



COMAL COUNTY  
CONSERVATION  
ALLIANCE

Working to preserve land, water, and wildlife in Comal County

# BENEFITS OF INVESTING IN OPEN SPACE

Numerous academic studies and the anecdotal experience of neighboring communities have clearly demonstrated the benefits of protecting open space. Protecting open space and water sources in Comal County is an investment in the future of our county that will pay dividends to county taxpayers for generations to come.

## Benefits of Open Space come in several ways

- Farming, ranching, and undeveloped natural areas generate more tax revenues than community service costs. Residential housing generates more community service costs than tax revenues.
- Maintaining natural systems reduces the cost of supplying and purifying water. It also helps control flooding and reduces the cost of flood damage.
- Proximity to parks and other natural spaces increases property values and, therefore, tax revenues.
- A robust natural environment helps to support the county's important tourism industry.
- A high quality of life is necessary to attract businesses. Access to appealing natural areas is an important part of that high quality of life.
- Nature is essential for our mental and physical health.

## Avoiding Costs

The cost of publicly funded community services is higher for residential developments than for other land uses. Contrary to popular belief, increased

residential development does not reduce homeowners' property taxes. Studies consistently report that over a wide range of residential densities, and especially in rapidly growing communities, the

public costs associated with residential development exceed the public revenues that accrue from it.<sup>1</sup> A 2004 study of 98 communities in 25 states concluded that they spent \$1.16 for every dollar of



Texas Hill Country - Photo by Jim Nix

revenue from residential developments, compared with \$0.27 for commercial developments and \$0.35 for farm or open spaces.

These conclusions are similar to a study that included Hays County, where each dollar of property tax revenue from housing required \$1.26 in public community service costs. In contrast, commercial and open lands required about \$0.30 in community service costs per dollar of revenue generated.<sup>2</sup> Costs to support residential housing are not only higher but are increasing in Comal County, where rapid population growth is creating widespread land conversion from open space to residential development. The resulting per person cost for county services increased by 51% from 2010 to 2018.<sup>3</sup>

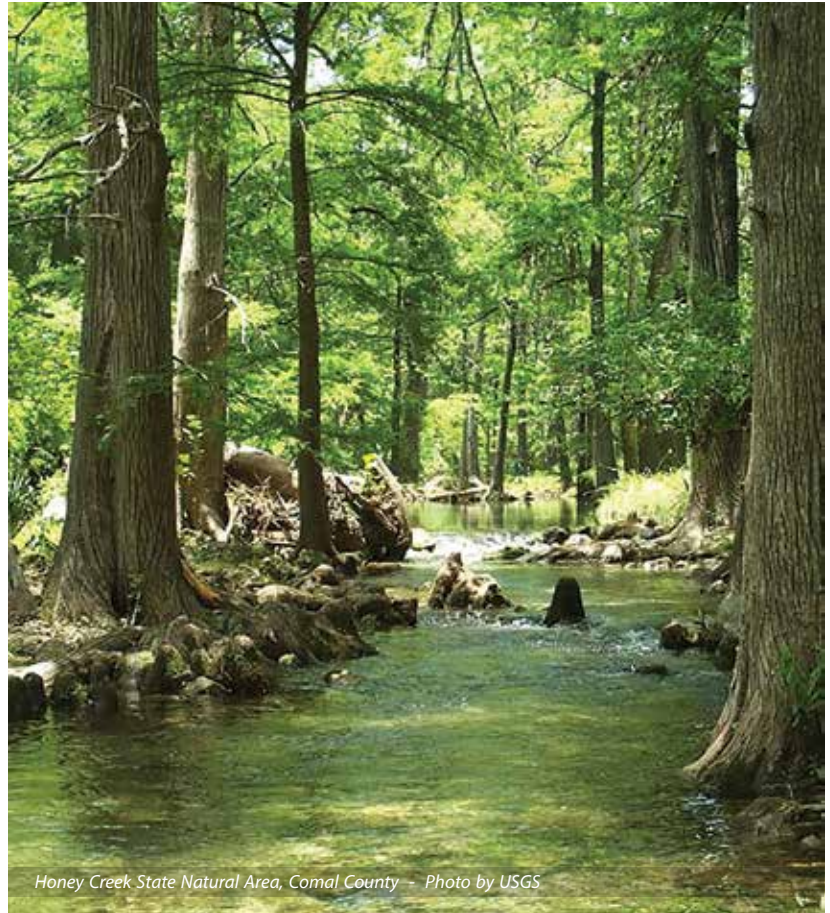
## Maintaining Natural Systems

Natural systems have provided for our human needs throughout history. Development, particularly the impervious surfaces of rooftops, parking lots, and roads, compounded by the destruction of natural vegetation, disrupts those natural systems. Once they are disrupted, artificial systems must be installed, often at much higher costs.

Our aquifers depend on the unimpeded flow of water in their recharge zones to replenish their supply. Approximately one-third of the land area of Comal County



Hill Country residential community - Photo by Lennar Homes



Honey Creek State Natural Area, Comal County - Photo by USGS



Water going into the aquifer (recharge); water coming out at Comal Springs.  
Photos by Barton Springs/Edwards Aquifer Conservation District (left)  
and Helen Ballew (right).

is in the Edwards Aquifer Recharge Zone. If rainwater can no longer freely flow into the caverns, caves, sinkholes, and cracks that guide it to the aquifer, it becomes runoff, causing erosion and flooding, and carrying pollutants into surface waters. Therefore, less water and less good-quality water is available for our use. The majority of Comal County residents outside city limits depend on water from wells drilled into the Edwards Aquifer.

For New Braunfels city residents and businesses, water from the Edwards Aquifer is the least expensive source of water for the New Braunfels Utilities (NBU), and its availability impacts their water bills. According to a 2019 report by NBU, water from the Edwards Aquifer costs \$207 per acre-foot. Water from NBU's other sources



costs between two and seven times as much. Water availability increases and water costs decrease if the Edwards Aquifer is allowed to continue to replenish through natural, unimpeded recharge.<sup>4</sup>

Trees, shrubs, grasses, and other natural vegetation in a watershed reduce the cost of purifying water for human use. One study demonstrated a direct correlation between water treatment costs and the percent of the watershed that was forested. In the study, the cost of treating one million gallons of water dropped from \$115 to \$37 as the percent of forest in the watershed grew from 10% to 60%.<sup>5</sup>

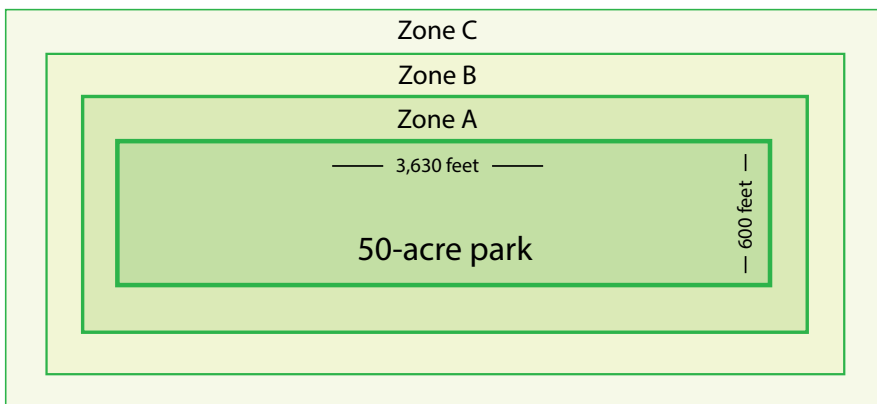
Natural open space in floodways and floodplains helps reduce the impact of floods by giving water a place to go, reducing the speed and intensity of the flood surge, and decreasing property damage. The savings can be significant, as much as \$4 for every \$1 invested in land preservation.<sup>6</sup>

### Increasing Property Values

Homebuyers are willing to pay more for homes near parks and open/green spaces. One study found a 10% – 20% increase in the value of property

in relation to proximity to open space. That increase varied based on the characteristics and quality of the open space.<sup>7</sup> The study also demonstrated a direct relationship between property value and proximity to parks, as demonstrated by the chart below: Property value increases were greatest in Zone A, immediately adjacent to the park. Property value increases were somewhat less in Zones B and C, which were farther from the park, but still greater than surrounding areas. Increased property values generate increased property tax revenues for the local government.

A regional example of this proximity impact can be found in the City of Wimberley, where Cypress Creek runs through the city. When the Cypress Creek Project estimated the cost of possible degradation of the creek, it was concluded that adjacent properties would see a 25% to 45% reduction in value from a prolonged reduced flow in the creek. Further and more prolonged reductions would have an even greater impact.<sup>8</sup>



### Supporting Economic Health

Roughly 20% of New Braunfels’s economy and 27% of its jobs are related to tourism, making tourism one of the largest industries in New Braunfels and Comal County.<sup>9</sup> People come to enjoy the rivers, scenic beauty, and rural charm of the area. Maintaining a high-quality, appealing natural environment is essential to this industry.



Tubers enjoying the Guadalupe River - Photo by Dustin Larimer

## Attracting Businesses

Historically, business location decisions were made largely on the availability of transportation, proximity to needed natural resources, or local political climate. Now many businesses fight to attract and retain highly skilled, knowledgeable workers. Those workers often care deeply about where they live.

They want a quality environment, which includes high-quality public services, excellent schools, cultural opportunities, and access to nature. That is why many successful, innovative companies build campuses with trees and open spaces, rather than traditional office

buildings.<sup>10</sup> Communities trying to attract such businesses must provide a high quality of life.

## Improving Our Health

Nearly 1,000 studies from around the world have found a strong correlation between time spent in green or natural spaces and good mental, emotional, and physical health. Some medical professionals now even offer prescriptions for people to spend time in nature to improve their health.<sup>11</sup> Although it is challenging to monetize the benefit of nature to our health, a healthy population is the foundation of a vital community and a strong economy.

## Conclusion

Protecting open space in Comal County is an investment in the future of our economy and the health of our people, residents and tourists alike. Investing in natural areas is as essential to the future well-being of Comal County as investing in infrastructure such as roads and schools.

Retaining property in an open or natural state is often its most economical and beneficial use.

As unprecedented growth continues in Comal County, there is an urgent need to make these investments in open space now, while we still can.

## References

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- <sup>2</sup> Farmland Information Center, *Cost of Community Services Studies*, 2016.
- <sup>3</sup> Comal County Comprehensive Annual Financial Reports of 2010 and 2018.
- <sup>4</sup> NBU FY2020 Budget and Financial Operating Plan, City Council Workshop, October 2019.
- <sup>5</sup> The Trust for Public Land, *The Economic Benefits of Land Conservation*, 2007, p. 4.
- <sup>6</sup> Siglo Group, *Valuing Economic Benefits of Texas Conservation Lands*, Texas Land Trust Council, 2019.
- <sup>7</sup> The Trust for Public Land, *The Economic Benefits of Land Conservation*, 2007, p. 4.
- <sup>8</sup> Cibolo Nature Center, *The Economic Value of Investing in Water and Land Conservation in Boerne/Kendall County*.
- <sup>9</sup> *Economic Development Strategic Plan*, New Braunfels, TX, 2012.
- <sup>10</sup> Jonas Altman, *Apple's New Headquarters Proves That the Coolest Offices Will Have These 3 Things*, Inc.com, 2017.
- <sup>11</sup> Jim Robbins, *Ecopsychology: How Immersion in Nature Benefits Your Health*, Yale Environment, 2020.

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