UNL Extension: Acreage Insights

Acreage eNews-December 2013

http://acreage.unl.edu

Water Conservation in the Shower
By Sharon Skipton, UNL Extension Water Quality Educator, and Bruce Dvorak, UNL Extension Environmental Engineering Specialist

Have you ever wondered how much water you use every time you take a shower? It's worth thinking about. In Nebraska, about 80 percent of us rely on groundwater for household water. Nebraska's groundwater comes from natural underground layers of sand and gravel that contain water. Groundwater is a renewable resource, replenished mostly by precipitation. However, groundwater resources are not limitless, and groundwater levels can decline when use exceeds recharge. Efficient water use is important in order to maintain groundwater levels.

So, how much water do you use when you shower? Older showerheads might use as much as 6 to 8 gallons of water per minute (gpm). A study by the American Water Works Association found that, on the average, we take eight-minute showers. If you take an eight- minute shower using one of those showerheads, you will use 48 to 64 gallons of water. That -15-minute shower that some of us like will result in 90 to 120 gallons being used, while a shorter shower will result in less water being used.

Regulatory standards enacted almost 20 years ago required showerheads made as of 1994 to use no more than 2.5 gpm. That 8 minute shower will use only 20 gallons, and the 15-minute shower will use just over 37 gallons with one of these fixtures. The newer showerhead could save as much as 44 gallons per 8-minute shower, or over 16,000 gallons of water in a year if you shower every day.

The most water-efficient showerheads carry the WaterSense® label. Products with the label are generally 20 percent more water-efficient than similar products on the market. Showerheads with the WaterSense® label must use no more than 2.0 gpm resulting in 16 gallons for an 8-minute shower or 30 gallons for a 15-minute shower.

Luxury shower systems, with multiple showerheads and nozzles became popular during the past few years. These shower systems can use 8, 10, or even 12 gpm. Showering for 8 minutes in one of these "human car washes" can use a lot of water. More recently, many manufacturers modified these shower systems so that only one part of the system can be operated at a time. This gives users lots of options for water delivery, while allowing only 2.5 gpm to be delivered at any given time.

Regardless of the showerhead model you have, you can save water by taking shorter showers. You also can save water by shutting off the water flow while soaping-up or shampooing. Some showerheads have a quick shut-off lever that allows you to turn the water on and off without adjusting the water temperature.

The benefits of reducing water use in a shower include energy conservation and associated energy costs. The U.S. Department of Energy reports that domestic water heating accounts for between 15 and 25 percent of the energy consumed in homes, with showering/bathing often being a major component. Becoming more water-efficient in the shower becomes a win-win-win. It will conserve water, consume less energy, and reduce energy bills.