Texas Water Resources Institute

November 1977
Volume 3
No. 9

Confused About Water Conservation? . . . write the Water Wizard

By Lou Ellen Ruesink, Editor, Texas Water Resources

Dear Water Wizard:

Will it never end? I gave up smoking for my health, gave up many favorite foods for my diet, and gave up driving 70 and living comfortably warm for the energy crisis. NOW everybody tells me I must use less water. Why should I?
Given Up

Dear Given Up:
You and your family can practice water conserva tion without spending any money and without giving up anything you now enjoy. By practicing a few water saving habits your family could be saving as much as 100 gallons per day--20 percent of the amount an average family of four now consumes.

Unlike efforts to conserve energy, water conservation does not require a change in lifestyle or personal habits. The simplest water conservation measures cost little, if anything. Even the more expensive ones easily pay for themselves over time.

Why should you save water? We Texans have grown accustomed to thinking of water as inexpensive and inexhaustible. This very year, however, we have used more water than nature has supplied. As demand continues to exceed supply, water will become increasingly more expensive It will take more energy to pump from deeper wells or from distant reservoirs. Water resources development costs have skyrocketed in recent cent years; not to mention waste treatment costs which are also in- creasing each year.

Many water problems exist today because modern habits and attitudes are based upon abundant water at our fingertips. Now is the time for each of us to evaluate some of our

careless water wasting ways.
Water Wizard

Dear Water Wizard:
My husband says he will leave me or have the water cut off if the water bill goes up one more dollar. I am glad he gave me a choice--I simply could not live without watering my beautiful lawn and washing
Soon to be Separated

Dear Soon:
With just a few water saving habits you can have your husband, green lawn, and clean car, too.. In most parts of Texas, more than half of the water piped into homes is going right back out through hoses onto lawns and gardens. You don't, howerer, have to let your lawn turn brown or the car stay dusty to conserve water out of doors. The basic principle of lawn and garden watering is not to give them more than they need. Don't follow a fixed schedule, water only when the grass or platns show signs of needing it. It also helps to mulch your shrubs and garden so the soil holds moisture longer. Weeds are water thieves--keep the garden free of them.

Heat and wind will rate your lawn of water before it can use it, so don't water on windy days or during the hottest time of the day. Water slowly; if water is applied too fast it runs off into gutters. Remember that when you leave the sprinkler running all day or leave the hose unattended, thousands of gallons can be lost in a vary short time. A kitchen timer or alarm clock is a handy reminder for turning off sprinklers. Make sure when the sprinklers are on that they cover just the lawn or garden, not sidewalks, driveways, and gutters.

When washing the car, use a bucket for soapy water and use the hose only for rinsing. Running water in the driveway won't get the car any cleaner. A twenty-minute car wash can use as much as 600 gallons of water, so don't spend so much time washing your car.

Do you use the hose to sweep away leaves? Use a rake or broom instead to clean up sidewalks, driveways, and gutters.

Adopting some of these suggestion should actually lower your water bill and make your husband very happy.
Water Wizard

Dear Water Wizard:
My grandmother is os old-fashioned she still runs water in a bowl to clean fruits and vegatables. I think washing them with running water is much more sanitary, don't you?
Really With It

Dear Really With It:
Even though water is easily available and seems abundant now, we should strive to do the

best job we can using it most efficiently. On the average, American use three and one-half times as much water each day as our grandparents did when they were our age. Much of this is is due to our wasteful habits.

Why don't you try cleaning food her way. it certainly will do the job with a lot less water. Some of her other water-saving ways are worth learning also.
Water Wizard

Dear Water Wizard:
Ever since my wife started reading your column, she's been driving me crazy with "Stop the leak . . . fix the toilet . . . replace the sprinkler." Just how important can a little leak be?
Married to a Nag

Dear Married:
Your water meter can answer your question better than I can. It can tell you whether you have any sizable leaks and how much water is being wasted. For leak detection, turn everything off carefully no water is being used anywhere in the house. Then check the position of the meter dial for about 15 minutes. If it hasn't moved, congratualtions! You have a relatively water-tight home. But if it has moved, start checking hose connections, faucets, the toilet, etc.

A slow leak can waste up to 20 gallons each day. A one-sixteenth-inch faucet leak can waste as much as 100 gallons in 24 hours.

Toilets are notorious for their hidden leaks. They can waste hundreds of gallons a day undetected. Leaks occur when the toilet is out of adjustment or when parts are worn, so it's important to check it periodically. Put a few drops of food coloring in the tank. If colored water shows in the bowl without flushing , there is a leak. and repairs are needed.

Most toilet and faucet leaks can be remedied by the home do-it yourselfer. A good hardware or plumbing supply store will have the necessary replacement parts and instructions. You might suggest that your wife go down and learn how to do it herself.
Water Wizard

Dear Water Wizard:
Your water saving tips are sound --but they are not enough to offset the predicted upward trend in residential water consumption. According to the Water Resources Planning Draft published by the Texas Water Development Board in May 1977, residential water demand mend in Texas is expected to double between 1974 and the turn of the century. Can anything else be done?
Concerned

Dear Concerned:
Residential water consumption can be cut dramatically in the future if there is public commitment to conseving water. Here are a few examples:

1. Public officials can adopt local building codes which encourage, if not demand, the most efficient fixtures and plumbing systems. Many revisions need to be made in building, plumbing, and health codes before water saving technology can be fully utilized. Presently, for instance, even though there are toilets available which use little or no water, many communities have codes requiring a flushing capacity of at least four gallons.

2. Architects and builders can incorporate many water saving designs in new homes and buildings. Water from bathing and wasing--called grey water--can be recycled for lawn irrigation and toilet flushing. Water consumption could be reduced 25-50 percent by recycling this water withing the home. If separate drainage systems were installed while the house was under construction, the difference in cost between a conventional system and recycling system would be minimal. The cost of changing the plumbing in an existing house, however, might be prohibitive.

3. Designers and manufacturers can produce more water efficient fixtures such as:

- toilets which use little or no water.
- suds saver washing machines which reuse water and save as much as 19 gallons per load.
- time or moisture controlled lawn sprinklers.
- recirculating hot water systems or electrically-controlled systems which provide desired water temperature instantly.

4. Landscape architects should design lawns in a way to prevent run- off from rainfall or irrigation. Drip or trickle irrigation, which applies small amounts of water over a long period of time, should be installed wherever practical. The best water conservation solution for lawns and gardens is the use of native plants or newly developed drought resistant plants in landscaping.

5. Researchers must focus on water efficient technology and methods. At present, there are no standards for measurement and evaluation of claims of water conservation devices. Innovative approaches for methods of water conservation should be backed by reliable tests before they are marketed.

6. Higher cost of water might be an incentive for an average household to practice water conservation; however consumers do not necessarily reduce their water consumption in response to a price increase. A low family may already be using water for little more than the essentials and therefore cannot reduce consumption. Since the cost of water usually represents a small percentage of an affluent family's expenses, a price increase is unlikely to reduce consumption.

7. Many experts believe that within ten years energy shortages will force the institution of strict water conservation programs in many parts of the nation. The fastest growing cost item in the nation's water budget is the energy needed to pump water from one place to

another. For the homeowner, it is likely that the amount of money he pays to heat water is greater than the cost of all the water he uses.

8. Public educators can do much to influence future water use in the state. Every citizen in Texas should know where his water supply originates, how it is treated, and how it is disposed. He should also be aware of future water demand in his area and how it will be met.

9. Finally, Texans must change their attitudes as well as their habits: water must be considered a valuable resource to be carefully conserved, not a "right" to be assumed.