



January 19, 2012
Cary McElhinney
US EPA Region 5

Why Water Efficiency?

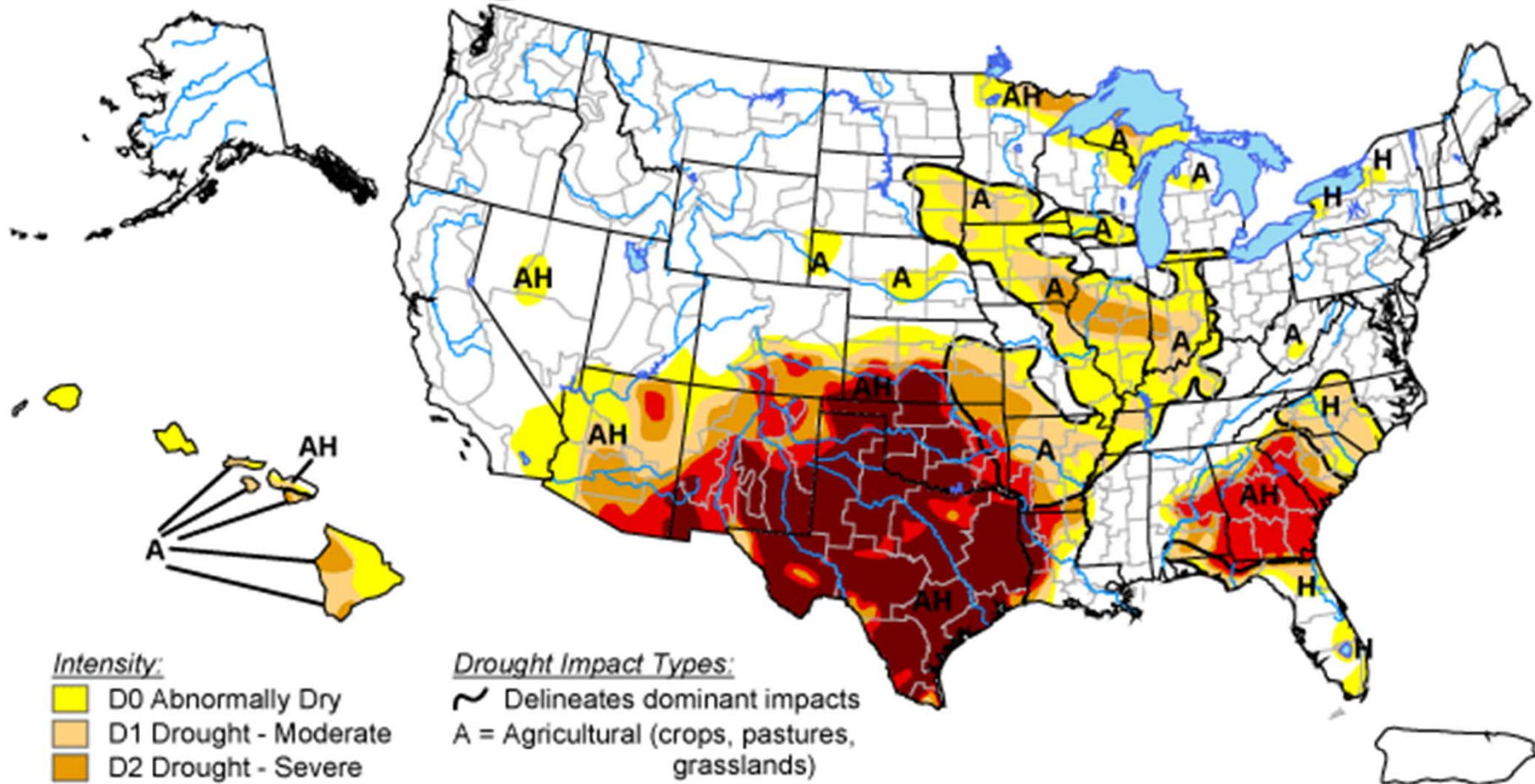
- Between 1950 and 2000, U.S. population doubled while the demand on public supply systems more than tripled.
- GAO: At least 36 states are anticipating water shortages by 2013.
- To preserve our water supply for future generations, we need to use water more efficiently.



U.S. Drought Monitor

September 20, 2011


Valid 8 a.m. EDT



Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

Drought Impact Types:

-  Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.

<http://drought.unl.edu/dm>

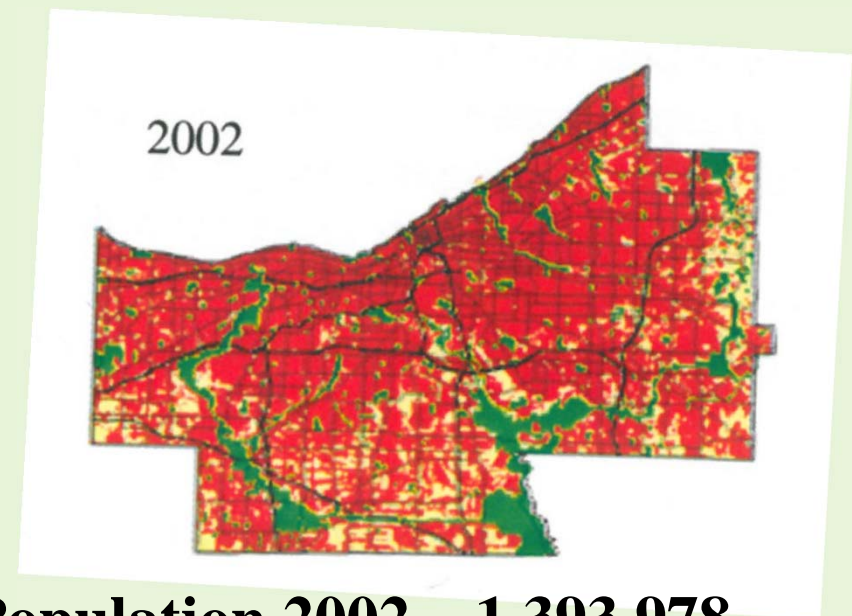
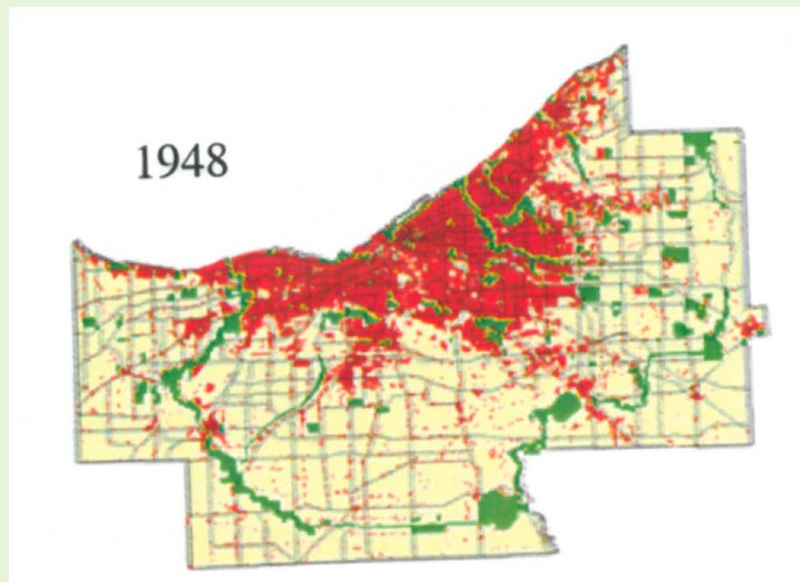
Released Thursday, September 22, 2011

Author: Michael Brewer/Liz Love-Brotak, NOAA/NESDIS/NCDC



Expanding Population

US Census Population 1950 – 1,389,582



US Census Population 2002 – 1,393,978

The Water-Energy Nexus

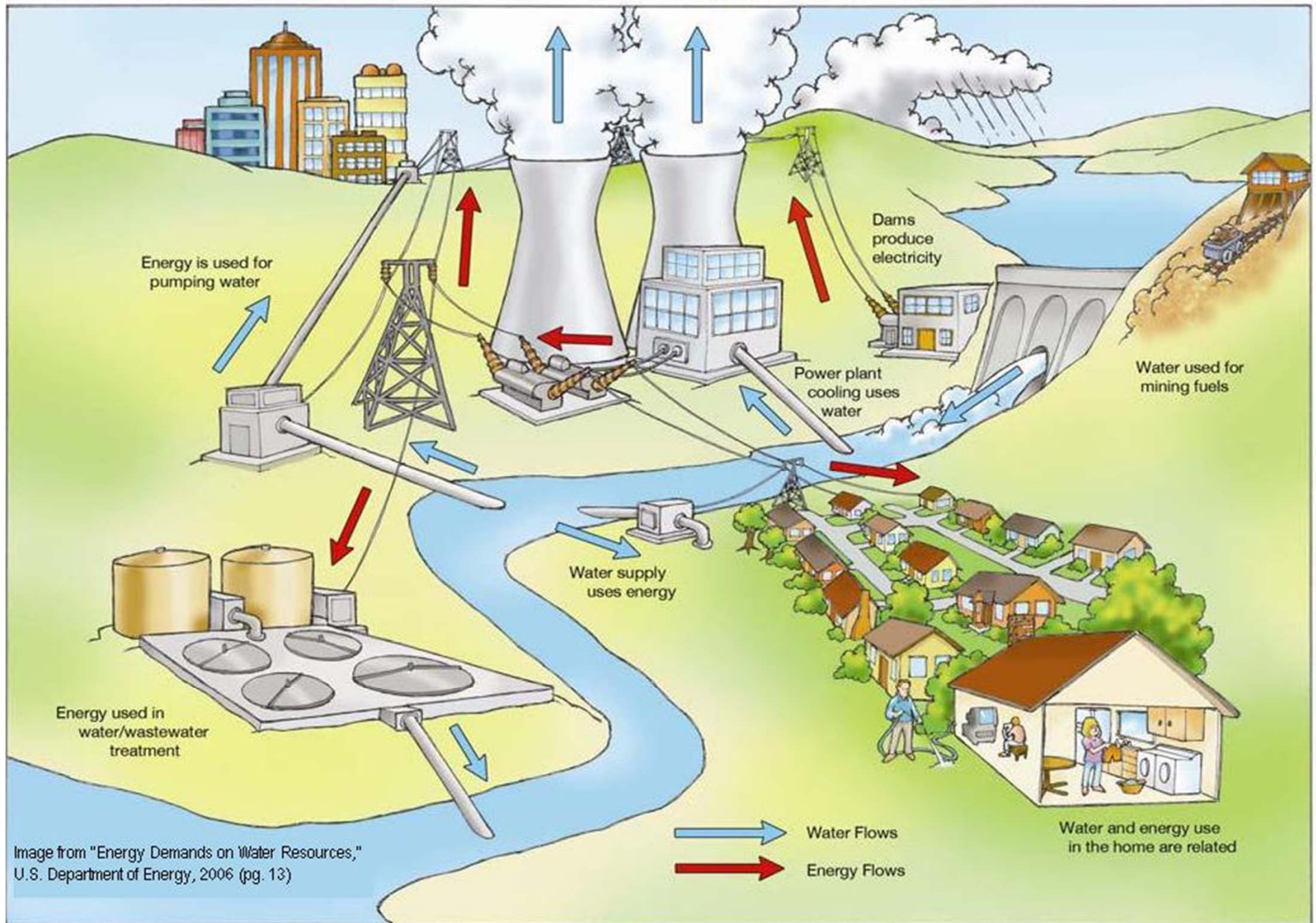
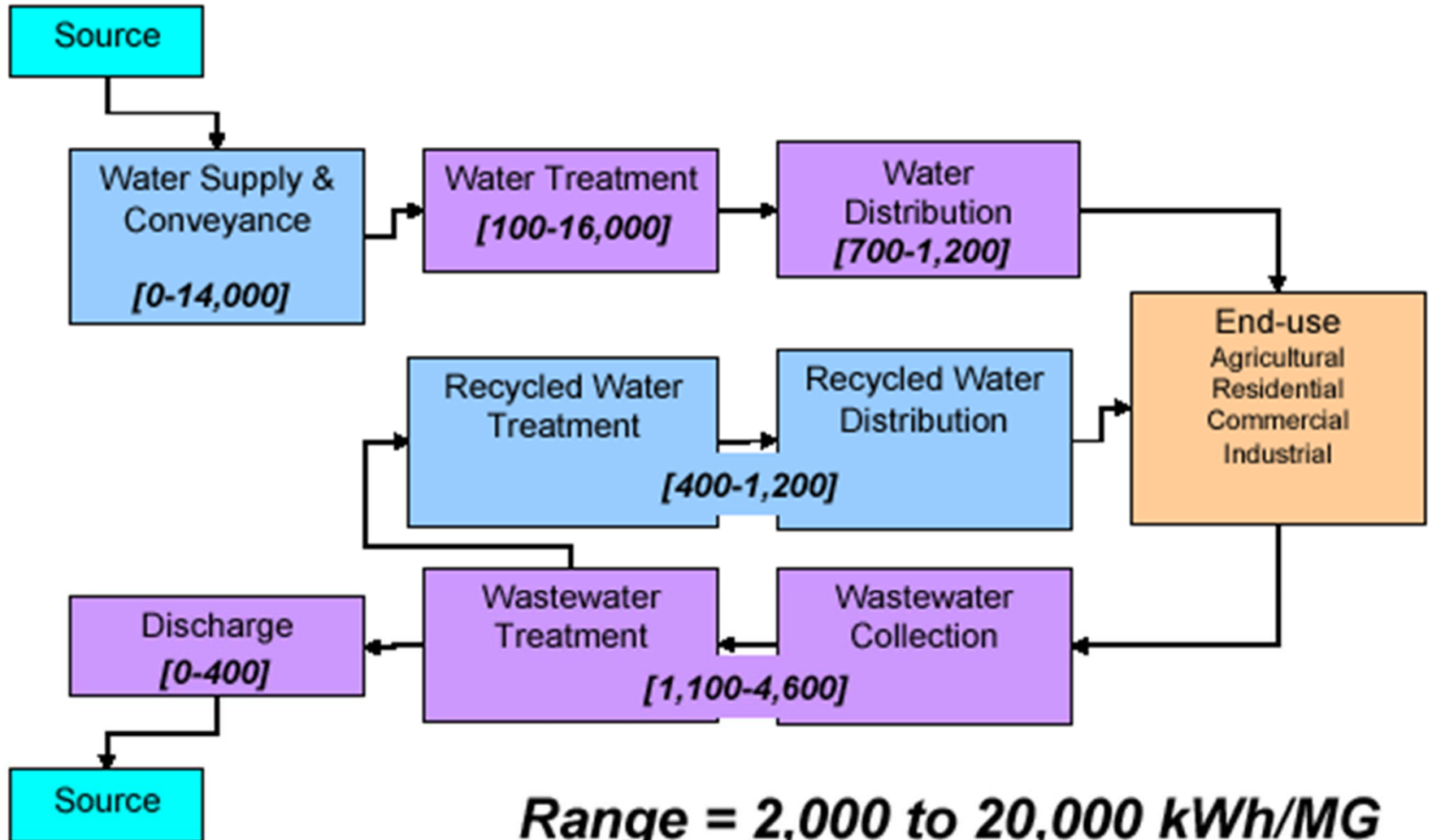


Image from "Energy Demands on Water Resources,"
U.S. Department of Energy, 2006 (pg. 13)

Energy Used in Water Production



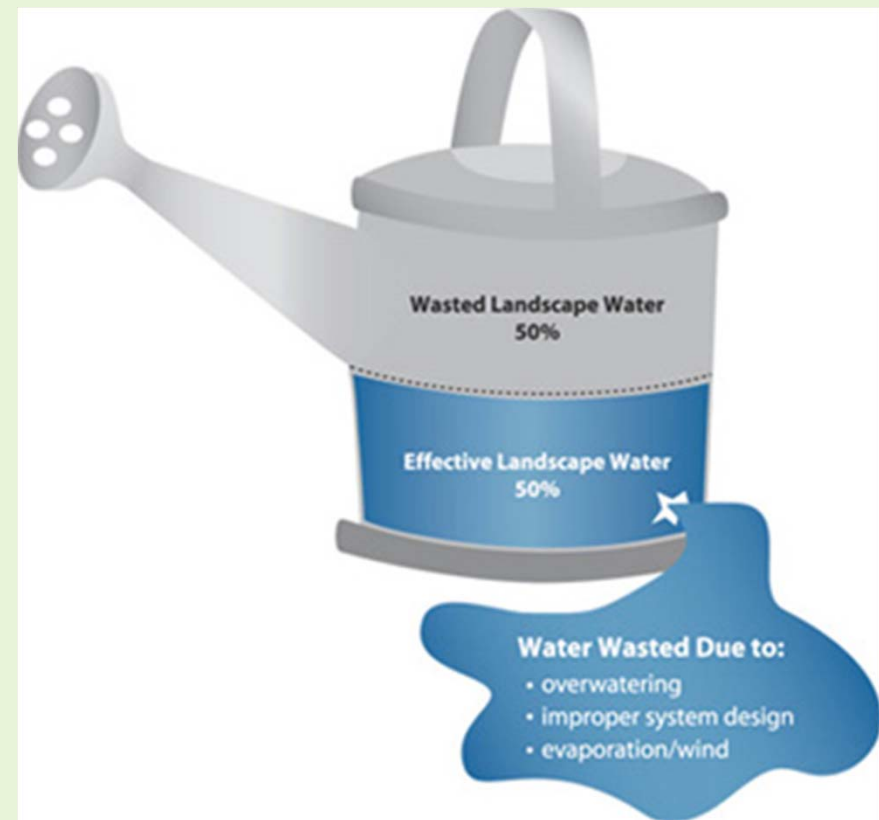
Drops to Watts



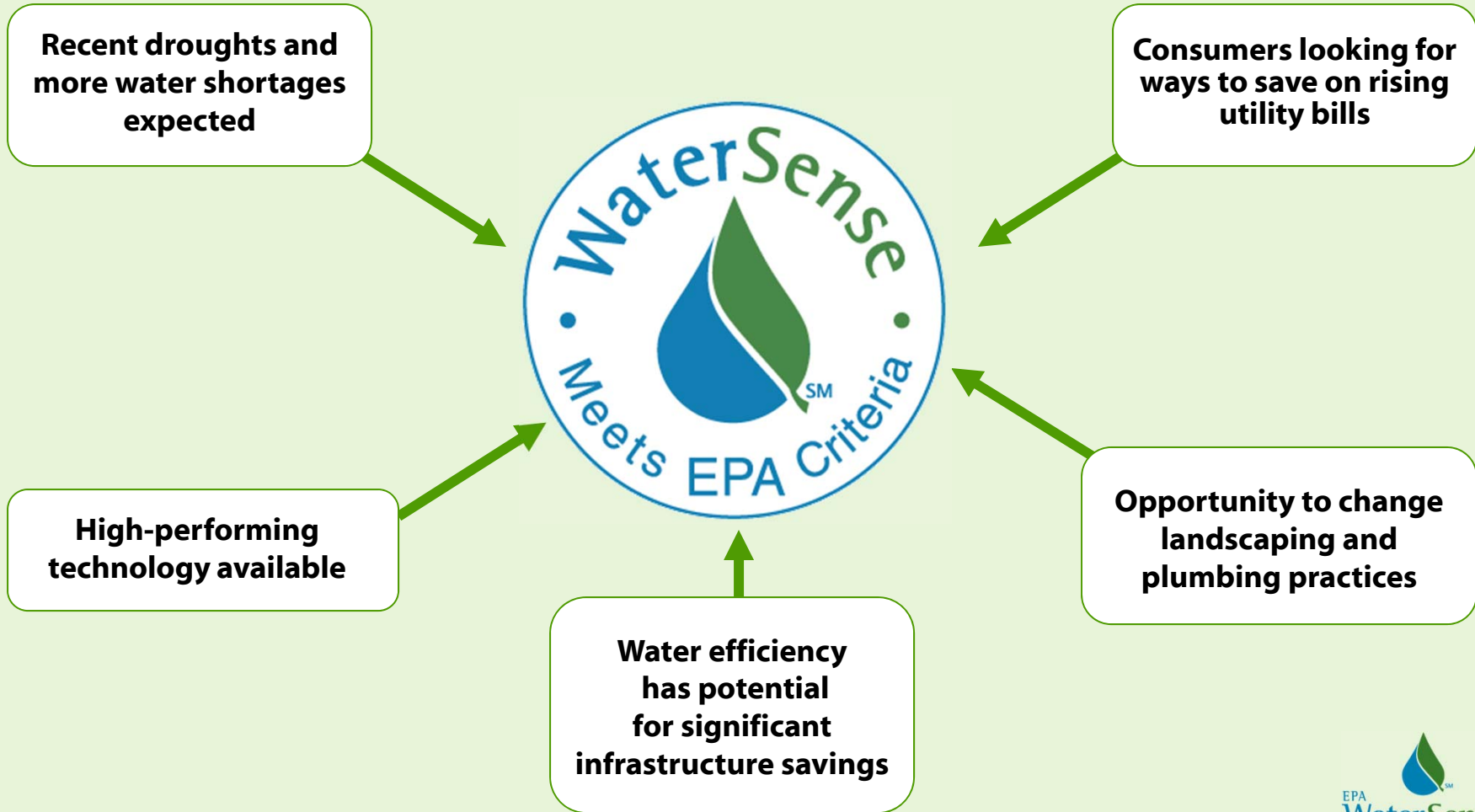
- Nationwide, drinking water and wastewater systems use 56 billion kilowatt-hours per year—enough electricity to power more than 5 million homes for an entire year
- Water efficiency saves energy used to pump, heat, and treat water
- If only one out of every 100 American homes were retrofitted with water-efficient fixtures, we could avoid 80,000 tons of greenhouse gas emissions—equivalent to removing nearly 15,000 automobiles from the road for a year!

The Potential to Save Is Here

- Homes with highly efficient technology can save about 30% or more in water use.
- New high-efficiency toilets use 20-60% less water with superior performance
- Up to 50 percent of water applied for household lawn and garden care is wasted



Why WaterSense?





What Is WaterSense?



- Voluntary partnership and labeling program launched by EPA in 2006.
- Simple way for consumers to identify products that save water and perform well.
- Labels products that use 20 percent less water.
- Backed by EPA's efficiency and performance criteria.
- Independently certified.

What's Special About WaterSense?



- 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 bear the burden of research, testing, and branding
 - Licensed certifying bodies certify the products and police the label's use
 - EPA leverages national network of partners to promote WaterSense



WaterSense Product Benefits



- WaterSense labeled toilets can save:
 - About 16 percent of total indoor water use
- WaterSense labeled faucets can reduce a household's annual water use by:
 - Nearly 600 gallons and 70 kilowatt-hours of electricity used for heating the water
- If just one in every 10 American homes installed WaterSense labeled fixtures, we could save:
 - More than 120 billion gallons per year
 - More than \$800 million per year in household utility bills



WaterSense “Products Pipeline”

	<i>Complete</i>	<i>2012/2013</i>	<i>and Beyond</i>
<i>Irrigation</i>	<i>Professional Certification Programs Irrigation Controllers</i>	<i>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>Urinals</i>	<i>Pre-rinse Spray Valves</i>	<i>Flushometer Valve Toilets Food Disposals</i>
<i>Other</i>	<i>New Homes</i>	<i>New Homes - Revised Commercial Bldg BMPs</i>	<i>Autoclaves Glassware Washers Additional Professional Certifications</i>



Where Is the WaterSense Label?

- **Tank-Type Toilets**
 - **900+** labeled models
- **Faucets/Faucet Accessories**
 - More than **3,000** labeled models
- **Flushing Urinals**
 - **90** labeled valves/fixtures
- **Showerheads**
 - More than **500** labeled models
- **Single-Family New Homes**
 - **55** labeled homes



Labeled products are listed at www.epa.gov/watersense/products/index.html



Product Search

Reduce your water use while enjoying exceptional performance with the following WaterSense labeled products. Search by category, brand, model name, and/or model number, search results appear below.

Please review [important product information](#) before purchasing WaterSense labeled products.

Product Category Showerheads	Brand Name All Brands Alsons Brizo Cleveland Faucet Group (a Moen brand) Delta	Model Name Classic
Model Number <input type="text"/>		
<input type="button" value="Search"/>		

Number of Products found: 1

Filtered By: Showerheads, Delta

Double-click on a row to view detailed product information.



Brand Name	Model Name	Model Number
Delta	Classic	1323*

Page 1 of 1

Please note: WaterSense retailer partners commit to making WaterSense labeled products available in stores. However, products may not be available in all markets.

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 favoring by the United States Government.



WaterSense New Homes Program

- Voluntary program that promotes water efficiency of single-family new homes—both indoors and outdoors
- 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 New Homes Program

- Backed by the credibility of the U.S. EPA
- First national new home labeling program for water efficiency
- Works with other green building programs - homes can receive multiple certifications
 - ENERGY STAR[®], LEED, NAHB, EarthCraft, etc.
- Inspected & certified by independent third parties
- Recoup initial investment in as little as six years
- Applicable to new single-family homes or townhomes, 3 stories or less

New Homes Specification: Indoor

- **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
 - Evaporative air conditioners
 - Water softeners
 - Drinking water treatment systems



New Homes Specification: Outdoor

Front yard + improved-upon areas

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



Healthy, beautiful
landscapes that allow the
homeowner to save water



Outdoor Water Use

- Outdoor use is estimated to be about 30 percent of residential use, or approximately 7.8 billion gallons per day, with the largest component being used for irrigation.
- Up to 50 percent of water applied by irrigation systems is lost to wind, evaporation, improper system design, installation, or maintenance.



Improving Outdoor Water Efficiency

- ***Goal 1 - Increase Awareness of Water-Efficient Products and Services:***
 - Make water efficiency an attribute of choice

- ***Goal 2 - Promote Water-Efficient Landscaping:***
 - Work with existing partners and other EPA programs to address efficient landscape design, plant selection and soil amendments

- ***Goal 3 - Improve the Performance of Irrigation Systems:***
 - Promote good design, installation, and O&M of irrigation systems



Weather-Based Irrigation Controller Specification (Draft)

- Specification establishes criteria for weather-based irrigation controllers that utilize current climatological data as a basis for scheduling irrigation.
- Applies to:
 - Standalone controllers
 - Add-on and plug-in devices
 - Both residential and commercial



WBIC - Scope

- Specification applies to controllers that create or modify irrigation schedules based on evapotranspiration (ET) principles by:
 - Storing historical crop evapotranspiration (ETc) data characteristics of the site and modifying these data with an onsite sensor;
 - Using onsite sensors as a basis for calculating real time ETc;
 - Using a central weather station as a basis for ETc calculations and transmitting the data to individual users from remote sites; or
 - Using onsite weather or climate sensors.



Performance Criteria

- The controller shall be tested in accordance with the most recent version of the Smart Water Application Technologies™ (SWAT) test protocol for climatologically based controllers, with the additional requirements identified in the specification.
- Irrigation adequacy for each zone shall be greater than or equal to 80 percent.
- Irrigation excess for each zone shall be less than or equal to 5 percent.



Commercial Program



Potential WaterSense Commercial and Institutional Buildings Program

- One potential element EPA is considering in order to expand the WaterSense program
- Would complement labeling of commercial products already underway
- **Launch of a Commercial and Institutional (CI) program will only occur if additional resources are approved**



Defining the CI Sector

WaterSense defines CI users of water as all those that cannot be clearly categorized as residential or industrial

Included Subsectors

- Office Buildings
- Schools/Educational Complexes
- Commercial & Retail Centers
- Hotels & Motels
- Laboratories
- Laundry Facilities
- Vehicle Washes
- Bakery/Pastry Shops
- Auto Service & Repair Shops
- Fuel Service Stations & Convenience Stores
- Churches & Other Places of Worship



Goals of Potential CI Program

- **Verifiable and documented water savings**
- Raise visibility of WaterSense program
- Increase participation and partnership opportunities in WaterSense



Water Efficiency in the Commercial and Institutional Sector: Considerations for a WaterSense Program



Water Efficiency in the Commercial and Institutional Sector: Considerations for a WaterSense Program

August 20, 2009

A literature and data review of CI water use on the national level

Contains program options and implementation strategies

Available at
<http://www.epa.gov/watersense/partners/cipaper.htm>





Who Can Be a WaterSense Partner?

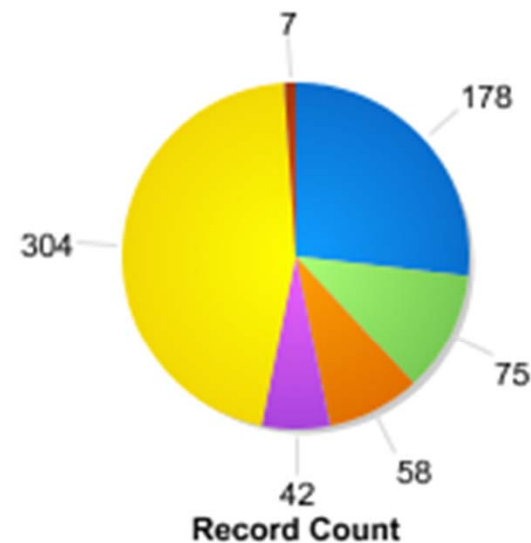
<p><i>Promotional Partners</i></p> <ul style="list-style-type: none">-Utilities-Government-Nonprofit Organizations	<ul style="list-style-type: none">▪ Promote WaterSense labeled products and practices to customers▪ Promote the concept of water efficiency and value of water▪ Offer incentives such as rebates for WaterSense labeled products (utilities)
<p><i>Manufacturers</i></p>	<ul style="list-style-type: none">▪ Manufacture WaterSense labeled products and promote them to buyers
<p><i>Professional Certifying Organizations</i></p>	<ul style="list-style-type: none">▪ Sponsor and promote professional certification programs that highlight water efficiency (currently only irrigation)▪ Encourage certified individuals to become WaterSense partners
<p><i>Irrigation Partners</i></p>	<ul style="list-style-type: none">▪ Promote WaterSense labeled products▪ Provide water-efficient services
<p><i>Retailers/Distributors</i></p>	<ul style="list-style-type: none">▪ Stock, promote, and sell WaterSense labeled products



WaterSense Partners

- 706 Promotional Partners
- 185 Retailers/Distributors
- 196 Manufacturers
- 10 Certifying Organizations
- 1,196 Irrigation Partners
- 54 Builder Partners
- 16 Provider Partners

WaterSense Promotional Partners



Type

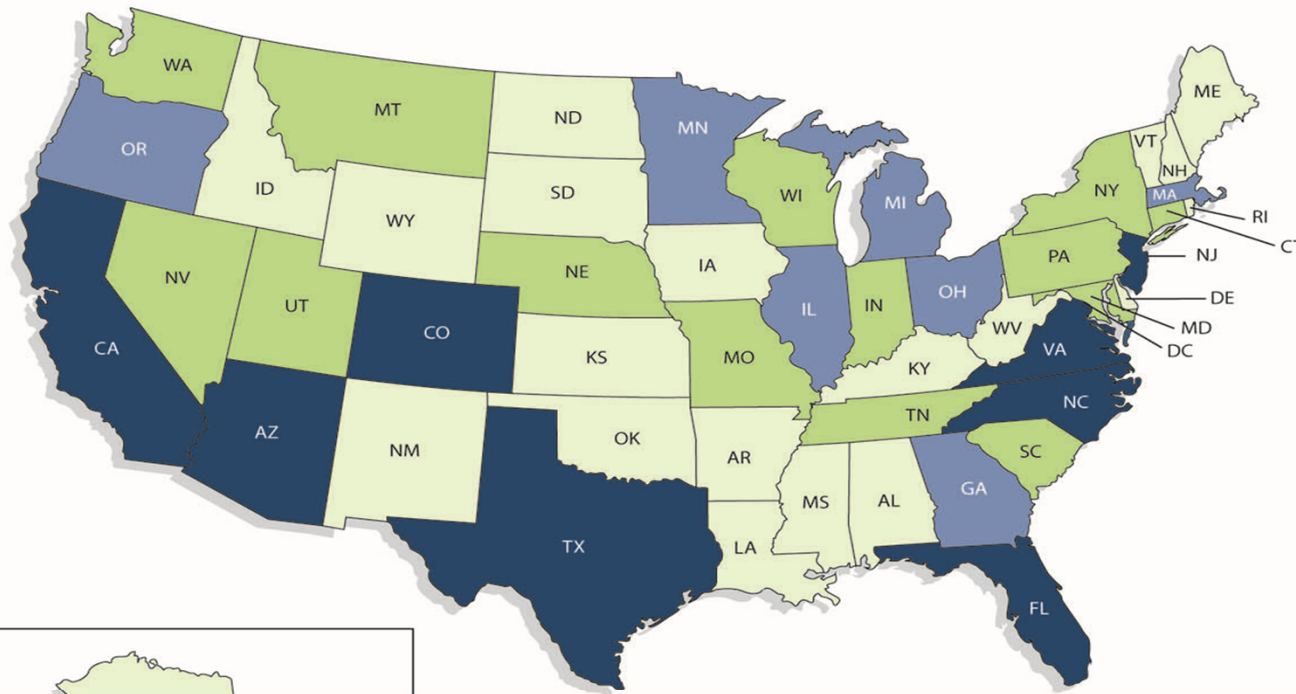
- Local Government
- State Government
- Utility
- NGO
- Trade Association
- Other



WaterSense Irrigation Partners

- Nine certification programs have earned the WaterSense label:
 - Irrigation Association's programs for Certified Irrigation Designer (CID), Certified Irrigation Contractor (CIC), Certified Landscape Irrigation Auditor (CLIA), Certified Golf Irrigation Auditor (CGIA)
 - North Coast Water Conservation Group's Qualified Water Efficient Landscaper (QWEL)
 - Contra Costa Water District
 - Utah State University Cooperative Extension
 - Central Iron County Water Conservancy District
 - San Joaquin Delta College
 - New Jersey Landscape Irrigation Contractor Program
 - CLCA's Water Management Certification Program
 - Rain Bird's Certified Residential and Light Commercial Irrigation Installer
 - Texas AgriLife's Certified Texas Landscape Irrigation Auditor

Irrigation Partner Map



- 0 - 10 Partners
- 11 - 20 Partners
- 21 - 40 Partners
- More than 41 Partners

Total Number of Partners = 1,116
Partners as of March 8, 2011

Meet Our Partners



WaterSense and its partners are committed to bringing water-efficient products to market, labeling new homes, and spreading the word about the need for smart water use. Search by partner type, state, and/or partner name to find WaterSense partners in your area, search results appear below.

[Welcome New Partners!](#)

Partner Type

- All Partners
- Builder
- Home Builders Association
- Irrigation Partner**
- Licensed Certification Provider

State

- ID
- IL**
- IN
- KS
- KY

Partner Name?

Search

Number of records found: 48

Filtered By: Irrigation Partner, IL

**Double-click on a row to view detailed partner information.*

Print | Download

Partner Name	Partner Type	State
Alex Mayfield	Irrigation Partner	IL
Andrew Meston	Irrigation Partner	IL
Betty Sargent	Irrigation Partner	IL
Bob Krupske	Irrigation Partner	IL
Brad Molaski	Irrigation Partner	IL
Curtis Feucht	Irrigation Partner	IL



WaterSense Partner of the Year Awards

Recognize WaterSense
partners who:

- Help advance the overall mission of WaterSense
- Increase WaterSense brand awareness in a measurable way
- Demonstrate overall excellence in the water-efficiency arena





2011 Partners of the Year

2011 Promotional Partner of the Year:

- Cobb County Water System (Atlanta, GA)

2011 Manufacturer Partner of the Year:

- Delta Faucet Company

2011 Retailer/Distributor Partner of the Year:

- Home Depot

2011 Irrigation Partner of the Year:

- Christopher Curry





2011 Excellence Award Winners

- Excellence in Strategic Collaboration
 - Public Service Commission of Wisconsin
 - Lowe's
- Excellence in Labeled Products Promotion
 - American Water
- Excellence in Education and Outreach
 - Dallas Water Utilities



Rebate Finder

Many WaterSense partners offer rebate programs for Watersense labeled products and services. Search below to see what money-saving rebates are available in your area.

Note:

- WaterSense provides rebate information but **does not** provide rebates for products. If you are looking for more information about a rebate or rebate program, please contact your local water provider.
- Some links on this page will direct you to non-EPA Web sites. Please read the [EPA Disclaimer](#).

Partner Name	State	Rebate Type
City of Fitchburg, Utility District #1	Wisconsin	Toilets
City of New Berlin Utility	Wisconsin	Toilets
Kaukauna Utilities	Wisconsin	Toilets
Kaukauna Utilities	Wisconsin	Single Family New Homes
Kaukauna Utilities	Wisconsin	Bathroom Sink Faucets
Madison Water Utility	Wisconsin	Toilets
Marshfield Utilities	Wisconsin	Toilets
Waukesha Water Utility	Wisconsin	Toilets
Cascade Water Alliance	Washington	Toilets
City of Monroe - Utilities Department	Washington	Toilets
City of Redmond	Washington	Toilets
Saving Water Partnership	Washington	Showerheads
Saving Water Partnership	Washington	Toilets
Saving Water Partnership	Washington	Urinals
Saving Water Partnership	Washington	Faucet Accessories
Spokane County Utilities Division	Washington	Toilets
Water District 19	Washington	Toilets
City of Charlottesville	Virginia	Toilets
City of Virginia Beach Department of Public Utilities	Virginia	Toilets
James City Service Authority	Virginia	Irrigation Professional Service



LOOK HERE

Information for Commercial, Education Government, Professional and more.



Fix a Leak Week



- **What:** Week to remind Americans to check their homes and irrigation systems for leaks
- **When:** March 12-18, 2012
- **Where:** Nationwide
- **Why:** To save water!
- **How:** Fix a Leak Week Tool Kit



We're For Water Campaign

- A multi-year national campaign to educate consumers about water saving behaviors and WaterSense labeled products.
- Saving water is as easy as check, twist, replace
 - Check toilets for leaks
 - Twist on a faucet aerator
 - Replace an old showerhead with a Watersense one





Suggest to Friends
Subscribe via SMS

The U.S. Environmental Protection Agency (EPA) established WaterSense to protect the future of the nation's water resources and to promote water-efficient products and services with a simple, easy-to-identify label.

Information

Founded: 2006

WaterSense

Wall Info Photos Discussions Events Video

WaterSense + Fans WaterSense Just Fans

WaterSense How far would you walk to get clean drinking water? Women and girls are the "water haulers" of the world. In developing countries they walk 6 kilometers (3.7 miles) a day on average, carrying 20 litres of water. Learn about World Water Day:



WORLD WATER DAY 2010 - 22.03.2010

www.unwater.org
UN-Water is dedicating World Water Day 2010 to the theme of water quality, reflecting its importance alongside quantity of the resource in water management

Yesterday at 1:44pm · Comment · Like · Share

2 people like this.

Jackie Green-May I love it!~!
8 hours ago · Report

Write a comment...

WaterSense Learn from the experts how to find Texas-sized savings in your water bills. Austin Water Utility representatives will be at the Barton Creek Square mall on Saturday, March 20 from 11 a.m. to 4 p.m. to help citizens learn more about fixing leaks in their homes.



Austin Water Utility
Location: Austin, TX
Time: 11:00AM Saturday, March 20th

Create an Ad
Facebook Pages
Facebook Pages help you discover new artists, businesses, and brands as well as connect with those you already love.
More Ads

Chat (17)



WaterSense 2010 Accomplishments

80 billion gallons of water saved!

- Consumers saved more than \$1.3 billion on water and energy bills
- 10.8 billion Kwh of electricity saved
- 3.9 million metric tons of carbon dioxide saved

**All savings are based on the number of labeled products shipped as reported by partners



Benefits of Participation

- WaterSense is FREE to join!
- National specifications for water-efficient products and services
- Access to free materials, templates, and logo or label
- Membership in a network of water efficiency experts
 - Learn new strategies
 - Collaborate with other types of partners
- Recognition from EPA as a water efficiency leader



EPA Stewardship Programs

- ENERGY STAR
- Green Power Partnership
- Combined Heat and Power
- Sustainable Water Infrastructure
- Sustainable Communities



More Information

■ WaterSense Information

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

- Cary McElhinney – EPA Region 5
- E-mail: mcelhinney.cary@epa.gov
- Phone: (312) 886-4313

