion gallons nationwide - enough to supply NY and NJ for a year!
- WaterSense labeled showerheads can save 2,300 gallons per year
  - 300 kwh in electricity - enough to power a tv for a year
- If every household in the U.S. replaced its showerheads with WaterSense labeled models:
  - \$1.5 bil in water and \$2.5 bil in energy savings annually
  - More than 250 million gal saved annually - enough for 2.5 million homes

# Indoor Requirements & Inspection: Showers



- Specification will be revised in 2011 to include WaterSense labeled showerheads
- Showerhead Requirements:
  - Showerheads must have a maximum flow rate of 2.5 gpm.
  - In cases with more than one showerhead, the entire device must meet the maximum flow requirement in all possible operating modes.
- Shower Size Requirements:
  - The total allowable flow rate of water flowing at any given time from all showerheads must be limited to 2.5 gpm per shower compartment with a floor area less than 2,160 square inches (in<sup>2</sup>).



# Indoor Requirements & Inspection: Showers



- Showerhead Flow Test



# Indoor Requirements & Inspection: Dishwashers & Clothes Washers



## Dishwashers

- Requirement:
  - *If a dishwasher is installed, it shall be ENERGY STAR<sup>®</sup> qualified.*

## Clothes washers

- Requirement:
  - *If a clothes washer is installed, it shall be ENERGY STAR qualified with a water factor (WF)  $\leq 6.0$  gallons per water cycle per cubic foot capacity.*
  - Check for leaks from all visible connections and valves.



# Outdoor Requirements & Inspection: Landscape Design



EPA provides builders with two options for complying with landscape requirements:

- **Option 1:** Regionally-based allocations determined using EPA's water budget tool.\*
- **Option 2:** Maximum turf allocation determined using a set percentage (40%) of the landscaped area.



\*New web-based version of WaterSense water budget tool coming summer of 2011



# WaterSense®

An EPA Partnership Program

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WaterSense / Water Budget Tool (V 1.01)

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## Water Budget Tool (V 1.01)

**STEP 1** Location and Area | **STEP 2** Plants and Irrigation | **STEP 3** The Results

Fill out the chart below with all the appropriate information to calculate your landscape's water needs.

Zone	Area (sq. ft.)	Plant Type / Landscape Feature	Water Demand	Irrigation type	Impact on Water Use	Required Water (gal/month)
× 1	2,290	Turfgrass	Medium	Fixed Spray	●●●●●●●●	8,038
× 2	130	Groundcover	Low	Drip - Standard	●●	105
× 3	588	Shrubs	Low	Drip - Standard	●●●●	476
× 4	392	Shrubs	Low	Drip - Standard	●●●●	318
× 5	710	Groundcover	Low	Drip - Standard	●●●●	575
× 6	450	Groundcover	Low	Drip - Standard	●●●●	365
× 7	540	Turfgrass	Low	Fixed Spray	●●●●	1,611

Total: **5,100**

+ add zone

**12,239**

Water Allowance (gal/month)

**11,488**

Total Site Water Requirement for the Site (gal/month)

**+751**

Remaining Difference (gal/month)

[NEXT STEP >](#)

Helpline: (866) WTR-SENS (987-7367) | [Contact Us](#) | [Office of Water](#)

WaterSense, U.S. Environmental Protection Agency, Office of Wastewater Management (4204M), 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460



# Outdoor Requirements & Inspection: Landscape Design



- Lots with total landscapable areas  $\leq 1,000$  square feet (ft<sup>2</sup>) are exempt from this landscape criterion.
- The landscape design criteria are minimum requirements, and are not intended to override local codes or regulation
- Temporary landscapes (e.g., straw mulch)
  - Allowed but WaterSense certificate label is withheld until permanent landscape meeting specification criteria is installed, inspected & certified.
  - Indoor criteria can be inspected and home can be occupied prior to installation of permanent landscape.

# Outdoor Inspection: Landscaped Area



- Landscaped area is defined as the designed area of landscape excluding the footprint of the home and permanent hardscape areas such as driveways, sidewalks, and patios.
  
- Includes any area improved upon by the builder such as:
  - Landscaping
  - Turf or sod
  - Water features or pools
  
- Excluded from landscapable area:
  - Septic drainage fields
  - public right-of-ways

# Outdoor Requirements & Inspection: Irrigation System



- *IF irrigation systems are installed, they must:*
  - Be designed or installed by a WaterSense irrigation partner.
  - Be audited by a WaterSense irrigation partner.
  - Shall be designed to sustain the landscape without creating runoff or direct overspray of the property
  - Achieve a minimum 65% distribution uniformity
  - Be equipped with technology that inhibits or interrupts operation during periods rainfall or sufficient moisture

# WaterSense Irrigation Partner List



WaterSense An EPA Partnership Program

WaterSense / Meet Our Partners

## Meet Our Partners

WaterSense is partnering with manufacturers, retailers and distributors, utilities, state and local governments, nongovernmental organizations, trade associations, irrigation professionals, and professional certifying organizations to bring water-efficient products to market and spread the word about the need for smart water use.

Please note that irrigation partners have been certified under a [WaterSense labeling process](#). Each irrigation partner, not his or her company of employment, is a current WaterSense partner.

[Welcome New Partners!](#)

Partner Type:

State:

Partner Name:

Number of records found: 1337

Filtered By: Irrigation Partners

**\*Important note: please double-click on a row to view detailed partner information.**

Partner Name	Partner Type	State
Ackley, Donald	Irrigation Partners	CA
Adams, Andy	Irrigation Partners	OH
Ainsworth, Sean	Irrigation Partners	NV
Ajay, Scott	Irrigation Partners	-
Almodovar, Carlos	Irrigation Partners	PR
Alvarado, Gregory	Irrigation Partners	CO
Antessia, Jeff	Irrigation Partners	CA
Anderson, Debbie	Irrigation Partners	KY
Andrade, Luis	Irrigation Partners	TX

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**\*Disclaimer of Endorsement:** For retailer and distributor partners, the state listed represents a company's headquarters location. Please visit a company's Web site to find a location near you.

# Certification & Labeling Overview



- Once the home has been inspected and certified to meet EPA's specification:
  - Inspector signs certificate
  - Licensed certification provider signs certificate
  - Builder receives certificate
    - Gives to homeowner
    - Provides homeowner educational manual
    - Other documents as needed, i.e., irrigation system schedules



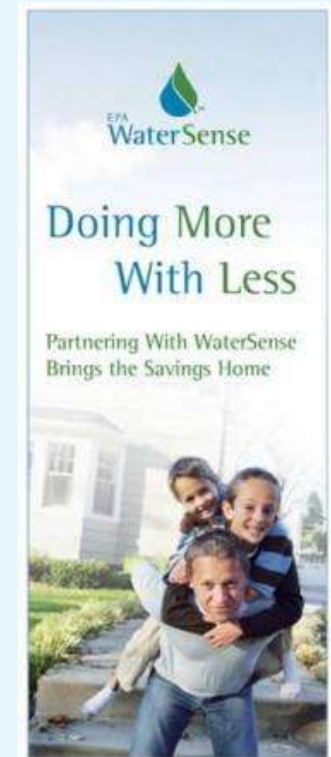
# Bringing WaterSense Labeled New Homes to Your Community



# Why Join WaterSense?



- National specifications for water-efficient products and services
- New opportunity for distinction in the market
- Growing demand for services (easy add-on)
- Recognition from EPA as a water-efficiency leader
- Membership in a network of water-efficiency leaders
  - Learn new strategies
  - Collaborate with other types of partners



# Why Join WaterSense?



- **Program flexibility**
  - Designed to fit easily with other green building programs while allowing add-ons and choices for homeowners
  - Outdoor component offers two options
- **Consumer satisfaction**
  - WaterSense label ensures high-performance products and services that save water and energy
- **Right thing to do**
  - WaterSense helps demonstrate a commitment to water efficiency in your community



# New Opportunities to Partner with WaterSense



- Builders
  - Build at least 1 home/year to meet the spec
  - Become the first builder in your state to partner and/or build to the WaterSense specification
  
- Licensed certification providers
  - Oversee inspections and certify homes to meet the specification
  
- Irrigation Professionals
  - Needed to design, install and audit new homes
  
- Promotional Partners
  - Now includes Home Builder Associations (HBAs)





# Licensed Certification Providers

- Licensed Certification Providers (LCPs)
  - Oversee the inspection and certification of WaterSense labeled new homes
  - Organizations that employ the inspectors
  - Sign and issues the WaterSense label to the builder
  - Notify EPA quarterly of any new homes that have been certified to earn the label.
- How do LCPs become WaterSense Partners?
  - Contact a WaterSense Program Administrator - RESNET
  - Apply to/Receive approval from Program Administrator
  - Complete and sign Partnership and Licensing Agreement with EPA

All available on the WaterSense website:  
<http://www.epa.gov/watersense/partners/lcp.html>

# HBA WaterSense Partnership



- Support EPA's mission and your community by promoting construction of water-efficient new homes
- Keep members updated on WaterSense new homes program news and events
- Spread the word about WaterSense labeled new homes to local community

# Community Support for WaterSense Labeled New Homes



- Recruit builders to construct WaterSense labeled new homes
- Incentivize WaterSense
  - Reduce initial tap fees
  - Fast-track permitting
  - Tax credits
- Create interest among home buyers and local home builder associations

**WATER EFFICIENCY**  
THE JOURNAL FOR WATER RESOURCE MANAGEMENT

HOME | SUBSCRIPTION SERVICES | EDITORIAL | EVENTS | INTERACT

May-June 2010

## Bring WaterSense Home

Utilities consider incentives to encourage water efficient homes.

By Alicia Mann  
[Comments](#)

**Article Tools**

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Stu Feinglas knows exactly how much it costs to tap into a municipal water supply when constructing new homes—it's his job to sell the water. He also knows how much water efficient products and practices can save a water utility—it's also his job to promote water conservation. As a water resources analyst for the City of Westminster in Colorado, Feinglas spends half his time selling water and the other half trying to get customers to conserve it.

With Westminster experiencing droughts and frequently feeling the pressure of limited water supplies—the Denver region is entirely dependent on surface water—promoting water efficiency is an important facet of water conservation in that region. Building water efficient homes is one way to help address the city's growing water demands. "It's easier and more cost-effective to build more efficiently in the first place," says Feinglas.

# New Partner Tools



- Builder/Provider marketing tool kits
  - Press release templates
  - Web site language
  - Artwork templates
- Use of partner logo
- Use of new promotional labels
  - Including builder promo label
- Online materials
  - Text and ideas for builder Web sites
  - Programmed “widget” updated regularly with water efficiency tips from WaterSense
- All WaterSense tools can be utilized by any type of partner (aka are available to HBAs that partner with WaterSense)

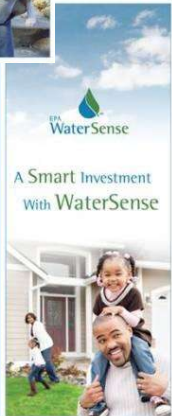
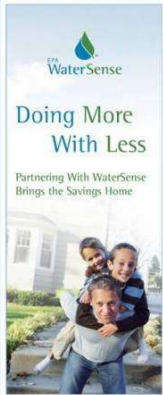


# Special Mark for Builder Partners



- Special mark for WaterSense builder partners to promote to consumers they build water-efficient homes
- Builder promotional label can be used on:
  - Web sites
  - Marketing materials
  - Model homes
- This mark is **not** used to indicate a home has received the label

# Tools for Realtors & Inspectors



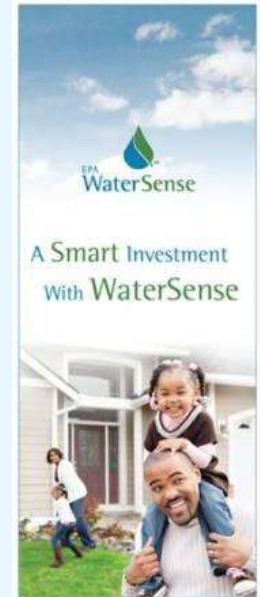
- Promotional marks
  - “look for” & “ask about”
- New Homes recruitment brochures
- WaterSense factsheets for products and homes
- Contact the WaterSense helpline: [watersense@epa.gov](mailto:watersense@epa.gov)



# Why Will Consumers Purchase WaterSense Labeled Homes?



- **Convenience, efficiency, & confidence**
  - Hot water will be delivered to users faster and use less energy
  - Landscaping will be healthy and sustainable, using less water and requiring less maintenance
  - WaterSense labeled products have been tested and certified for efficiency *and* performance
- Homeowners can feel good about themselves every time they turn the key, and pay their utility bills



# Why Purchase a WaterSense Labeled New Home?



- WaterSense labeled homes will be at least 20% more efficient than a traditional new home
  - **50,000** gallons of water - equal to 1200 loads of laundry
  - At least \$500 per year on water, sewer, and energy bills

# Coming to a neighborhood near you!



# Learn More



## ■ WaterSense Information

- Web site: [www.epa.gov/watersense](http://www.epa.gov/watersense)
  - Partnership information
  - new homes specification,
  - certification system, or

## ■ For questions:

- E-mail: [watersense@epa.gov](mailto:watersense@epa.gov)
- Toll-free Helpline: (866) WTR-SENS
  - 1(866) 987-7367
- Alicia Marrs [marrs.alicia@epa.gov](mailto:marrs.alicia@epa.gov)





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