

Riparian Areas Protect Waterways

Overall, the Guadalupe River in Kerr County exists in a fairly natural and free flowing state. It's true, there are numerous small and a few large dams intercepting its course, but for the most part, the river meanders from Hunt to Comfort as it has done for thousands of years. The unspoiled condition of the river is what allows it to support a vast diversity of aquatic life. One of the most important aspects of the river that helps protect water quality is the vital strip of land along the waterway called the riparian area.

The riparian area is a band of dense, native vegetation along a body of water. This zone can be identified by high soil moisture, frequent flooding, and the unique collection of plants and animals found there. The distinct community of soil and vegetation form a network of roots and ground cover that intercept runoff from upland areas and stabilize the river bank. These areas also act like a sponge and have the capacity to store water for sustained release back into the river. As a result, riparian areas improve both water quality and quantity.

A healthy riparian area also helps prevent pollutants from reaching the river because contaminants are taken up into plant tissues, absorbed into soil particles, and modified by soil organisms. Excess sedimentation can also be a type of pollution, and riparian areas work to capture sediments before they reach the river. Too much sediment can suffocate fish eggs and aquatic insect larvae, and also interfere with recreational activities as it reduces water clarity and fills in water bodies.

A healthy riparian area will stabilize the river or stream and protect it from erosion. Although some erosion occurs naturally, urbanization and overgrazing can decrease the size or function of the riparian zone and its ability to protect the waterway. These natural buffers are often hard to protect because they may get in the way of our enjoyment of the river by blocking our view or our access. However, careful consideration and planning can allow our community to continue to grow along the banks of the Guadalupe, while at the same time preserving the dynamic integrity of the river.

There are numerous benefits to protecting and restoring riparian areas. Besides their ability to filter runoff and stabilize river banks, these buffers have been found to increase groundwater infiltration, provide floodwater storage, increase wildlife habitat, and provide recreation areas. UGRA supplies a field guide to riparian plants to anyone interested in learning more about riparian areas and the vegetation they support. Please contact me to obtain your free copy today.

Let's Keep Our River Clean

Tara Bushnoe, Natural Resources Coordinator for UGRA, tbushnoe@ugra.org or (830) 896-5445