## "SF NEW MEXICAN" 4//01 Water conservation — we can do more



Permaculture in Practice

> by Nate Downey

Habits in adults are very hard, almost impossible, to change (as Aristotle said). But when fate forces us into a behavioral change, we have no choice but to be up for the challenge. Here in the droughtstricken Southwest (and this year, too, in most of the United States) the challenge revolves around the habits we must change in order to effectively and maturely address our lack of water.

One might think that New Mexico would be able to teach folks in other states, who are new to living with drought, about all the things we do to conserve water in the landscape. Unfortunately, this really isn't the case.

Sure, we have drip irrigation. Yes, we have far fewer outdoor swimming pools per capita than most cities. Yes, it's easy to buy

beautiful, drought-tolerant plants and trees. Yes, we have a strong tradition of living well with very little rain. And, sure, there's a small alternative community of gardeners and landscapers who have worked at conservation for many years. But the bottom line is that we are not the highly effective leaders that we should be when it comes to water conservation.

In fact it seems we lag far behind where we should be - that is, to borrow permaculturist Bill Mollison's phrase, "if we wish to maintain any claims to consciousness or morality." We still have many too many water-wasting golf courses. And, although the number of residential lawns is dropping every year, many commercial and government buildings still maintain vast expanses of lawn. Even the State Land Office, of all places, flaunts a big lawn in the heart of downtown. Meanwhile the New Mexico Environment Department drags its feet incessantly on the updating of wastewater-recycling regulations.

The root of the problem is that most of us lack any hint of the habits that will one day come to us naturally. With the hope that the current drought might motivate

people to change their habits, here are some suggested behavior modifications. (Most of these "Seven Habits of Highly Effective Water-Conscious Land Stewards" are described in greater detail in my previous columns. I can send copies if you contact me.)

Harvest roof water. Many of us have found that the rain barrels we place under our canales begin to overflow very quickly during monsoons. Using cisterns and pumice wicks, we can put this resource to good use.

Recycle wastewater. The "black" water we flush down our toilets and the "gray" water that runs down our drains is an incredible untapped resource. Onsite treatment systems are safe and efficient, especially if designed and installed properly.

Catch runoff water. Our clavey soils quickly seal up when moisture falls. This causes a "sheet flow" effect where water careens through the landscape leaving eroded soil in its wake. Why not contour the land and direct it to plants and trees?

Install "deep pipe" irrigation. Instead of watering plants only at the soil's surface, we can "plant" small-diameter, perforated pipes

filled with gravel next to our plants. This way, we can direct water to a given plant's entire root zone using much less water to establish a plant or tree.

Mulch. If you don't have at least a three-inch-deep layer of mulch around your plants, you are letting moisture in the soil evaporate.

Use appropriate grasses. If you must install a lawn, buffalograss and blue grama are great alternatives to fescue and Kentucky blue grass.

Become politically active. People familiar with these issues know that legal questions abound concerning water that falls on and water that flows through a piece of property. In addition to accepting the challenge to change our habits on a personal, land steward level, we will need to rise to the challenge of participating in a strong legal/political defense of our basic, natural right to effectively conserve water.

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