

## Death of a Thousand Cuts

Sherry Sass, 3/6/06

“Death by a thousand cuts” is a vivid, if gory, description of a process that might not be so painful when each event is viewed alone, but nonetheless can be lethal as all the events add up. Is this what we’re doing to our river, and our water supply, as growth accelerates?

Santa Cruz County is making progress on minimizing the negative impacts of growth while maximizing the positive for big new developments. And the Santa Cruz Active Management Area, our regional branch of Arizona’s Department of Water Resources, does its best, within the existing crazy legal framework of water rights, to keep big water uses in line with water availability. Also, conservation groups like Tucson Audubon Society, the Sonoran Institute, the Trust for Public Lands, and our own Friends of the Santa Cruz River work hard to ensure that the river and all the gifts it gives us survive this new century.

However, all these groups can only do so much to protect our river and watershed. By themselves, they cannot prevent the “death by a thousand cuts”. But together, we (residents, developers, landscapers, builders, and the people they build for) can make a big difference.

Any new construction or modification on the land can either create damage far from the site, or can have minimal (or even positive) effects on water flow, aquifer recharge, erosion, and ultimately on the river environment. You can, theoretically, build a “zero impact” house, which actually puts as much water back into the natural cycles as if it were not there at all. And if entire developments were planned to have such a small “environmental footprint” as far as water’s concerned, our growth would not inevitably lead to the river’s demise. We might even be able to improve our watershed’s ability to absorb water, reduce peak flood flows, and help stabilize our long-term water supplies.

I am not talking about expensive, Star Wars technology here. Rooftops are “impervious surfaces” because they have to be waterproof. So they can be a terrible source of runoff and erosion, or a great resource if that water is collected and slowly used on the land. Gutters, collecting barrels, some pipe, and a water storage tank may be all that’s needed to be a “water harvester” at your house. Plants love rainwater, which is much purer than our mineral-laden groundwater. And another bonus is that your water bills will be lower, since you can irrigate your landscape (which can be a home’s largest water use) with the free stuff!

Reduce impervious surfaces if you can—roadways, driveways and walking paths can be minimized, underlain with weed cloth and covered with a great variety of gravels, mulches, or other loose materials, so water can still get into the ground. This will also help avoid problems with erosion and gulley formation.

Here’s another cheap, easy way to reduce your home’s “water footprint”: sculpt your land gently to encourage water to soak into the ground around your home. Making shallow depressions with low downstream berms and planting in the

basins can increase infiltration into the ground as well as providing free drinks for your landscape.

And don't forget to plant native! Our home-grown trees, shrubs and grasses are perfectly adapted to this environment, so need far less water and other care than exotics do. They also provide food and shelter for wildlife, and can be lush, bright with color, and high-end attractive when planted in groupings that have similar water and sun needs.

For more information on how to reduce your water bills, grow native, and live more lightly on the earth, visit [www.azwater.gov](http://www.azwater.gov) (AZ Dept. of Water Resources), [www.Sahra.arizona.edu](http://www.Sahra.arizona.edu) (University of Arizona) or call our local Cooperative Extension office (520-281-2994). And support your community's efforts to ensure that the river, and our water supply, can sustain us into the next century.

*[Sherry Sass was trained as a biologist, and is a founding member of Friends of the Santa Cruz River (FOSCR), a volunteer group dedicated to protecting the flow, water quality, and riparian habitat of the river. Ann Phillips, permaculturist, restoration specialist for the Tucson Audubon Society and current President of FOSCR, also contributed to this article. Visit [www.friendsofsantacruzriver.org](http://www.friendsofsantacruzriver.org) for more information.]*