

## UPPER LLANO RIVER WATERSHED PROTECTION PLAN NEWSLETTER

### IF ONLY WE KNEW BY: TOM ARSUFFI

*Most human beings have an almost infinite capacity for taking things for granted.*

Aldous Huxley. Themes and Variations. 1950

Let's start off with a given for most of us, certainly me.....who doesn't like free? The definition of free is, "costing nothing". Depending on what kind of free things we are talking about though, there may be hidden costs we need to be aware of. Part of the human condition is that free things, especially if they come on a regular basis, are things that can be taken for granted. When things are taken for granted, their importance are frequently overlooked, and in a worst case, abused. What is worse is if the collective "we" are not even aware of all the free stuff we are getting, which greatly increases the likelihood of taking things for granted.

The natural world in which we live provides lots of free stuff, stuff that provides not only value to our life and well being, but also of significance economically. That means \$\$\$\$ , big bucks. If we only knew. This area of ecological research got a real jump start in 1997, by an ecologist Robert Costanza, who wrote a paper titled:

*The value of the world's ecosystem services and natural capital.* How much did Costanza find that nature provides for free if we put a \$\$ value to it - **\$33 trillion per year in 1997 and in an updated 2014 paper, the free ecosystem services is valued at \$125 trillion dollars.** In comparison, human global gross national product totals around \$18 trillion per year. Ecosystem Services fall into four broad

categories: *provisioning*, such as the production of food and water; *regulating*, such as the control of climate and disease; *supporting*, such as nutrient cycles and crop pollination; and *cultural*, such as spiritual and recreational benefits.

Unfortunately, our society is becoming increasingly urban, disconnected from nature and increasingly natural resource illiterate. We are damaging and impairing the ability of nature to provide those free things. And when we do, we have to come up with expensive and sometimes artificial technological replacements - like a water treatment plant to replace a wetland. Zack Thomas, now with Texas Parks and Wildlife just published a study showing fishing for Guadalupe bass in Hill Country streams has a \$75 million dollar impact. That is a big underestimate, but it shows one ecosystem value of keeping water flowing in our streams.

There is a broad array of ecosystem services accrued by managing rangeland for invasive brush. These services include wildlife habitat; recreation (including that associated with wildlife); watershed functions; carbon sequestration, biodiversity conservation, restored desirable vegetative cover to protect soils; control erosion; reduce sediment; improve water quality and enhance stream flow; improve forage accessibility, quality, and quantity for livestock; and protect life and property from wildfire hazards. To fully evaluate the benefits/costs and net value of brush control, a more holistic and comprehensive economic valuation is required and necessary. Good land stewardship helps preserve those beneficial ecosystem services. That's good news for our future generations and good news for Guadalupe bass and our springs, rivers and streams.



*Beautiful landscape of the Texas Hill Country. Image courtesy of Hill Country Real Estate.*

*“When something does not insist on being noticed, when we aren't grabbed by the collar or struck on the skull by a presence or an event, we take for granted the very things that most deserve our gratitude”*

-Cynthia Ozick