



## “Currents” April 2023

### **Placing a Value on Clean Water**

How much is a healthy Guadalupe River worth to you? Can you put a dollar amount on clear flowing streams, healthy fish populations, or the peace of mind knowing that when you turn on the faucet, water will flow?

Tangible advantages of a healthy environment, like clean drinking water for example, are referred to as ecosystem services. These positive benefits that nature provides to people can be products that we extract from the environment like timber and oil. It can also be the land’s ability to absorb flood water which protects infrastructure and homes. Additionally, ecosystem services can be in the form of recreational opportunities for tubing or kayaking that are provided by a swift flowing section of the river.

Going back to the first question, could you put a dollar amount on these services? The concept of ecosystem services argues that putting a value on the environmental and aesthetic benefits of land can help better protect it and support the landowners who have been maintaining it. In 2022, the Texas A&M Natural Resources Institute and partners put together a statewide assessment of our ecosystem services to determine that dollar value for working lands. They looked at a wide range of services from cultural and aesthetic to wildlife habitat and water storage. When looking across the state, they estimated that working lands (farms, ranches, and forests) contribute roughly \$629 worth of services per acre every year. Taking this average and applying it to all of the working lands across the state means Texas land is providing at least \$89 billion dollars a year in ecosystem services. Working lands are undeveloped and when managed sustainably, their soil and vegetation compose a watershed that filters and slows runoff, captures water, and mitigates flood damage. Therefore, working land contributes to healthy waterways.

The team also estimated that we lose about 640 acres of working lands a day, which means over the course of a year, we’re losing over \$140 million in ecosystem services. Some of these services we’re losing like recreation will be sought out elsewhere, but services like flood mitigation and reducing pollution from runoff will have to be paid for in other ways.

As a society we've come to expect products like clean air and pollinated plants, but those products are provided by healthy watersheds. These ecosystem services are incredibly important to our environment and way of life, but they are often overlooked because they are not a part of the typical market structure that many decisions are based on. Assigning a dollar number to those services allows lawmakers and landowners to evaluate land with the added financial priority of these ecosystem services.

### **Let’s Keep *Our* River Clean**

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