

# WaterSense

Saving Water Saves Energy

Sylvia Bienzle  
U.S. Environmental Protection Agency

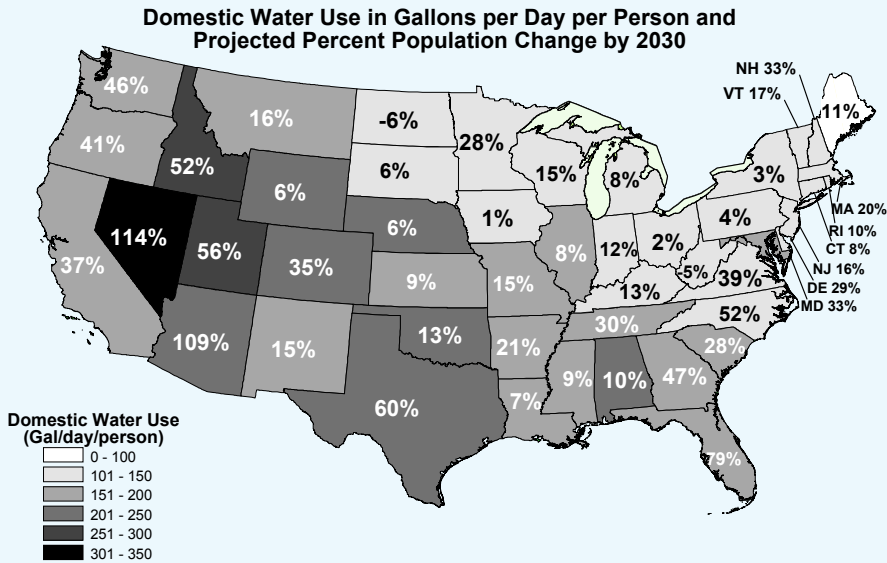
## Two Sides of the Same Coin

Water  
for  
Energy



Energy  
for  
Water

# Regional Water Impacts



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# Strategies to Save Water



- **Supply**
  - Can't manage what you don't measure
  - Minimize losses and line breaks
  - Cheap water is easy to waste
- **Demand**
  - Approximately 70% of water used indoors, 30% outdoors



**YOU can make a difference!**

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## Saving Water, Saves Energy



The cheapest gallon of water may be the one you never have to provide



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## Strategies to Save Water



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### ■ Demand

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## Water Use at Home



### Residential Water Use



- Bathrooms largest water household water user
- Up to half of landscape water goes to waste

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## 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



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## What is EPA's WaterSense



- Voluntary partnership program launched in 2006
- Help consumers identify products that save water and perform well.
- Labels products that use less water
- Backed by EPA's efficiency and performance criteria
- Independently certified
- Just over 2,300 partners to date
- More than 2,700 labeled products

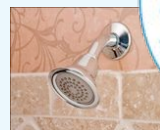
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## WaterSense Products and Services



- **WaterSense Products**
  - 700+ labeled toilets
  - 2,600+ labeled faucets
  - 270 labeled showerheads
  - 40+ labeled flushing urinals
  - 15 labeled new homes
- **WaterSense Services**
  - Irrigation Professionals
  - New Home Certification Providers



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## Schedule for WaterSense



	<i>Complete</i>	<i>2011/2012</i>	<i>2011 and Beyond</i>
<i>Irrigation</i>	<i>Professional Certification Programs</i>	<i>Irrigation Controllers Moisture Sensors Drip/Micro Technology</i>	<i>Irrigation Sprinklers</i>
<i>Residential Plumbing</i>	<i>Toilets Faucets Showerheads</i>	<i>Water Softening Systems</i>	<i>Water Treatment Systems</i>
<i>Commercial Plumbing</i>	<i>Flushing Urinals</i>	<i>Pre-rinse Spray Valves</i>	<i>Flushometer Valve Toilets Food Disposals</i>
<i>Other</i>	<i>New Homes</i>	<i>Commercial and Institutional Building Support</i>	<i>Autoclaves Glassware Washers Additional Professional Certifications</i>

11 Significant opportunity for associated energy savings



## WaterSense Collaboration



### 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

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## 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 CO2



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## WaterSense Labeled New Homes



- 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

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## 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

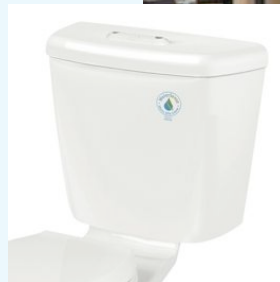
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## New Homes Specification: Indoors



- **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



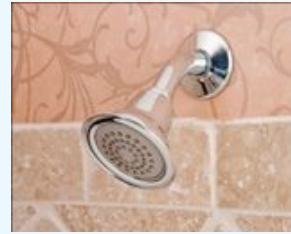
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## Indoor Requirements & Inspection: Hot Water Delivery System



- 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.



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## New Homes Specification: Outdoors



### Front yard and improved-upon areas

- **Landscape**
  - Performance-based OR prescriptive turfgrass allocation
  - Vegetated slopes
  - Mulching requirements
- **Other features** (if installed)
  - Pools/spas are covered
  - Ornamental water features have beneficial use
- **Irrigation system** (if installed)
  - Designed or installed by WaterSense irrigation partner
  - Audited by WaterSense irrigation partner
  - Schedules required for homeowner



WaterSense labeled new homes feature healthy, beautiful landscapes that allow homeowners to save water

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## Benefits of Water Efficiency



Utility



YOU!



Environment

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## Learn More



### WaterSense Information

- Web site: [www.epa.gov/watersense](http://www.epa.gov/watersense)
  - List of products
  - Partnership information
  - Educational fact sheets and resources
- E-mail: [watersense@epa.gov](mailto:watersense@epa.gov)
- Toll-free Helpline: (866) WTR-SENS



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