

Let's not be bird-brained about rainwater



Permaculture in Practice

by Nate Downey

They say turkeys sometimes drown when they open their beaks to the sky during a torrential rain. Pretty funny, isn't it? But, unfortunately, in a way we here in the American Southwest resemble those clueless birds. Ostriches are not the only long-necked dingbats we mimic, especially when it comes to our water supply.

Why, when it rains, do we make almost no attempt to collect the most precious of desert resources? At least turkeys (to a fault) understand the concept of rainwater catchment. Not until we start collecting and using the rain that careens off of our roofs during every storm, as well as melting snow, will we be able to deny this bird-brained reputation.

If you are ready to cut this albatross loose, make sure you get to one of the upcoming educational fairs providing information about conserving and harvesting water. KABC and the City of Santa Fe will sponsor an event on Sunday, June 2, at Villa Linda Mall. Then, on June 9, the Arroyo de Los Pinos Project encourages you to "Run-off to the Museums" on Camino Lejo for a water fair focussing on storm water and erosion control.

Water is just one of several resource-oriented themes that will be featured at a June 21-22 event called "Opportunities for a New America." Sponsored by KSFR radio, the event is the brainchild of Realtor Alan Hoffman and will take place at Town & Ranch on the corner of Paseo de Peralta and Don Gaspar.

In case you can't make these events, here's a brief primer on cisterns (rainwater-harvesting tanks), which are really the best way to collect precipitation.

A 1,000-square-foot roof can yield 7,500 gallons of water in a year with average rainfall. That's enough to fill a 55-gallon drum over 136 times. If you are good at

regularly emptying water from your cistern, that roof could harvest most of its rain and snow with a system made up of three or four 850- to 1,200-gallon cisterns.

Cisterns can be installed either above ground or underground. Due to the expense of excavation, backfilling, tamping and pipe connections as well as the removal and disposal of excess earth, underground cisterns usually cost many times more per gallon than those placed on the surface. Depending on the complexity of the system, an above-ground installation can be as easy as unloading the cistern from a truck and placing it under a canale or downspout.

A big advantage of above-ground cisterns is that, in many cases, it is not necessary to use a pump to deliver water to plants. If your property has adequate slope, water will drain out of the tank to plants that need it, especially if these plants are appropriately placed in low areas.

Installation costs vary with onsite factors including slope, access, number of canales or downspouts, existing vegetation and planned vegetation; and

options such as float switches, recharge lines, pressure tanks, pumps, filters, valve boxes and drip-irrigation systems.

Connecting a cistern to drip irrigation can easily be done, but it's more complicated than most people think. The easiest way to pump from a cistern is to connect a sump pump to a hose (Don't get electrocuted!). Unfortunately, drip irrigation is much more efficient than hoses and/or soaker hoses.

The future of this region will depend on people making the necessary transition to watering with harvested water, not with the shrinking resources in our rivers and aquifers. We already have Turkey Day celebrating the food we harvest in the fall. Now 's the time for a spring holiday when we gather together to learn about the many ways to harvest our much needed, but often wasted roof runoff.

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