

# Sensitive Williamson County Cavern Systems Feed Salamander's Springs

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**Ruby Morgan, 11, the daughter of Wendy Morgan who works for the city department, views the cave in all its splendor. The photo taken by Ralph Barrera, Austin-Statesman Staff**

AUSTIN, Texas (AP) — Nestled in a three-lot patch of land in the middle of the Avery Ranch neighborhood is a concrete and metal hatch the entrance and only sign of an ancient, dripping cave of glistening caramel-colored, calcite-covered limestone beneath.

Hundreds of similar karst caverns — about 750 in Williamson County alone — honeycomb the Central Texas landscape. Water from the ground above seeps through the soil, drips down the walls of the caves and into the Edwards Aquifer. It then empties through springs back into creeks and streams on the surface.

"It's all connected," said Mike Walsh, president of the Texas Cave Conservancy, which owns the Avery Ranch land that covers the cave.

Avery Ranch Cave feeds water to springs that are home to the Jollyville salamander — a candidate for the endangered species list and a source of tension between Williamson County officials, federal officials and environmental groups.

One such spring nearby is home to a "healthy" population of the critters, an official said Tuesday.

Walsh and other officials were in far Northwest Austin at the cave Tuesday as part of a city-sponsored event promoting Groundwater Awareness Week. More than 50,000 Austin residents rely on groundwater, city officials said. Most cities in Williamson County provide residents a mix of groundwater and surface water, according to a representative for the Brazos River Authority, which serves much of the county.

The Avery Ranch cavern was closed off for thousands of years before a crew attempting to put in sewer lines discovered it in 2001. The U.S. Fish and Wildlife Service then granted the cave conservancy a contract to develop the site as an educational show cave. It's open to the public twice a year; April 14 is the next day for visitors.

Walsh's group helps maintain caves for entities that include Cedar Park, the Brushy Creek Municipal Utility District and the Williamson County Conservation Foundation.

"Cedar Park is very critical to the watershed," Walsh said. He explained that water that enters one Cedar Park cave system — the roughly 1-square-mile Buttercup Creek watershed — flows through a series of underground streams and then surfaces in springs in the Volente Road area.

Those springs feed Cypress Creek, which flows into Lake Travis, from which much of Austin gets its water, Walsh said.

Water from Avery Ranch Cave also feeds a dozen springs in the area, several of which are home to the Jollyville salamander — one of two species of salamander that call the county home.

Officials have been fighting the potential endangered species listing, arguing the county can maintain the species without federal regulation, which they fear will inhibit development in the ever-growing county.

One spring, at the Avery Ranch Golf Course, supports a healthy population of salamanders, said Sylvia Pope, a hydrogeologist for the city. She said the public golf course is irrigated with water from Brushy Creek and has a pest management system that's actually helped the ecosystem.

"Avery Ranch has done a great job," Pope said.

Laurie Dries, a salamander biologist at the City of Austin, said salamanders are important because they are good indicators of water quality.

"This whole karst aquifer system is a sensitive system because water runs through it so quickly," Dries said. "Those species are adapted to live in that environment, so how they're doing tells us a lot about the water."

The city is promoting Groundwater Awareness Week to remind residents to use "green" gardening habits — such as using natural compost, as opposed to chemical-heavy fertilizers — and emphasize that residents should clean up messes, from motor oil to dog waste, said Wendy Morgan of the city's groundwater protection department.

"All of that moves through these rocks and becomes part of the groundwater."