

At Risk: Planet's Most Extraordinary Bat Colony

BILL HURLEY on 3 July, 2013 at 05:00



Editor's Note: The following story is part of a periodic series exploring regional issues of interest or importance outside San Antonio.



From March through October, the Bracken Cave is home to a nursery colony of nearly 20 million Mexican free-tailed bats – the largest colony and concentration of mammals on Earth. Right here on the far northeastern edge of San Antonio.

The emerging bats darken the sky at sunset as they swarm out of the cave's mouth to feed on insects, and then again when they return at sunrise. In the course of a single night swarming the skies of South Texas they **consume more than 100 tons of crop-damaging insects**. And they significantly reduce the number of mosquitos in the region.

The 697 acres encompassing the Bracken Cave preserve is owned and protected by **Bat Conservation International** (BCI). In 2002 SAWS and the Edwards Aquifer Authority (EAA) partnered on 621 acres of this to create easements.

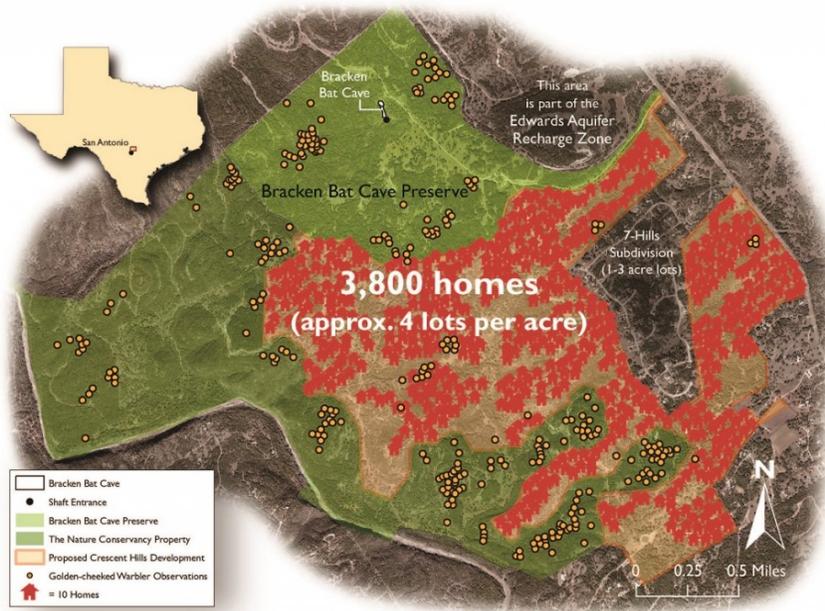


Millions of bats emerge from the mouth of Bracken Cave, a mere 20 minutes north of downtown San Antonio. Photo courtesy of EdwardsAquifer.net.

For 10,000 summers or more, scientists believe, the cave has played host to bats, protected by the wild surroundings of the Texas Hill Country. The closest urban areas are Garden Ridge, a small municipality four miles from the cave and New Braunfels, 12 miles away.

Now that may change.

Galo Properties is planning to build **Crescent Hills**, a 2,778 acre residential and mixed use project that will include nearly 4,000 homes, a little more than one mile south of Bracken Cave.



Area map courtesy of Bat Conservation International. The proposed Crescent Hills subdivision places homes approximately one mile south of the Bracken Bat Cave opening – directly under the bat's twice-daily migration route.

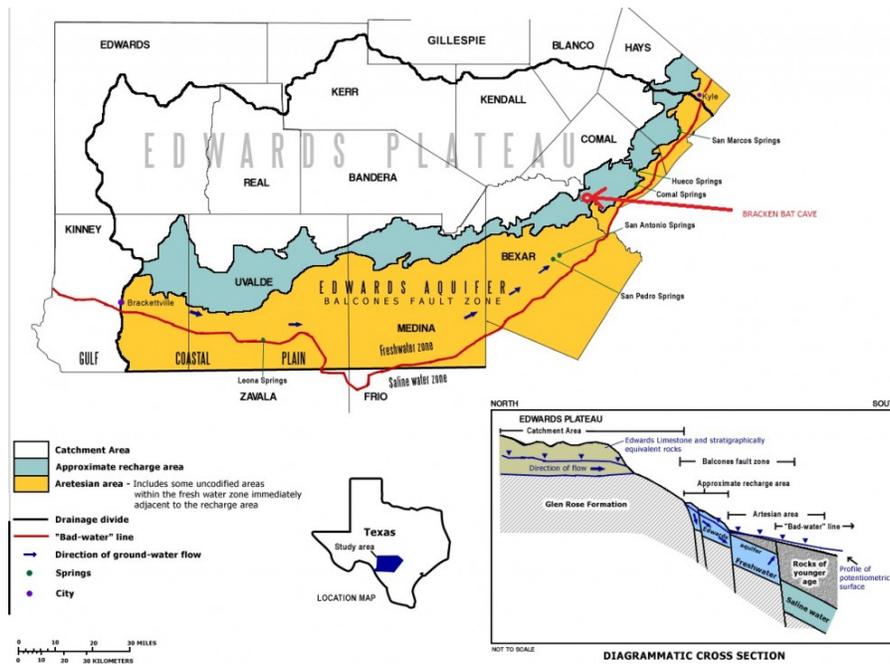
The proposed development has ignited a heated debate among citizens and various stakeholders. Those opposed to development of this land take issue with its potential threat not only to the bat cave, but to water quality within the Edwards

Aquifer Recharge Zone (EARZ), public health, numerous endangered species in the area, and the tourism value of the caves and Hill County as a natural attraction.

On the other side of the argument are the inexorable forces of a growing metropolis and decades of policies that have allowed the city to sprawl out over the aquifer recharge zone. The debate brings into sharp focus the growing challenges of balancing urban growth while protecting extraordinary natural resources that once damaged or lost can never be recovered.

WATER CONCERNS

The cost to SAWS ratepayers to provide water to the Comal County development is yet another central argument the development in its present form, and the site's location on an "approximate recharge area" (see map below) of the Edwards Aquifer is another.



At a SAWS board meeting Tuesday, representatives from the Greater Edwards Aquifer Alliance (GEAA) spoke during the meeting's citizens to be heard session, calling for SAWS to rescind its agreement of service to the area – required through the certificate of convenience and necessity (CCN) applied for by SAWS and approved by the board several years ago.

"We've been coming down to protest development over the (Edwards Aquifer) recharge zone for years ... Crescent Hills is the latest threat to the recharge zone," said Executive Director Annalisa Peace after the meeting on behalf of the GEAA. "We're hoping that SAWS will reconsider (providing service to Crescent Hills) and deny any more developments like this on a case-by-case-basis."



GEAA Executive Director Annalisa Peace.

This development puts the progress of millions of public dollars invested to protect the Edwards Aquifer at risk, according to Peace. "The fewer people producing sewage on the recharge zone, the better off everybody's going to be."

According to the Texas Water Code, once developments are within the boundaries of its CCN, SAWS must serve every rule-abiding customer or face a possible \$5,000-per-day fine. The Texas Commission on Environmental Quality (TCEQ) could also issue orders compelling service and/or stop granting future CCN requests.

"All (SAWS) has to do is apply to decertify the CCN," Peace said, adding that the development is in Comal

County, "San Antonio gets no sale or property taxes from there – how does straining our existing water supply to them benefit San Antonio?"

But it's not SAWS' job to take action, in this case, to deny service to a development on a customer's property based on external concerns, said **Greg Flores, SAWS vice president of public affairs**. "It's not as simple as GEAA makes it seem. SAWS spent five years approving the CCN (for that area) ... denying service would put us in the unenviable position of discriminating against a customer ... we won't deny service to this development."

Flores explained that county lines do not dictate SAWS service area. The water and wastewater utility has extraterritorial jurisdiction (legal authority beyond its boundaries) to apply to be the sole utility provider (via a CCN) when city growth warrants it.

At a **City Council meeting in May**, some asked if SAWS should meet new demand for service outside Bexar County. SAWS customers already face increased rates to cover the costs of securing additional water supplies.

"It's within the extra territorial jurisdiction," Flores said. "And it's our responsibility to follow and serve the city anywhere it grows or can grow."

When the Crescent Hill development plans reach the City Planning Commission, Flores said, environmental ordinances such as the **Edwards Aquifer Protection Ordinance** will come into play. That's the right time, he said, for concerns raised Tuesday to be addressed.



SAWS Vice President of
Public Affairs Greg Flores.

San Antonio's water quality ordinance limits impervious cover of a recharge zone development to as little as 15 percent. It just stretches the imagination to envision 3,800 single-family homes on 225 acres (15% of the development site's 1,500 acres).

SAWS will be required to provide water to the 3,800 proposed residential units, a volume estimated at 1,089 acre-feet of water per year at a cost of \$992,079, according to the GEAA.



Sewer line in Elm Hole Creek (in red) proposed to serve Crescent Hills. Photo of SAWS map courtesy of GEAA.

Also to consider, says the GEAA, is the cost of inspections required by the Texas Commission on Environmental Quality (TCEQ) for sewage infrastructure installed on the recharge zone. TCEQ requires camera testing every five years for sewer lines at an

estimated cost to SAWS customers of \$37,000/mile (sewage lines are not subject to this inspection if outside the recharge zone).

SAWS already has issued a utility service agreement with Crescent Hills, wherein almost \$21 million in impact fees will be paid to SAWS. Then Galo is responsible to build "laterals" to connect with the SAWS system, which currently calls for three pipelines to be extended from the development; two five and six-mile wastewater lines and a five-mile water line.

SAWS officials remain steadfast in their decision to provide service to the development, Flores said. "Only one board member has expressed a desire for the board to reconsider its decision ... but no formal requests have been made."

PUBLIC HEALTH

Bats are attracted to insects. Insects are attracted to light. Insects will gather around porch and street lights around these homes and bats are also known to swoop down for a drink of water from swimming pools.

For example, [as reported by Jeff B. Flinn for Express-News](#), on June 2, 2013, Kirby City Manager [Tim Bolda](#) said that a bat had landed in a grassy area near a city pool. While it is also rare to find a healthy bat on the ground, as many as four curious Kirby kids could have been exposed to rabies. The bat later tested positive for the disease and the kids have since been located and tested.

Even though it's rare to encounter a rabid bat — only 1%, in fact — it does happen. One percent of 10 million bats is not inconsequential: 100,000. However, no case of bat-to-human transmission has been reported in Austin or its surrounding counties, despite the 1.5 million bat colony under the Congress Avenue Bridge.



Emergence of the bats of the Congress Avenue Bridge in Austin, Texas at dusk. Photo via [Wikimedia](#)

[Commons](#).

But should some child, pet, or parent come into contact with a sick bat, there will be a call for the City's Metropolitan Health District to deal with this threat to public health.

Bats, like other mammals, excrete waste called guano. Bats in flight has been [known to cause spotting and staining on houses, vehicles, patio furniture and anything else close to their roost](#).

The more potential there is for human/bat contact, as a subdivision directly in a flight path would provide, the more likely

people will raise a cry for protection from the “offending” animals. It won’t matter that the bats have been there for more than 10,000 years, that their agricultural economic impacts from minimizing pesticide usage and health benefits in terms of mosquito control far outweigh any risks, or that people would have been advised against building homes in the colony’s fight path.



ENDANGERED SPECIES



One common annoyance to environmentalists is the common misunderstanding of the Endangered Species Act.

The primary point of the landmark 1974 federal legislation is to use species to monitor the overall health of the environment. This is why the Habitat Conservation Plan (HCP) is used and why the golden-cheeked warbler is on [Comal County's list of endangered species](#). It is (almost literally) the proverbial “canary in the coal mine” for this particular region’s ecological health.

(Note: The Map used at the top of this page marks dozens of sightings of the warbler in or close to the development boundaries.)

DEJA-VU, HILLS OF CASTLE ROCK?

The Crescent Hills development is very similar to the 2007 proposed “mega-subdivision” development of the Hills of Castle Rock, also on the recharge zone. The proposal included about 12,000 residents, living in 3,500 homes, a school, and a 200-acre commercial area. Phil Hardberger was mayor and Alex Briseño was SAWS chairman when the project came before them. [They both rejected it outright in December 2007.](#)

Hardberger famously acknowledged “irreversible mistakes” had been made with previous city-sanctioned development on the recharge zone, especially in areas along Loop 1604 North and US 281.

“I would like to keep the San Geronimo watershed as pure as we can,” he said.

The Hills of Castle Rock, however, was not within SAWS’ CCN.

THE BOTTOM LINE:

There are a whole lot of “levels” and agencies that regulate and make rules governing development over the recharge zone, at the federal level (HCPs), the state level (TCEQ), the county/regional level (EAA) and the city level (SAWS and City Council). All these agencies work side by side and enter into agreements with one another. Sometimes, however, their respective missions out them at odds.

Mayor Julián Castro has said there’s been no decision made. “There is a science to figure out in terms of whether development would or would not actually harm the bats,” [Castro said in an interview broadcast by Texas Public Radio.](#)

State Rep. Lyle Larson, R-San Antonio, and Rep. Doug Miller, R-New Braunfels, have proposed a bill to find out exactly that:

House Bill 36 would delay development until a study of its potential environmental effects can be carried out and analyzed.

The project's engineer, Gene Dawson, told the San Antonio Express-News in May that the company's owner, Brad Galo, had the right to build on his own property.

"Galo is a developer. He builds subdivisions for a living," he said. "BCI is welcome to buy this property and do whatever they want with it."

That's not a bad idea, said GEAA's Annalisa Peace, "The best outcome would be for (Galo Properties) to lower their selling price for the land ... and some sort of consortium of investors to purchase the land for preservation (or conservation easement)."

According to Peace, Galo Properties is asking \$35 million for the 1,500 acre plot - far more than the GEAA could hope to raise and one reason why any developer would have to squeeze so many houses on to the land to make a profit. Peace thinks \$12-15 million would be a more reasonable price.

BCI's executive director Andrew Walker is an optimist. "People have good horse sense here, and we can figure out a solution to this." Here's hoping he's right.

Rivard Report Managing Editor Iris Dimmick attended the GEAA press conference at SAWS headquarters yesterday. Her contributed material appears in italics.

Bill Hurley is a full-time freelance journalist and part-time software programmer (who until recently, was exactly the reverse). He has served on the Friends of Government Canyon (PR chair), the Green Spaces Alliance board, the Bexar Audubon Society board, and the Land Heritage Institute as treasurer.

RELATED STORIES:

[San Antonio Startup Pioneers Sustainable Water Treatment](#)

[Amid Cycles of Drought, San Antonio is Flash Flood Alley](#)

[As SAWS Pushes Native Plants, Texas Legislature Considers Native Plant Bills](#)

[SAWS Awards Businesses that Conserve, Braces For Summer Drought](#)

[Get Ready for Brown Grass as San Antonio Nears Stage 3 Water Restrictions](#)

[Texas Water: A Modern Proposal](#)

[Homecoming Weekend: Ex-Trinity Prof Char Miller Returns With New Book](#)

[Water: For Thirsty Lawns or Thirsty People?](#)

[Environmental Costs Missing From Eagle Ford Shale Reports](#)

[A Wary Rancher's Wellspring: Oil and Water](#)