

Title Slide

Text used in slides and talking points of this presentation is used/adapted with permission from the following Extension Bulletins: *Saving Water at Home (HENV-601)* and *Saving Water Saves Energy (HENV-704)*. See reference slide for additional information.

Kentucky's Waters

- Over 90,000 miles of streams and rivers
- Thousands of ponds, lakes, reservoirs, and wetlands
- · 40-50 inches of precipitation per year

Did you know...

"Kentucky has more navigable miles than any other state except Alaska." – KY Geological Survey

Instructor discussion/talking points:

Many may consider Kentucky a "water-rich" state with over 90,000 miles of streams and rivers, thousands of ponds, lakes, reservoirs, and wetlands, and 40 to 50 inches of precipitation per year. So, it's not surprising that water, one of our most valuable natural resources, is often taken for granted.

There is no new water.

Instructor discussion/talking points:

The water we use today is the same water our ancestors used thousands of years ago and will be the same water future generations will use in years to come. There is no new water. Water travels from the air through condensation to the earth as precipitation and back to the atmosphere by evaporation. Water conservation is not about saving water but about having sufficient clean water at any given time and place to meet our needs.

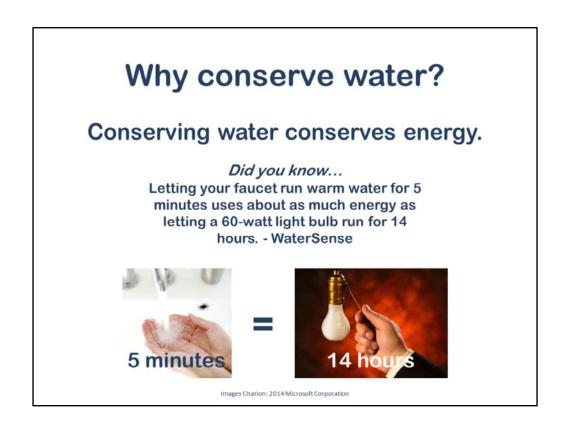
Why conserve water?

Using less water can better prepare us for water shortages and drought situations.

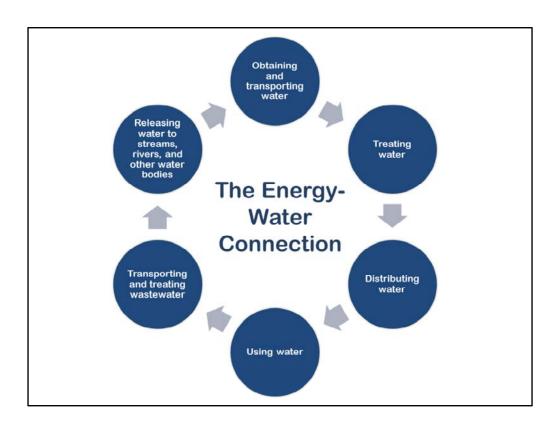
Photo of dry creek bed in Franklin County. Taken by Keenan Bishop, UK ANR Agent, June 2012.



Instructor discuss bullet point on slide. Ask participants to share experiences they have had related to water use during drought situations.



Instructor discuss information on slide. Go to next slide to discuss in more detail and see graphic of energy needed to obtain, treat, and distribute water.



Instructor discuss the Energy-Water Connection shown on slide.

Obtaining water from streams, rivers, aquifers, and other water bodies, and transporting it to water treatment facilities requires large amounts of energy. Once at water treatment facilities, energy is needed to pump and process water, and distribute water to consumers. Further energy is used by consumers to treat water with softeners and filters, circulate and pressurize water with pumps and irrigation systems, and heat and cool water. Then the spent water or wastewater consumes more energy as it is pumped to treatment plants, and aerated and filtered at the plant. By conserving water, we decrease our demand for energy-intensive systems that obtain, treat, and distribute water. Simply put by conserving water we save energy.

Why conserve water?

Conserving water saves money.



Image Citation: 2014 Microsoft Corporation

Instructor notes:

Each year the average household spends as much as \$500 on water and sewer bills. With more efficient water use, around \$170 per year could be saved.

How much water do you think the average Kentuckian uses per day?

70 gallons of water per person per day

Instructor ask participants: How much water do you think the average Kentuckian uses per day?

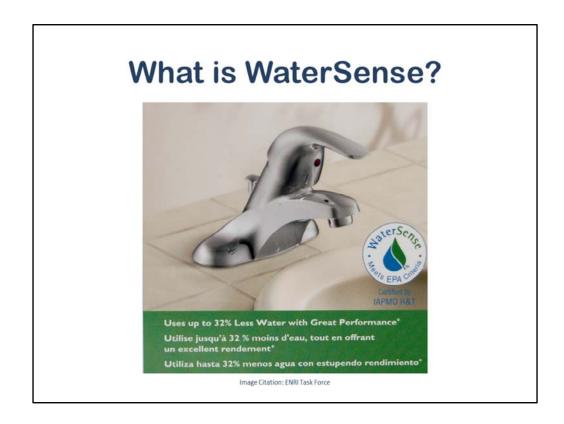
Answer: Approximately 70 gallons of water per person per day.

Instructor notes:

As a visual bring in a empty gallon jug and discuss that the average person uses 70 gallons per day. Or collect 70 empty jugs and show as a visual of how much 70 gallons is.



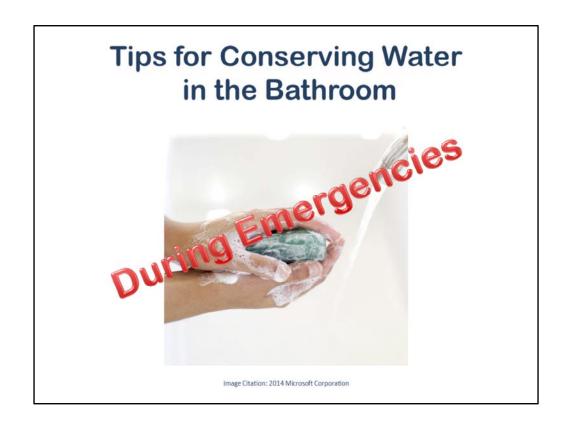
Instructor discuss tips to conserve water in the bathroom (see page 3 of *Saving Water at Home HENV-601*). Ask participants if they have additional tips or comments to share about saving water in the bathroom.



Instructor discuss the WaterSense program. Ask if participants have heard of the program.

The WaterSense program is sponsored by the U.S. Environmental Protection Agency to promote products that are water-efficient and high-performing, such as toilets, showerheads, faucets, and faucet accessories. The WaterSense label indicates a water-efficient product that is independently certified to perform as well as or better than standard models. WaterSense-labeled products can be found at home improvement stores. For more information, visit the WaterSense website at www.epa.gov/watersense/.

Photo Credit: Photo of faucet package purchased at home improvement store. UK Environmental and Natural Resource Issues Task Force.



Instructor discuss tips to conserve water in the bathroom during emergency situations, such as a drought (see page 3 of *Saving Water at Home HENV-601*).



Instructor discuss tips to conserve water in the kitchen (see page 4 of *Saving Water at Home HENV-601*). Ask participants if they have additional tips or comments to share about saving water in the kitchen.



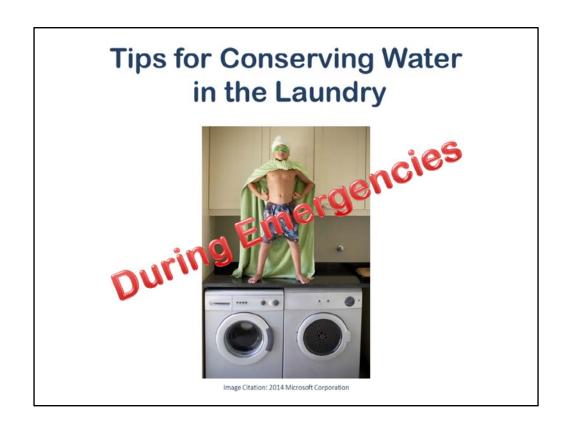
Instructor discuss tips to conserve water in the kitchen during emergency situations, such as a drought (see page 4 of *Saving Water at Home HENV-601*).

Tips for Conserving Water in the Laundry



Image Citation: 2014 Microsoft Corporation

Instructor discuss tips to conserve water in the laundry (see page 4-5 of *Saving Water at Home HENV-601*). Ask participants if they have additional tips or comments to share about saving water in the laundry.



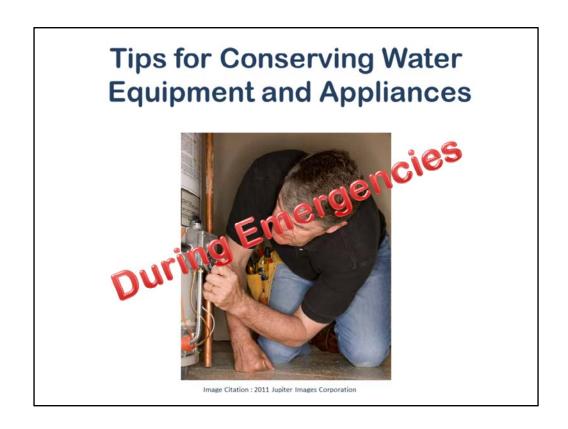
Instructor discuss tips to conserve water in the laundry during emergency situations, such as a drought (see page 4-5 of *Saving Water at Home HENV-601*).

Tips for Conserving Water Equipment and Appliances



Image Citation: 2011 Jupiter Images Corporation

Instructor discuss tips to conserve water in regards to equipment and appliances (see page 5 of *Saving Water at Home HENV-601*). Ask participants if they have additional tips or comments to share about saving water in regards to equipment and appliances.



Instructor discuss tips to conserve water in regards to equipment and appliances during emergency situations, such as a drought (see page 5 of *Saving Water at Home HENV-601*).

Photo Credit: 2011 Jupiter Images Corporation

Tips for Conserving Water in the Landscape and Garden



Image Citation: ENRI Task Force

Instructor discuss tips to conserve water in the landscape and garden (see page 5-6 of *Saving Water at Home HENV-601*). Ask participants if they have additional tips or comments to share about saving water in the landscape and garden.

Photo Credit: UK Environmental and Natural Resource Issues Task Force

Tips for Conserving Water in the Landscape and Garden



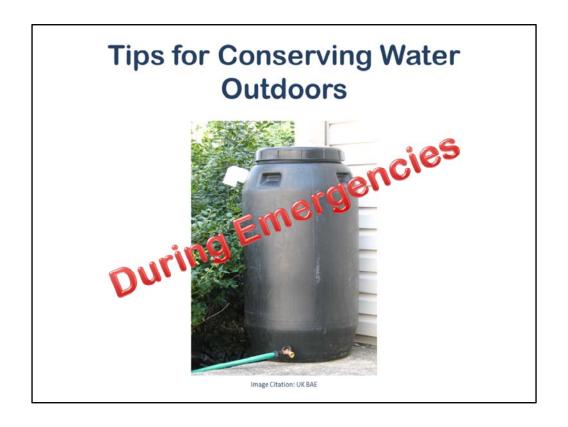
HENV-601).

Instructor discuss tips to conserve water in the landscape and garden during emergency situations, such as a drought (see page 6 of *Saving Water at Home*



Instructor discuss tips to conserve water outdoors (see page 6 of *Saving Water at Home HENV-601*). Ask participants if they have additional tips or comments to share about saving water outdoors.

Photo Credit: UK BAE



Instructor discuss tips to conserve water outdoors during emergency situations, such as a drought (see page 6 of *Saving Water at Home HENV-601*).

Photo Credit: UK Biosystems and Agriculture Engineering



Optional activity:

Participate in the 40 Gallon Challenge. Information is available online at http://40gallonchallenge.org/. The 40 Gallon Challenge is a regional campaign that challenges residents to conserve at least 40 gallons of water per day. Taking the 40 Gallon Challenge is as simple as filling out the Pledge Card, either online or at your local Extension office. The Pledge Card includes simple no-cost suggestions, such as shortening your shower by two minutes, to tips which require more effort and money, such as replacing an old, non-efficient toilet with new low-flush toilet.

What will you do as a result of this lesson?

Evaluation (optional):

Give each participant an index card. Have them write their name, date, and one thing they will do as a result of the lesson. Save the cards. Several weeks/months later, survey the group to see if they actually did what they planned.

References are referenced in the Presenter's Notes section of this slide.

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References:

KY Geological Survey. 2014. Water Facts. Available at: http://www.uky.edu/KGS/education/factsheet_water.pdf

University of Kentucky. 2012. Saving Water at Home HENV-601. Available at: http://www2.ca.uky.edu/agc/pubs/HENV/HENV601/HENV601.pdf.

University of Kentucky. 2011. Saving Water Saves Energy HENV-704. Available at: http://www2.ca.uky.edu/agc/pubs/henv/04/henv704.PDF.

Image Citations:

Microsoft Office Corporation. 2014. Available at: http://office.microsoft.com/en-us/images/back-to-school-with-office-clip-art-and-media-HA010237914.aspx.