

Please rely on the Greater Edwards Aquifer Alliance as a resource.

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For more information visit our web site:

www.AquiferAlliance.org

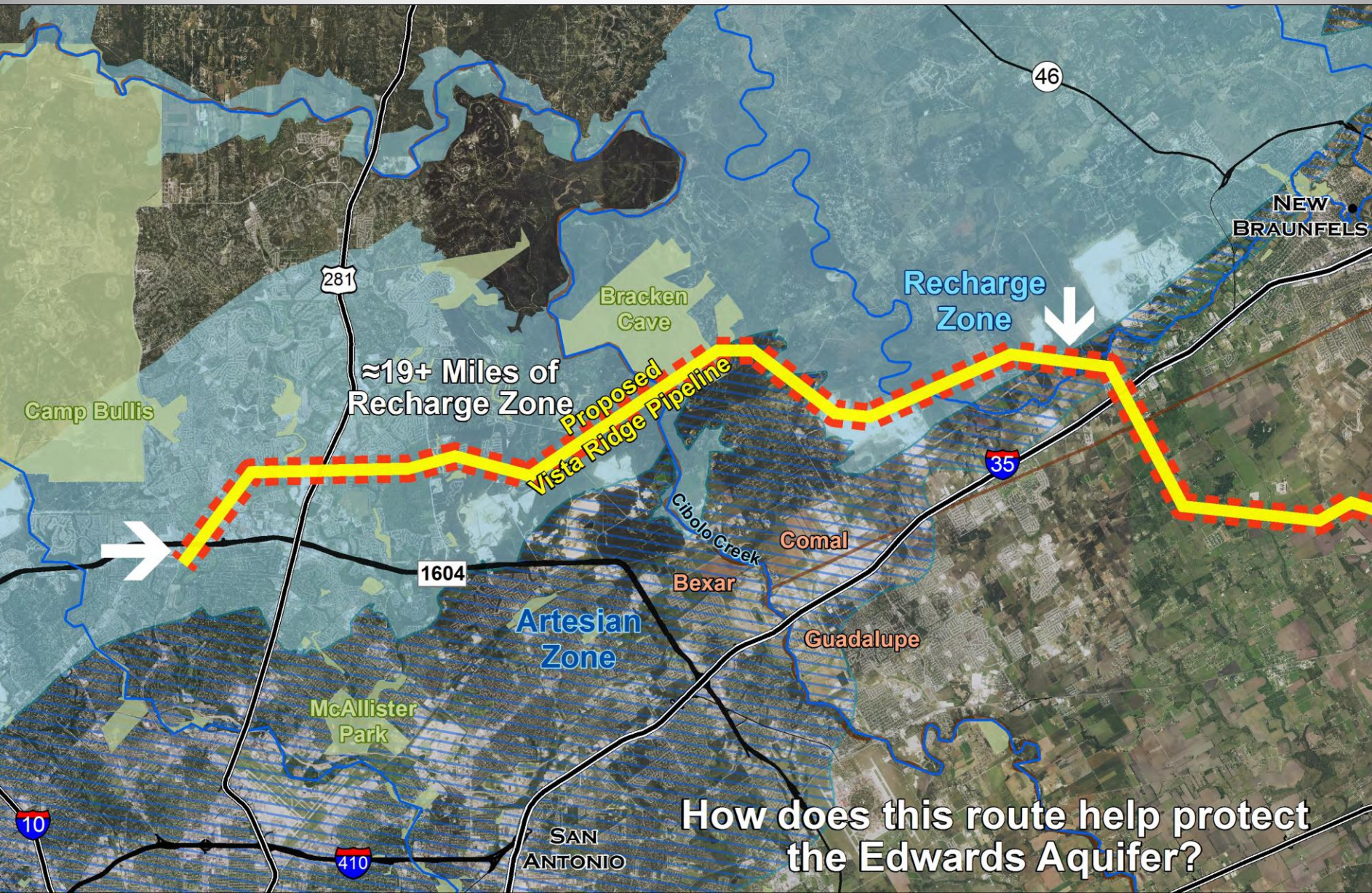


History of Coalition Actions on San Antonio Water Issues

- **1988** Regional Water Plan of Henry Cisneros
 - **1991** Applewhite I
 - **1994** Applewhite II
- **1990** SAWS Impact Fees (COPS Metro, APA, LWV-SA)
- **1993** Coalition formed to purchase Government Canyon
 - **2001** Proposition 3
 - **2005, 2010, 2015** Proposition 1 and renewals
- **1994** Southside neighborhoods receive SAWS service
- **1995** At the insistence of a coalition of local organizations (AGUA, COPS/Metro, MALDEF, LULAC, LWV-SA) the City convened a water quality task force to devise City regulations to protect the Edwards Aquifer and created a table of permitted uses specific to the Edwards Aquifer Recharge Zone.

History of Coalition Actions on San Antonio Water Issues

- **2001** PGA Initiative – Smart Growth San Antonio
- **2002 - 2006** Water Quality Task Force II
- **2012** SAWS Water Management Plan
- **2/6/2014** Ron Nirenberg asks for Comprehensive Study examining City policy on water
- **Spring 2014** SAWS Impact Fees
- **Fall 2014** Vista Ridge (first meeting at GEAA office 8/28/2014)
- **2015** SAWS rates, opposing Vista Ridge, and call for comprehensive water planning by City of San Antonio



How does this route help protect the Edwards Aquifer?

The Edwards is a uniquely prolific aquifer characterized by rapid groundwater recharge and rapid open channel flow



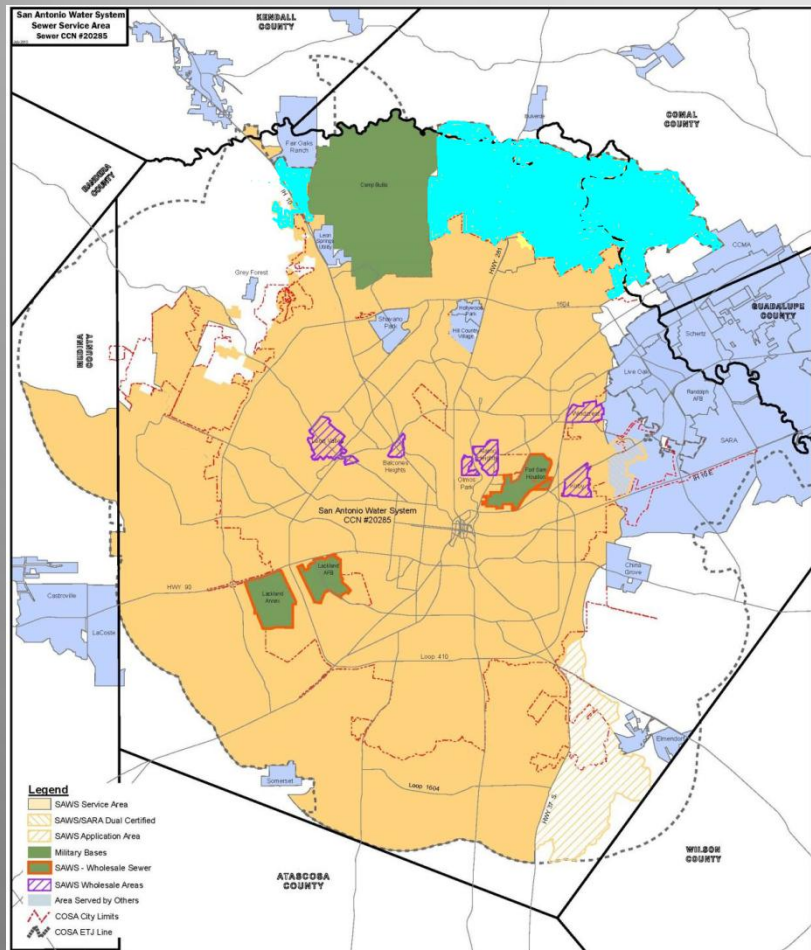
The Texas Commission on Environmental Quality (TCEQ) has designated the Edwards Aquifer as the major aquifer in the state most vulnerable to pollution.



Little to no filtration is provided as water enters directly into the Aquifer through faults, stream beds, and terrain characterized by uniquely porous Edwards limestone.

SAWS Expanded Service Area

Amended area is between IH 10 and the City of New Braunfels ETJ. Includes the entire ETJ in the north east portion of Bexar County and into Comal County.



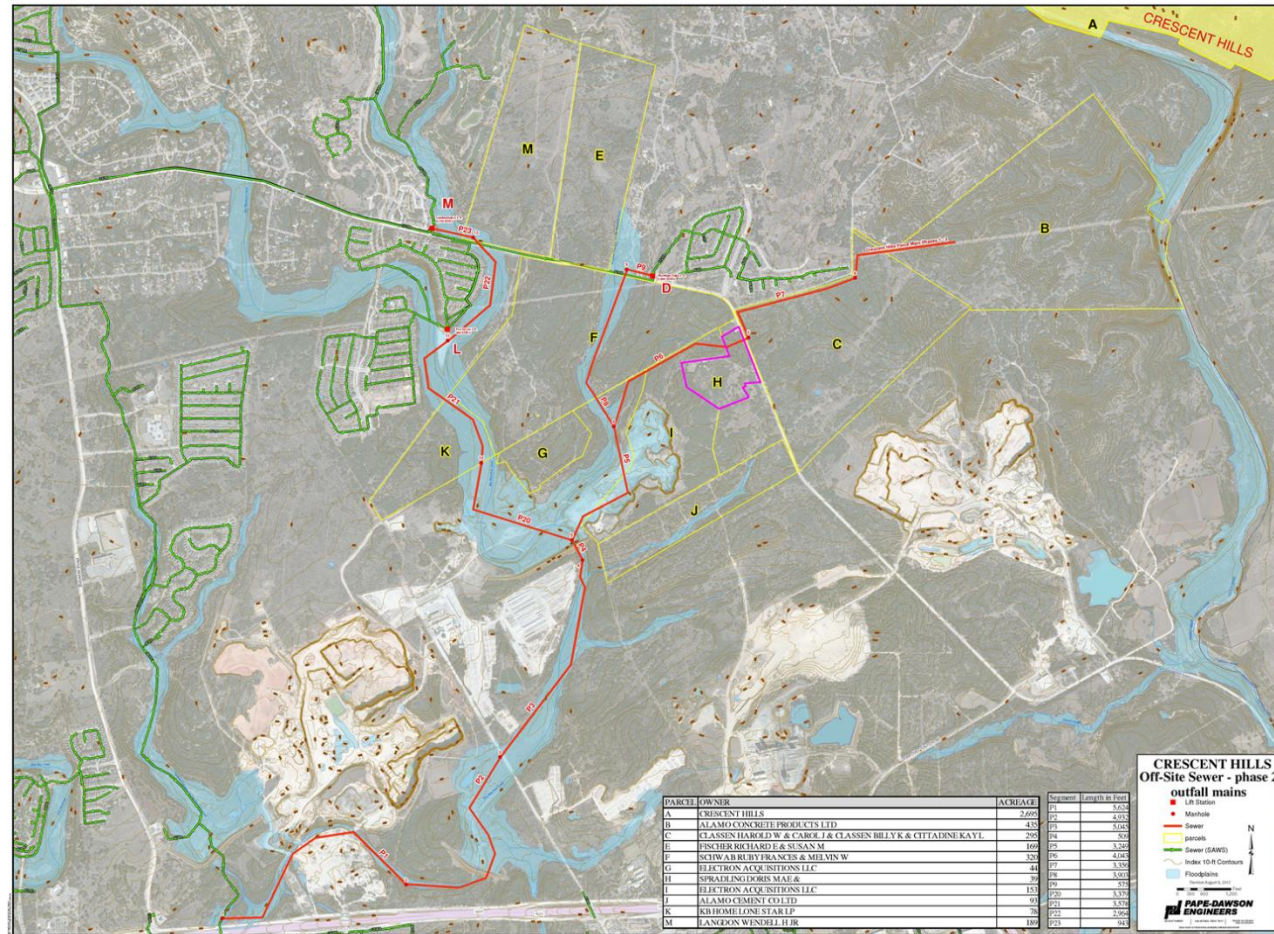
The Edwards Aquifer Recharge Zone within this ETJ is roughly the area between the City Limits and the ETJ border.

GEAA and member groups successfully opposed the extension of the CCN over the Edwards Aquifer Recharge and Contributing Zones in the western portion of our ETJ.

18,000 acres of the CCN are in Comal County

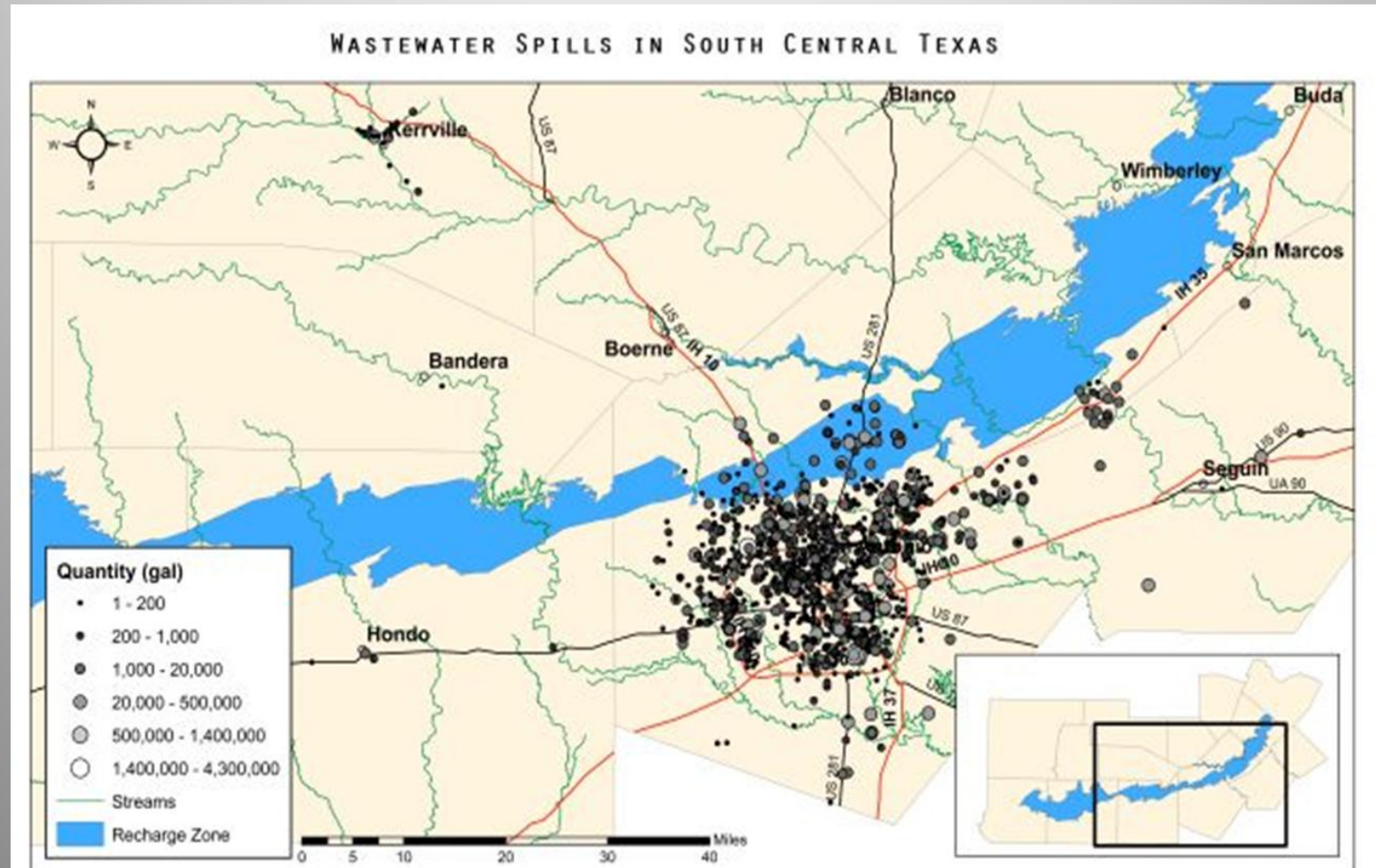
Currently, there are no services contract that have been issued within the disputed area of the CCNs.

There will be an explosion of growth in undeveloped areas along the oversized sewage mains installed to supply growth in the ETJ



SAWS has determined that oversized mains are needed to serve other developments anticipated to be built in this area. Sewage infrastructure was to be installed in creeks that recharge the Edwards Aquifer.

Between January 2008 and May 2012 **eighty three spills** totaling 809,000 gallons (**2.5 acre/feet**) of raw sewage occurred on Edwards Aquifer Recharge Zone.



Increased Urbanization in the Edwards Aquifer Recharge and Contributing zones is Impairing Water Quality

- Results of EAA well tests (2011 – 2012*) detecting anthropogenic or “emerging” contaminants (pharmaceuticals and personal care products)
- Analytic Method Chemical Name Result Unit AY-68-28-2118/22/11 10:50 AMWS-LC-002217a-Estradiol 1.2ng/l AY-68-28-2118/22/11 10:50 AMWS-LC-0022 Equilenin 3.8ng/l AY-68-28-2118/22/11 10:50 AMWS-LC-0022 Estrone 6.9ng/l AY-68-28-2118/22/11 10:50 AME1694 Triclocarban 2.9ng/l AY-68-28-2118/22/11 10:50 AME1694 Tylosin 2.3ng/l AY-68-28-6088/18/11 10:30 AME1694 Cotinine 1.7ng/l AY-68-28-6088/18/11 10:30 AME1694 Cotinine 1.7ng/l AY-68-28-6088/18/11 10:30 AME1694 Lincomycin 0.51ng/l AY-68-28-6088/18/11 10:30 AME1694 Lincomycin 0.51ng/l AY-68-28-6089/19/12 12:40 PME1694 Diltiazem 7.9ng/l AY-68-29-1128/18/11 1:35 PME1694 Lincomycin 0.42ng/l AY-68-29-1121/11/12 11:05 AME1694 Caffeine 53ng/l AY-68-29-1121/11/12 11:05 AMWS-LC-0022 Estrone 1.6ng/l AY-68-29-1121/11/12 11:05 AME1694 Lincomycin 0.27ng/l AY-68-29-1138/18/11 12:05 PME1694 Lincomycin 0.31ng/l AY-68-29-1138/18/11 12:05 PME1694 Lincomycin 0.31ng/l AY-68-29-1131/10/12 11:25 AMWS-LC-002217a-Estradiol 1.4ng/l AY-68-29-1131/10/12 11:25 AMWS-LC-002217b-Estradiol 1.5ng/l AY-68-29-1131/10/12 11:25 AME1694 Caffeine 320ng/l AY-68-29-1131/10/12 11:25 AME1694 Diltiazem 0.48ng/l AY-68-29-1131/10/12 11:25 AMWS-LC-0022 Estrone 1.3ng/l AY-68-29-1131/10/12 11:25 AME1694 Lincomycin 0.69ng/l AY-68-29-1131/10/12 11:25 AME1694 Triclosan 17ng/l AY-68-29-4181/17/12 9:45 8/16/12 9:50 AME1694 Thiabendazole 24ng/l IDX-68-15-901 Hueco Springs 12/3/12 1:15 PME169817a-Estradiol 1.60ng/l IDX-68-15-901 Hueco Springs 12/3/12 1:15 PME1694 Cotinine 4.85ng/l IDX-68-15-901 Hueco Springs 12/3/12 1:15 PME1694 Diltiazem 0.705ng/l IDX-68-23-301 Comal Springs 8/23/11 8:50 AMWS-LC-002217a-Estradiol 4.3ng/l IDX-68-23-301 Comal Springs 8/23/11 8:50 AMWS-LC-002217b-Estradiol 7.0ng/l IDX-68-23-301 Comal Springs 8/23/11 8:50 AMWS-LC-0022 Equilenin 0.72ng/l IDX-68-23-301 Comal Springs 8/23/11 8:50 AMWS-LC-0022 Estrone 5.8ng/l ILR-67-01-801 Hotel Springs at San Marcos 12/3/12 11:50 AME1694 Cotinine 4.73ng/l ILR-67-01-801 Hotel Springs at San Marcos 12/3/12 11:50 AME1694 Diltiazem 0.451ng/l ILR-67-09-101 12/14/12 12:00 AME1694 Caffeine 250ng/l ILR-67-09-101 12/14/12 12:00 AME1694 Carbamazepine 19ng/l ILR-67-09-101 12/14/12 12:00 AME1694 Sulfamethoxazole 12ng/l
- *excludes results from test well near Cibolo Nature Center
- Lincomycin and sulfamethoxazole are antibiotics · Diltiazem is a blood pressure medication · Carbamazepine is an epilepsy medication . Cotinine is a nicotine metabolite

Directives from the EPA may address some of these issues, but it will not address all

For example, one of the largest sewage leaks on the ERZ was the result of a broken lateral line (the line that connects the structure to SAWS main) for a large apartment building, which is the responsibility of the property owner, and is not maintained by SAWS.



Picture from frontage road of Hwy 281, construction crews widening the highway sheared a SAWS sewer main, resulting in a very large leak not reported for 28 days from the time of the incident.

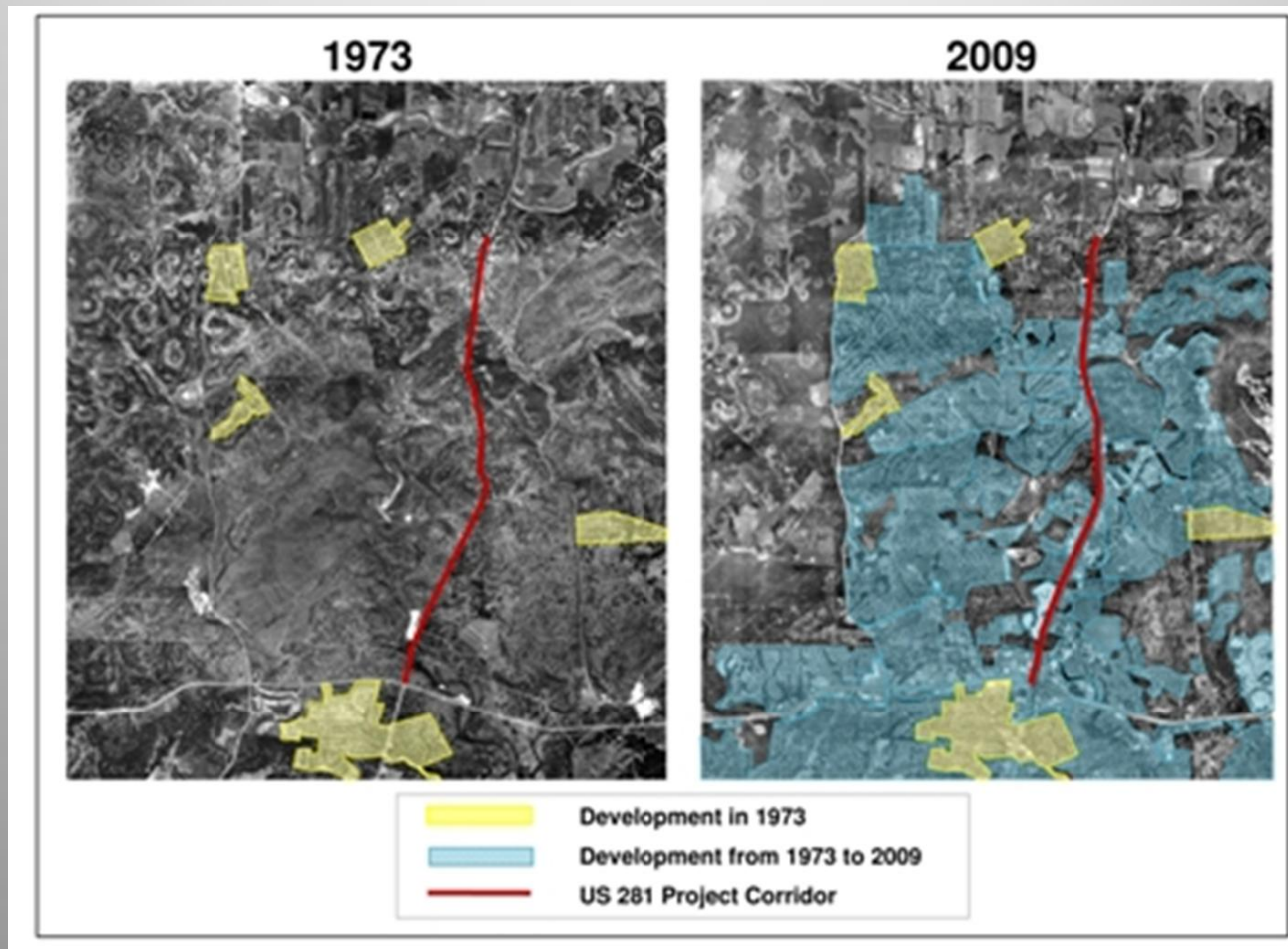
SAWS service results in projects of **greater density**, and **encourages growth** that follows the installation of oversized water and sewer mains. We can expect an **explosion of growth** in the **disputed area** as SAWS is required to approve service for **any project that requests it**.



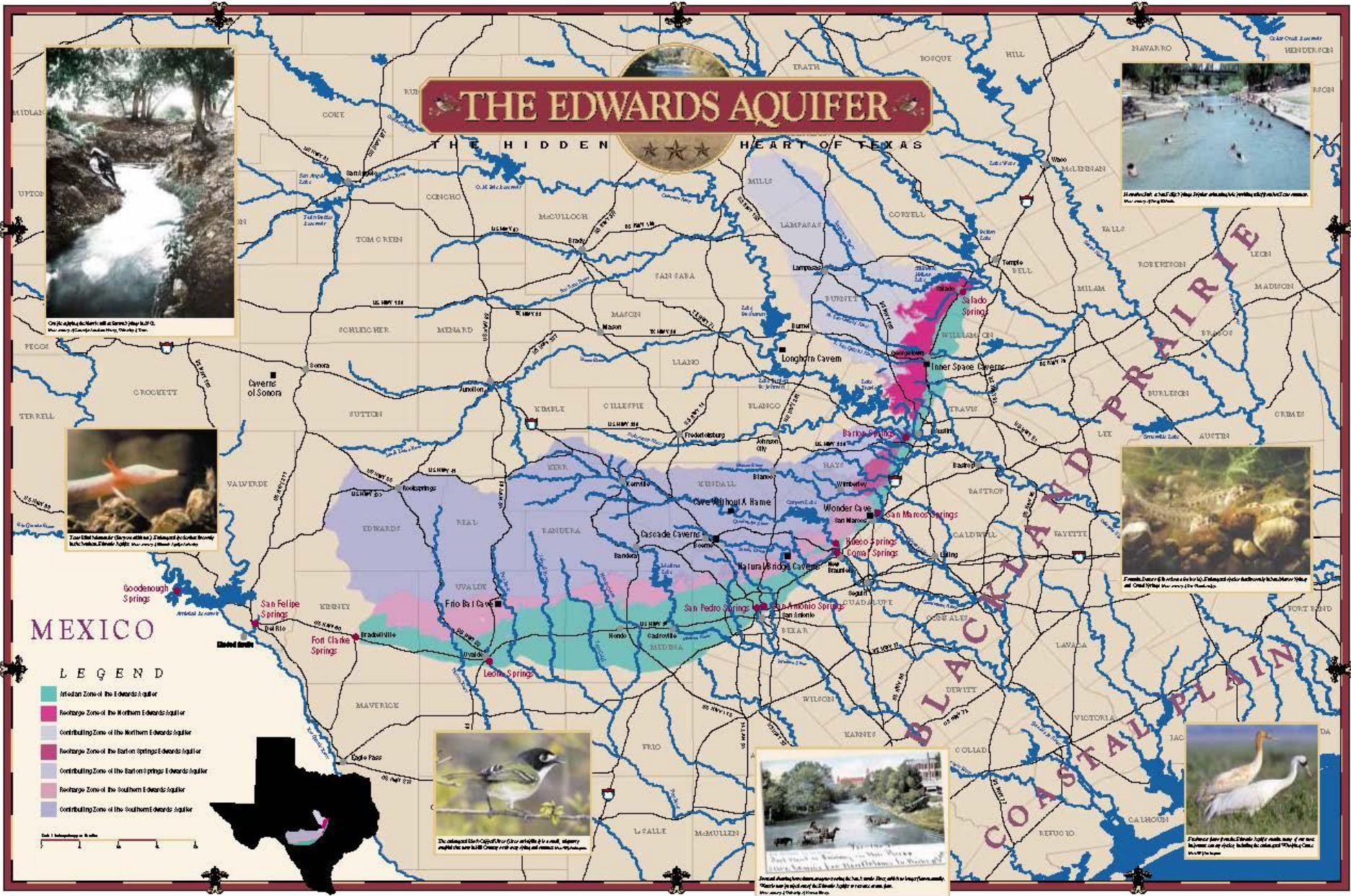
“Organized Wastewater collection is what drives development.”

Gene Dawson, president, Pape Dawson Engineers, Inc.

“Business in, waste out” San Antonio Express News, April 9, 2014



Since January 2014, the consent agendas of SAWS Board meetings have featured 28 requests for USA's within the Edwards Aquifer watershed. Most were approved with no discussion.



SAWS Role In Development of the Edwards Aquifer Recharge Zone

The Greater Edwards Aquifer Alliance Recommends:

- **Amend Certificate of Convenience and Necessity (Water CCN #10640 and Sewer CCN #20285) to exclude the Edwards Aquifer Recharge and Contributing zones in northeast Bexar and Comal counties**
- **Adopt a moratorium on issuing new Utility Service Contracts for water and waste water service on the Edwards Aquifer Recharge, Transition, and Contributing zones until such time as policies protective of these areas are adopted**
- **Institute a fee to be assessed on all customers served by SAWS sewer service and residing on the Edwards Aquifer Recharge Zone to cover the cost of State required sewage infrastructure inspections**
- SAWS Aquifer Division staff must **consult with the San Antonio City Attorney's office prior to issuing Category 1 status exempting projects from City of San Antonio Water Quality ordinances** - Aquifer Protection Ordinance No. 81491 (City of San Antonio Code of Ordinances, Chapter 34, Article VI, Division 6)

SAWS Role In Development of the Edwards Aquifer Recharge Zone

The Greater Edwards Aquifer Alliance Recommends:

- The San Antonio Water System shall **require**, as condition of approval of service contracts for service in jurisdictions other than the City of San Antonio, **compliance with conditions no less stringent than San Antonio’s Water Quality ordinances**, or in the event that the jurisdiction has ordinances to protect water quality, the application of whichever ordinance is provides greatest protection.
- The San Antonio Water Systems Board shall direct the San Antonio Water System to establish a policy to **prohibit applications for extension of Certificates of Convenience and Necessity into areas eligible for Proposition 1 funds** dedicated to the protection of the Edwards Aquifer.
- The San Antonio Water System shall **require full compliance with San Antonio’s water quality ordinances** as a condition of service, regardless of category status as to previously vested rights.
- **“Grandfathered” projects will not be considered eligible for service contracts unless they comply with current regulations.**

SAWS staff says they will be able to better protect the Edwards watershed if SAWS is the sole service provider in this area. We disagree for the following reasons:

- The City of San Antonio has the right of first refusal for non-SAWS sewage systems within the ETJ.
- **SAWS can protest permits for substandard projects.** GEAA and SAWS joined forces to successfully protest the issuance of sewage discharge permits for the Hills of Castle Rock subdivision.
- In areas outside the CCN, **SAWS engineers can require changes to the plans** that will better protect the Aquifer as conditions of granting service. **When required to provide service, they have no such leverage.**
- To avoid the use of lift stations, which frequently malfunction, SAWS installs **gravity feed sewage lines within creek beds** and intermittent streams, which are **major Edwards Aquifer recharge features**. Thus, when leaks do occur, raw sewage is leaked in areas where the **most prolific recharge** of the Aquifer occurs.
- **Guarantee of SAWS service** will **boost the price of land** within the disputed service area, which will **necessitate higher density projects.**

- **The Greater Edwards Aquifer Alliance recommends that SAWS adopt a moratorium on issuing new Utility Service Contracts for water and waste water service on the Edwards Aquifer Recharge, Transition, and Contributing zones until such time as policies protective of these areas are adopted**

San Antonio Express News, October 26, 2014 **“Bracken Cave Deal Shows Need for Better Planning”**

“...it’s troubling that San Antonio Water System approved service to high-density residential development outside of Bexar County and over the aquifer recharge zone. The oversized sewer and water lines SAWS approved for the project would encourage even more development in an area where the region would clearly benefit from limits.

“Right now we’re operating in two different worlds with what council does in development and growth and planning, and what SAWS does in respect to its service area,” said City Councilman Ron Nirenberg, who spearheaded the bats deal and is examining comprehensive growth strategies.

The city’s growth and development standards don’t apply to its extraterritorial jurisdiction, Nirenberg said, meaning SAWS can provide service to pretty much any development in this portion of its service area.

Obviously, this needs to change.

While we largely support growth and development because it is a major driver of San Antonio’s economy, it is paramount that the city develop density requirements for SAWS service in the extraterritorial jurisdiction, particularly over the Edwards Aquifer.

Growth will come, and SAWS, because of its size and service capacities, is uniquely situated to shape how that growth occurs.

“The Crescent Hills subdivision shows the need for managed growth policies in SAWS’ extended service area.”

The Greater Edwards Aquifer Alliance recommends SAWS institute a fee for assessed on all customers served by SAWS sewer service who reside on the Edwards Aquifer Recharge Zone to cover the cost of State required sewage infrastructure inspections

TCEQ requires camera testing every five years for sewer lines on the Recharge Zone, at an estimated cost to SAWS customers of \$37,000/mile.

TCEQ requires smoke testing every two years for sewer lines on Recharge Zone.

Cost does not apply to sewage infrastructure that is not on Recharge Zone.

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