A TALE OF TWO LAKES

Texas tourism industry continues to deal with drought impacts

Travis County and Montgomery County are separated by more than 150 miles, and yet they both share one all-too-familiar issue—lakes hit hard by drought.

Lake Travis is considered full at 681 feet mean sea level, while Lake Conroe, in Montgomery County, is full at 201 feet. In 2011, Lake Travis dropped to 626 feet; a much smaller water body, Lake Conroe dropped to 192 feet.

Although their communities are geographically separate, two groups of residents championing the lakes set out to do quite similar things. Noticing the possible effects of drought and falling lake levels on lake-related businesses and real estate values, concerned citizens sought to evaluate the precise economic impact, if any, that drought had on their communities.

Lake Travis Community Coalition

Beginning in 2009, the Lake Travis Community Coalition raised funds for a study investigating the economic value of Lake Travis. The coalition, made up of local governments, utility districts, chambers of commerce and companies from around the lake, called upon real estate research firm Robert Charles Lesser & Co. (RCLCO) to evaluate two things.

"We were first tasked with determining the significance of the economic and fiscal impact of Lake Travis on Travis County and surrounding communities in normal lake level years," said Todd LaRue, of the Austin RCLCO office. "We were then tasked with quantifying the impacts that low water levels have on the economic and fiscal impact."

On Sept. 29, 2011, the Lake Travis Coalition received the completed Lake Travis Economic Impact Report.

To reach its conclusions, the report found a baseline for the economic impacts associated with Lake Travis during nondrought times in 2010. Then, the same factors were measured during drought, and drought-related impacts were assessed.

The report concluded that the total assessed value of all land surrounding Lake Travis was \$8.4 billion. According to the Lake Travis report, "lake-front and lake-cove parcels are assessed at a premium to other

residential parcels." These lakefront homes have higher assessed property taxes than their nonlakefront counterparts.

"Long-term low water levels could have a substantial impact on the value of over \$8 billion in property on and around the lake," LaRue said.

The report concluded that as a result of various taxes—including sales taxes from businesses surrounding Lake Travis, hotel occupancy taxes and mixed beverage taxes—the fiscal impact of land and businesses around Lake Travis was \$207.2 million in 2010, the baseline, nondrought year. The tax revenues went, primarily, to local economies.

The economic impact of spending that would not occur without the lake can be thought of as tourism-based impact, according to the report. Tourists spend money on transportation, food, lodging, shopping and entertainment. This amounts to about \$115 per visitor per day, the report stated. For the baseline, nondrought year of 2010, it was estimated that total visitor spending was about \$168.8 million as a result of park visits, vacation rentals and boating.

"When Lake Travis experiences extreme fluctuations in water levels, the total amount of tax revenues collected by state and local entities declines," the report reads. "Major fluctuations in lake levels decrease visitor spending."

"The economic impact of Lake Travis is very significant to the local economy," said LaRue. "Low water levels have a severe consequence on the lake's economic impact."

Lake Conroe Communities Network

Lake Conroe is an interesting case, according to Terry Bowie, president of the Lake Conroe Communities Network. Since the city of Houston owns rights to two-thirds of the lake for municipal water purposes and the San Jacinto River Authority owns the other third, future water planning is complicated.

As drought took hold in 2010, Houston began pumping water from Lake Conroe to fulfill the city's water needs. Coupled with Houston's withdrawal, the drought led to Lake Conroe levels falling dramatically.

Low water levels at Lake Travis, shown during the 2007 drought, significantly affect the surrounding area's economy. Photo courtesy of the Lower Colorado River Authority Corporate Archives, W0104.





To assess the impact of low lake levels on the economy of the Lake Conroe area, in 2010 the Lake Conroe Communities Network, led by Bowie, carried out a research plan.

"The study was commissioned for lake level effect regardless of the cause," Bowie said. "Due to the fact that while all involved had an intuitive feeling that low lake level has an adverse effect on the economy, there was no hard data substantiating that feeling. The Lake Travis study was a consideration, but not the sole basis" for the network study.

According to the report, researchers at Texas A&M University reviewed and evaluated existing lake-level studies, one of which was by the engineering firm Freese and Nichols, and examined how fluctuating lake water levels affect the surrounding property values and sales tax revenues.

Texas A&M researchers included Drs. George Rogers, Jesse Saginor and Samuel Brody from the Department of Landscape Architecture and Urban Planning and Dr. Georgianne Moore from the Department of Ecosystem Science and Management.

After their initial evaluation, the researchers analyzed sales taxes and surveyed businesses to estimate the impact of lake levels on sales tax revenues. Next, they surveyed residents and assessed property values to estimate the impacts on property values. This information was compiled into the Lake Conroe Report and was submitted to the network in Montgomery County in July 2012.

What was found at Lake Conroe was not dramatically different than what was found at Lake Travis. As lake levels decline, the potential for significant economic impact to the lake community increases.

Along the south end of the lake, through the city of Montgomery, State Highway 105 provides increased tourism traffic independent of lake-related activities, the report found. Therefore, the impact to lakeside businesses not along the 105 corridor is greater than those in the corridor.

Still, recreational business owners report being "greatly hampered" during periods of drought, said the report.

"As a marina owner, along with owning a house on the lake, the continual loss of water is extremely disconcerting," said one local business owner during the survey portion of the study. "Our marina business is down two-thirds compared to previous years."

"If the lake level is reduced below normal for extended periods of time, it will adversely affect the Montgomery County economy—period," Bowie said.

The report showed that there is "more than \$1.6 million per year in lost sales tax revenue in the city of Montgomery for each foot of water lost in the lake beyond 2 feet." That is, for each foot the lake falls, sales tax revenues drop by over 10 percent.

As distance from the lake increases, the effect of low lake levels decreases. Unlike with Lake Travis, on Lake Conroe there are many diverse, independent economies that are not lake-based. Cities such as Conroe and Willis are not directly affected by changes in tourism based on lake levels, the report stated, noting that proximity to Interstate 45 was a possible cause for this economic insulation.

"Residential properties located in lake subdivisions are valued ... around 15 percent higher than similar properties ... elsewhere in the county," the report stated.

According to the report, lakefront homes sell for a premium on Lake Conroe, and "residents expect the impact of lake-level changes ... in lake communities to be 28 percent (reduction of the selling price)." However, just 5 miles from the lake, property values are not affected by the lake level at all.

One positive effect of low lake levels was reported by the Lake Conroe Fire Department: "low lake-levels have resulted in fewer drunken, impaired boating citations." Also, the department reports an "improved bottom line for boat towing companies," as more boats run aground due to low lake levels.

However, community members said the negative impacts of lakes dropping still far outweigh any positive effects.

"Water is critical to the county's present and future well-being," Bowie said. "Important decisions regarding its prudent use are now being made almost on a daily basis.

"The network would like for the various government agencies as well as our legislative representatives to have sufficient data to make good decisions," Bowie said. "It is hoped the (report) information will assist in this decision-making process."

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