

Storm Damage Along Your Creek? Don't Rush to Clean Up Too Much

While those of us in this area were spared the devastating flood damage experienced by some of the folks in Blanco and Comal counties, the recent rains have certainly changed the look of a lot of creeks and rivers in our area. Some folks have experienced erosion of banks, some have seen deposition of alluvial soil, some have lost trees and other vegetation and many have accumulated debris ranging from leaf litter to large tree trunks.

While the changes that have occurred in most places are really just part of the natural functioning of riparian areas, many landowners consider these changes to be “damage”, and our minds automatically react to damage with ideas of how to “repair” the damage that the flood “caused”.

Unfortunately, the ideal picture many folks have in mind about how a riparian area should look is something that resembles a city park or a golf course, with closely mown grass and a few scattered trees. This leads to the idea after the flood that the area needs to be “cleaned up”.

In fact, the experts agree that this is just the opposite of what a healthy, functioning riparian area should look like. Healthy riparian areas should have abundant vegetation of all types from the water's edge out into the flood plain, including sedges, rushes, grasses, shrubs and large trees.

Another misconception about riparian areas is that everything should be done to “speed up” the flow of water, a view that seems to be particularly common in cities. But doing so just passes flood problems downstream and in speeding up the flow of water, what is really happening is increasing the energy of the flowing water which leads to more severe erosion. We really need to slow down the flow of water to reduce the energy to reduce erosion and to allow the water to soak into the porous soil in the floodplain. And what slows down the flow of water and dissipates the energy and reduces erosion? Vegetation, both alive and dead.

If you had erosion during the flood, it may have been because you didn't have enough vegetation to slow down the water and hold the soil in place. If you had deposition of alluvial soil coming from upstream, that deposition is building up the floodplain and increasing the riparian sponge which stores the water along the creek or river providing for the base flow between rain events. If you have had an accumulation of organic debris (leaves, limbs, tree trunks), that material will help to slow down the water during the next flood and help to trap sediment. It also adds organic matter to the soil making it more fertile.

I am certainly not in a position to tell every landowner of a riparian area exactly what they should do with their property. What I am suggesting is that every landowner educate themselves about the functioning of their riparian area before embarking on any “cleanup” work. (Kind of like the old carpenter’s rule, “measure twice, cut once”)

Most of the experts I know are more likely to recommend leaving the area alone rather than to embark on a massive cleanup. Employing heavy machinery in a riparian area almost always makes things worse rather than better. Mother Nature will eventually “repair” the “damage”, but she doesn’t necessarily do so on a time scale that humans like. And the results will be what Mother Nature thinks is best.

My advice to landowners with flood damage is to get expert opinions from government agencies such as the Natural Resources Conservation Service or the Texas Parks and Wildlife Department. Importantly, their advice is not influenced by any financial considerations as to whether you do or do not take their advice.

I highly recommend all landowners with riparian areas obtain a free book from the Nueces River Authority entitled, “Your Remarkable Riparian”. It will explain the functioning of riparian areas and how you can take care of yours. You can contact them at 830-278-7810 or www.nueces-ra.org.

Until next time...

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