


EPA
WaterSense

Every drop counts.




James R. Brown
USEPA Region 6
brown.jamesr@epa.gov



Natural Assets for a Sustainable Future

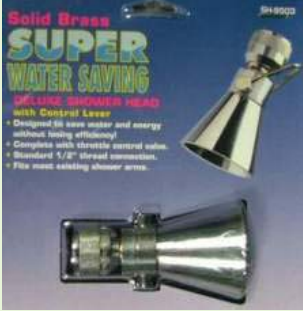
VNT Policy Focus	Other Considerations
<ul style="list-style-type: none">▪ Preserve and Protect Open Spaces▪ Parks▪ Greenways▪ Trees▪ Lakeshores▪ Views▪ Floodplains▪ Water Resources	<ul style="list-style-type: none">▪ Energy Resources Solar, Wind 







Energy and Water Connection at Home

- If just 1% of US homes were retrofitted with water efficient fixtures, 100 million KWh of electricity could be saved each year
- Avoids release of 80,000 tons of greenhouse gases into the atmosphere






ALL U.S. households: 30% water use reduction (would save ~ 5.4 billion gallons per day and \$4 billion per year)



Green Infrastructure





- Natural Assets for Construction





Hidden Energy Costs in Water Use

- Running a hot water faucet for 5 minutes consumes the same energy as a 60W light that's on for 14 hours!


Municipal water/sewer plant energy use


- U.S. annual total* = 75 billion kilowatt hours per year
- 3% of total U.S. consumption of electricity
- Equal to entire residential electricity demand of California
- More than entire energy-intensive pulp/paper and petroleum sectors *combined*
- Public bill = Already \$4B/yr. Increasing
- Residential water heating uses 104 Bkwh annually!




* 60,000 drinking water treatment plants + 15,000 sewage treatment plants


Sources: US EPA, Alliance to Save Energy, Pacific Institute & NRDC





Water Use in the US

- AWWRF Study of 1200 homes in US 14 cities (inside use):
 - 26.7% Toilet Flushing
 - 21.7% Clothes Washing
 - 16.8% Showering
 - 13.7% Wasted through leaks
 - 1.4% Dishwashers
- Outside use:
 - > 40% Landscape Irrigation; > 60 – 70% in Summer




Water Efficiency Opportunities

- Water Sense Program
- Water Conservation at Drinking Water Facilities
- Water Conveyance and Leak Detection Remedies
- Industrial and Agricultural Water Conservation and Reuse






Consumer and Developer Choices . . .

How Does a Tankless Water Heater Work?

The Process:
1. A hot water tap is turned on.
2. Water enters the heater.
3. The water flow sensor detects the water flow.
4. The computer automatically ignites the burner.
5. Water circulates through the heat exchanger.
6. The heat exchanger heats the water to the designated temperature.
7. When the tap is turned off, the unit shuts down.



Fix a Leak Week



Fix a Leak Week



- March 15-21, 2010
- Goals:
 - Educate consumers on the importance of fixing leaks
 - Raise awareness about WaterSense and new products

Region 6 Contacts:
Debra Browning, 214-665-8025
Julie Hankinson, 214-665-3185

