

Go Green, Ron Duncan and Emily Hanson: Recyclables: To rinse or not to rinse?

RON DUNCAN and EMILY HANSON

Go Green

Ever find yourself wondering if the water used to rinse a recyclable container is necessary and worth the water used? The answer is ... it depends.

It all revolves around the capability of the processing facility to tolerate contamination and the type and amount of residue in the container, whether it be a metal can, glass bottle or plastic container.

GreenWaste Recovery Inc. is the local hauler and recycling processor for Scotts Valley, Capitola and the unincorporated area of Santa Cruz County. In GreenWaste's "Recycling Guide," customers are asked to rinse containers before tossing them in the recycling bin. But just how important is it?

If you have asked yourself this question, you are not alone. One reader posed the question as follows: "As I toss cat food cans and milk cartons into the recycle bin, I find myself rinsing them off first. The recycling guidelines ask you to do it, the garbage gets pretty smelly if you don't, and also it is just sort of a habit not to subject others to my dirt.' Seems like a big waste of water for an unknown benefit. So I am wondering if you could produce some advice on balancing the conflicting requirements of different kinds of conservation?"

Competing Resources

Recycling is a good thing, but so is conserving water, especially in areas like Santa Cruz County, where we are short of water and have no imported sources to help us out. At what point does the value of the water used to rinse a container outweigh the environmental benefits of recycling it?

Recycle Process

The Material Recovery Facility owned and operated by GreenWaste has a higher tolerance than most processing facilities for containers because the facility was designed to handle wet wastes, though liquids and food waste should never be left in containers before placing them in your recycling cart. On their way to being made into new products, recycled materials go through different processes that can still function without the rinsing of some of the containers; however, cleaner material does help facilitate a smoother recycling process and a higher quality product, and higher quality products keep rates down.

To Rinse or Not to Rinse

Containers with liquids e.g., beverages, liquid condiments, etc. should always be emptied, but no rinsing is required. Food containers, however, should be emptied manually and food residue should be rinsed out. The mechanized and manual processes for separating glass, cans, and plastic containers for another useful life involve crushing and shredding, with magnets, screens, vacuums, electrical and optical sorting systems to remove caps, rings, labels and other contaminants. If left in the containers, remaining wet wastes liquids and foods compromise the processing equipment and dry recyclables like paper become contaminated with wet waste and are no longer recyclable.

Rinse for a Reason

The main reasons for rinsing are to ensure recyclables are not contaminated, and to address health and aesthetic concerns. If food containers are left unrinsed, ants, rodents and other pests are more likely to visit your recycling bins and unattractive odors could also develop.

Recycling Does Save Water

The recycling of products generally saves significant amounts of water during the manufacturing process by avoiding the use of virgin material. The amount of water saved by recycling can be approximated based on the energy savings from recycling the materials. For every kilowatt of energy conserved from recycling versus producing products from raw materials an associated 25 gallons of water is estimated to be saved.

Based on published energy conservation information, calculations indicate the approximate water savings from recycling the following items:



A typical aluminum can = 6 gallons of water saved.



A one-gallon plastic milk jug = 10 gallons of water saved.



A glass bottle = a quarter-gallon of water saved.

Although the water savings listed above for the various containers are estimates and will vary, the purpose is to provide a reference and to indicate how much water is being saved on a large scale by recycling.

How to Rinse

When you examine the amount of water needed to rinse a container compared to the amount saved from recycling, it is clear that recycling saves water. However, this does not diminish the need to be as water-wise as possible while rinsing containers. The water savings realized from recycling do not directly help conserve Santa Cruz County water resources, but the rinse water does come from our limited water sources.

When rinsing, do not use hot water or soap as this is not necessary. A good approach is to use water left over from other washing activities. For example, water from salad cleaning, dish washing or maybe even water caught in the

shower while it's warming up can be reused to rinse containers. A rubber spatula is often handy to assist with hard-to-clean containers such as peanut butter jars. Only a little water is needed to rinse the containers, and if they're only lightly soiled, the rinse water can be captured in the sink and used for several containers.

Other Reasons to Recycle

Recycling not only saves water when considering the overall water "footprint" of the container, but significant energy savings and other environmental benefits are realized e.g., reduced landfill disposal, pollution and greenhouse gases from reduced manufacturing, and less virgin wood, metal and petroleum products are needed to manufacture new containers. Naturally, reducing consumption and reusing containers when possible always makes sense.

Ron Duncan writes a biweekly column for the Sentinel. He is a manager for the Soquel Creek Water District. Contact him at rond@soquelcreek-water.org or call the district at 475-8500. Emily Hanson is the community relations manager for GreenWaste Recovery, Inc.