



San Marcos Springs

Hays County

Compilation and layout by Robin Gary, Watershed Association, July 2022

Water Source: Edwards Aquifer

Description



Photo of two glass-bottom boats on Spring Lake in front of the Meadows Center. Photo: Texas State University Meadows Center

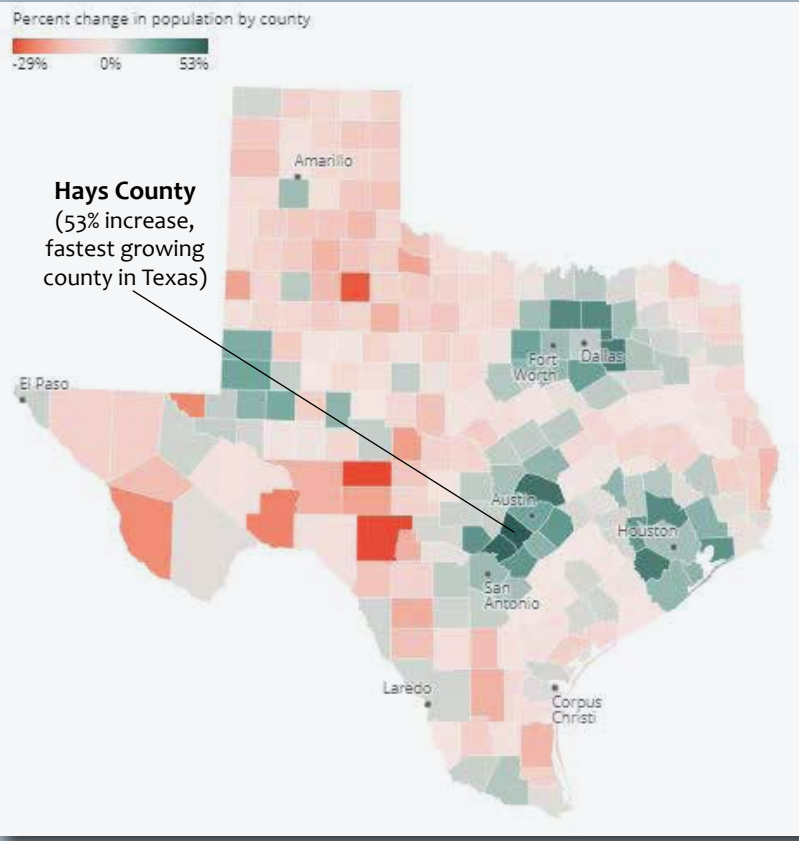
San Marcos Springs is made up of more than 200 artesian springs that bubble up from the Edwards Aquifer to form Spring Lake and the headwaters of the San Marcos River. Spring Lake was purchased in 1994 by Texas State University and is now managed by the Meadows Center for Water and the Environment. Formerly known as Aquarena Springs, Spring Lake hosted attractions like rides, mermaids, and Ralph the swimming pig. Aquarena’s past is remembered fondly, but Spring Lake is now managed more sustainably.

The Edwards Aquifer is the water source for San Marcos Springs and is a main water supply for cities and neighborhoods near the I-35 corridor and many landowners with private wells.



Challenges

The Edwards Aquifer has rapid recharge and groundwater flow rates. Development, runoff, pumping, drought, and impervious cover impact water availability and water quality at the springs and downstream. According to the 2020 census, Hays County was the fastest growing county in Texas. The increases in population create more development, and thus increased demand for water. Development is especially challenging on the Edwards Aquifer recharge zone, where water from the surface makes its way directly into the groundwater system with little to no filtration. The groundwater can be directly impacted in these areas affecting the millions of people rely on the Edwards Aquifer for their water supply. There are six federally protected species found in Spring Lake, the San Marcos River, and associated artesian wells and caves.



Map showing the percent change in population by County from 2010 to 2020. Image credit: Texas Tribune

Protection

Spring flow at San Marcos Springs serves as a drought trigger for groundwater users within the Edwards Aquifer Authority area. Robust conservation easement, alternate supply, voluntary irrigation suspension, and drought management programs spearheaded by the Edwards Aquifer Authority help to protect and enhance recharge and conserve water during drought. The Edwards Aquifer Authority, City of San Marcos, Texas State University and several other partners have established a Habitat Conservation Plan here and at Comal Springs to protect Edwards Aquifer spring flow and water quality. The City of San Marcos and Texas State University are collaborating to implement habitat restoration projects in and around Spring Lake and the Upper San Marcos River to mitigate effects their Edwards Aquifer groundwater pumping.



Photo of a kayaker surveying Texas Wild Rice, an endangered species, on the San Marcos River. Photo courtesy of the Edwards Aquifer Authority.

Access and More Information



Photo of a Aquatic Science Adventure Camp Snorkel Tour, Edwards Aquifer Research and Data Center.

Spring Lake is open year-round. The Meadows Center offers glass-bottom boat tours, kayak, and snorkeling tours, and trainings for groups and the public. The Discovery Hall and hiking trails through the Natural Area and Wetlands Boardwalk are also free to the public. The Edwards Aquifer Research and Data Center hosts an Aquatic Science Adventure Summer Camp focused on learning and exploring area springs, creeks, and caves.



Art4Water is a program of the Watershed Association, a 501(c)(3) non-profit



Photo credit: Jennifer Idol, courtesy of Meadows Center for Water and the Environment