



Preserve Our Hill Country
Environment

Stop 3009 Vulcan Quarry

INTRODUCTION

Michael Zimmerman

- Housekeeping
 - Bathrooms, etc.
 - Fire Exits
 - Coffee/H2O
- Overview for tonight
 - 2-hour program
 - Presentation
 - Questions/Comments
- Introductions

OVERVIEW

Milann Guckian

- Why here?
- Why we formed
- Who we are
- How we got here - Chronology
- Accomplishments
- Air
- Scope of the Aggregate Industry in Comal County
- Water/Caves
- Relationship between TCEQ, Aggregate and Government
- Where do we go from here/What you can do
- Your Turn (Comments/Questions)

WHY HERE?

Why build a quarry here?

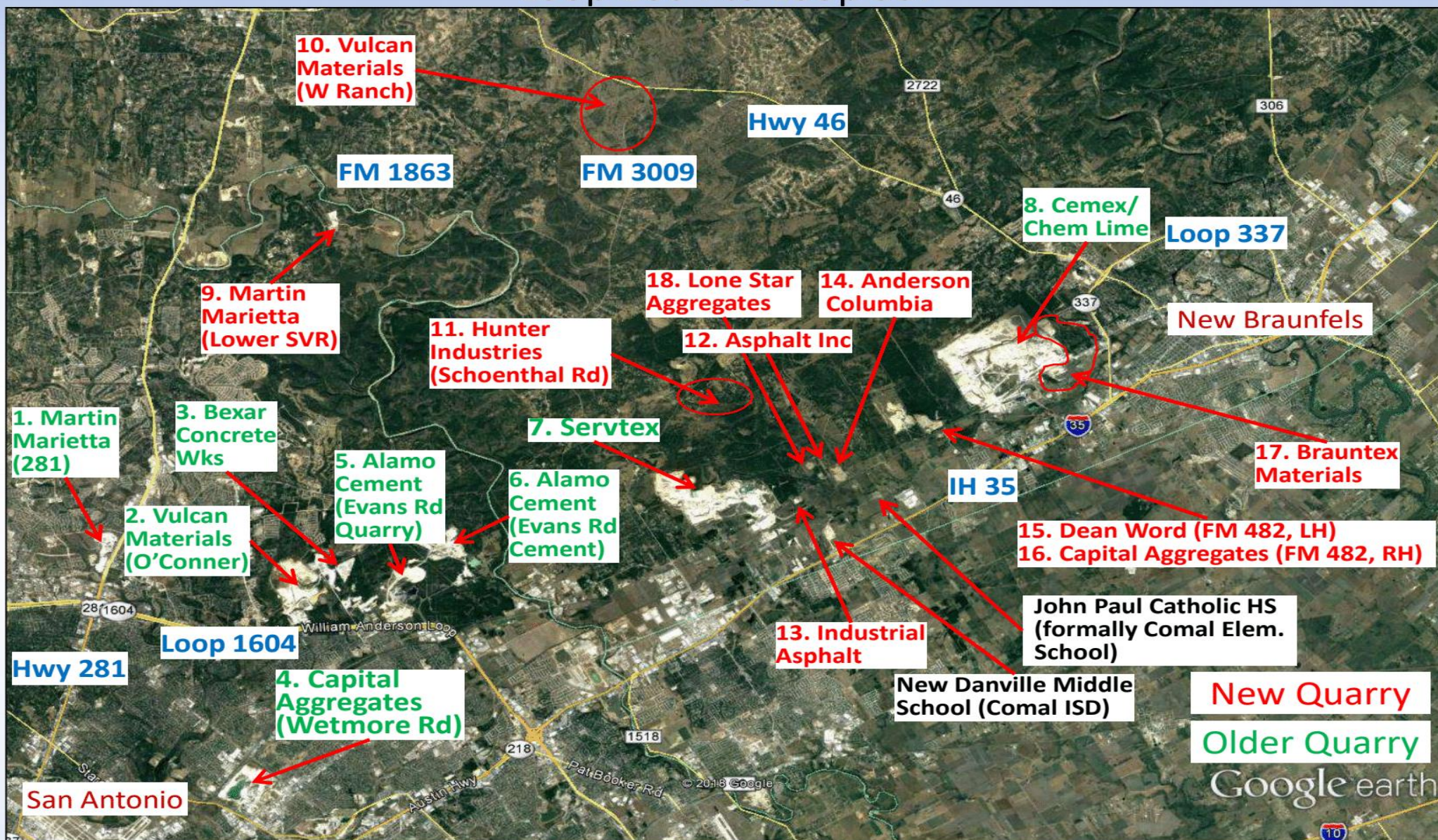
- APO's are a rapidly growing 20-billion dollar+ open-pit mining industry in Texas
- We sit over 60% of all limestone in Texas....We're like the Fort Knox of limestone
 - The entire Balcones Escarpment from the Oklahoma border to Uvalde County's border with Mexico is limestone. Most of the **mining aggregate** is found in Williamson County down to Uvalde County
- Access to major highways and the interstate system
- Access to Railways
- Access to legislators, minimal regulation
 - Texas Aggregate and Cement Association (TACA) is one of the largest lobbying groups in Texas
 - They advocate to "Promote, maintain, and obtain reasonable, uniform and predictable statewide environmental permitting processes and associated management practices related to aggregate, concrete, cement, and related industries."
- Rapid growth in Texas, particularly in Hill Country counties
- The proposed quarry will be the first of many.....if approved

WHY HERE?

Why not?

- Area residents are at risk for exposure to Air Pollution from the aggregate industry
- Vulcan's proposed site sits directly over the Edwards and Trinity Aquifer Systems
 - Supplies water to over 2 million people from Bell County down to Uvalde County
- Caves
 - Natural Bridge Caverns, Honey Creek, newly discovered and newly charted caves around Vulcan's proposed site
- Increased traffic on already over-burdened roads
- Noise and Light Pollution
- Effects to Wildlife and area Fauna
 - Bats, Golden-cheeked Warbler, Bees, Butterflies, etc...
- The proposed quarry will be the first of many.....if approved

Quarry Row Open-Pit Mines Loop 1604 to Loop 337



AFFECTED AREA TODAY

Martin Marietta

Brauntex & Cemex

Dean Word & Capital Aggregate

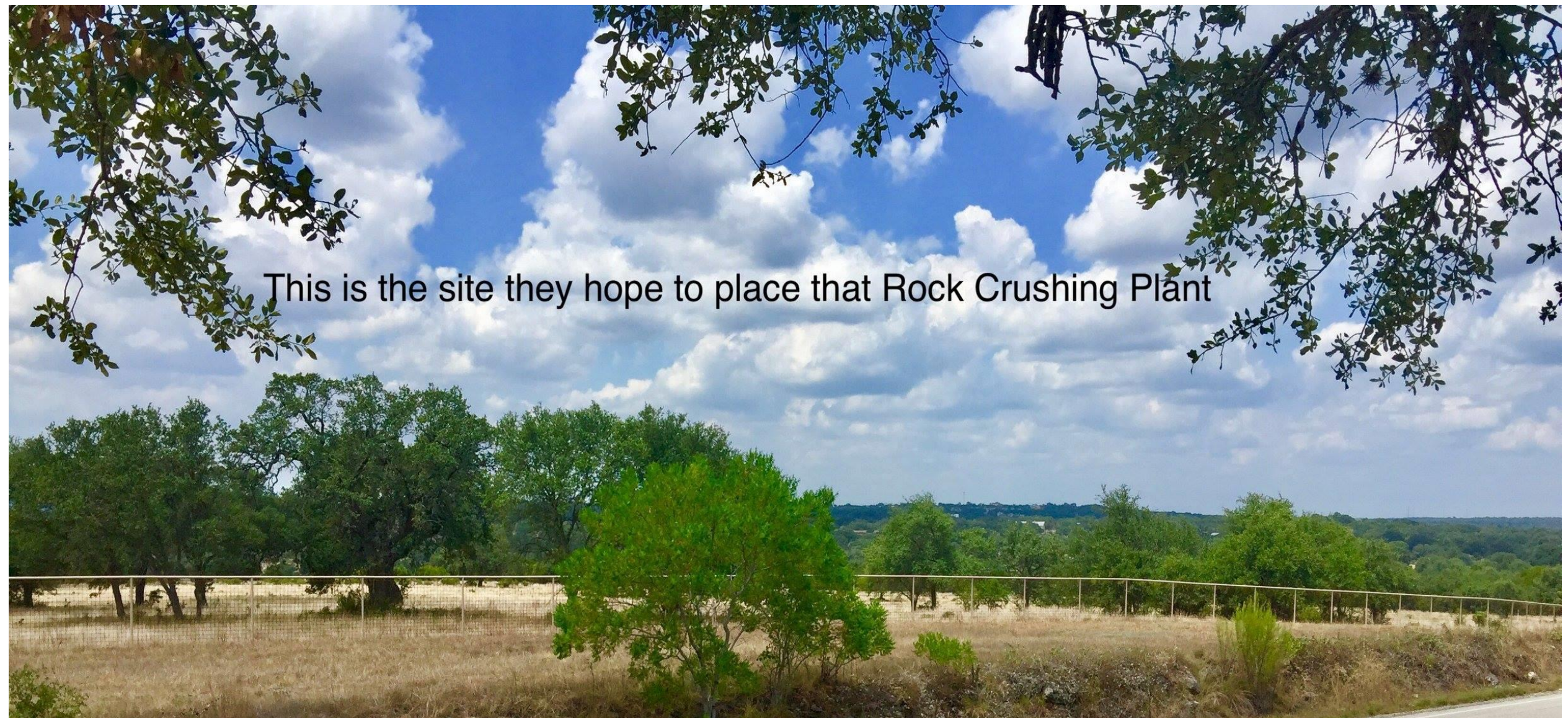
Hanson Materials

Alamo Cement

Vulcan Materials

WHITE RANCH TODAY

This is the site they hope to place that Rock Crushing Plant



VULCAN QUARRY TOMORROW



WHY WE FORMED

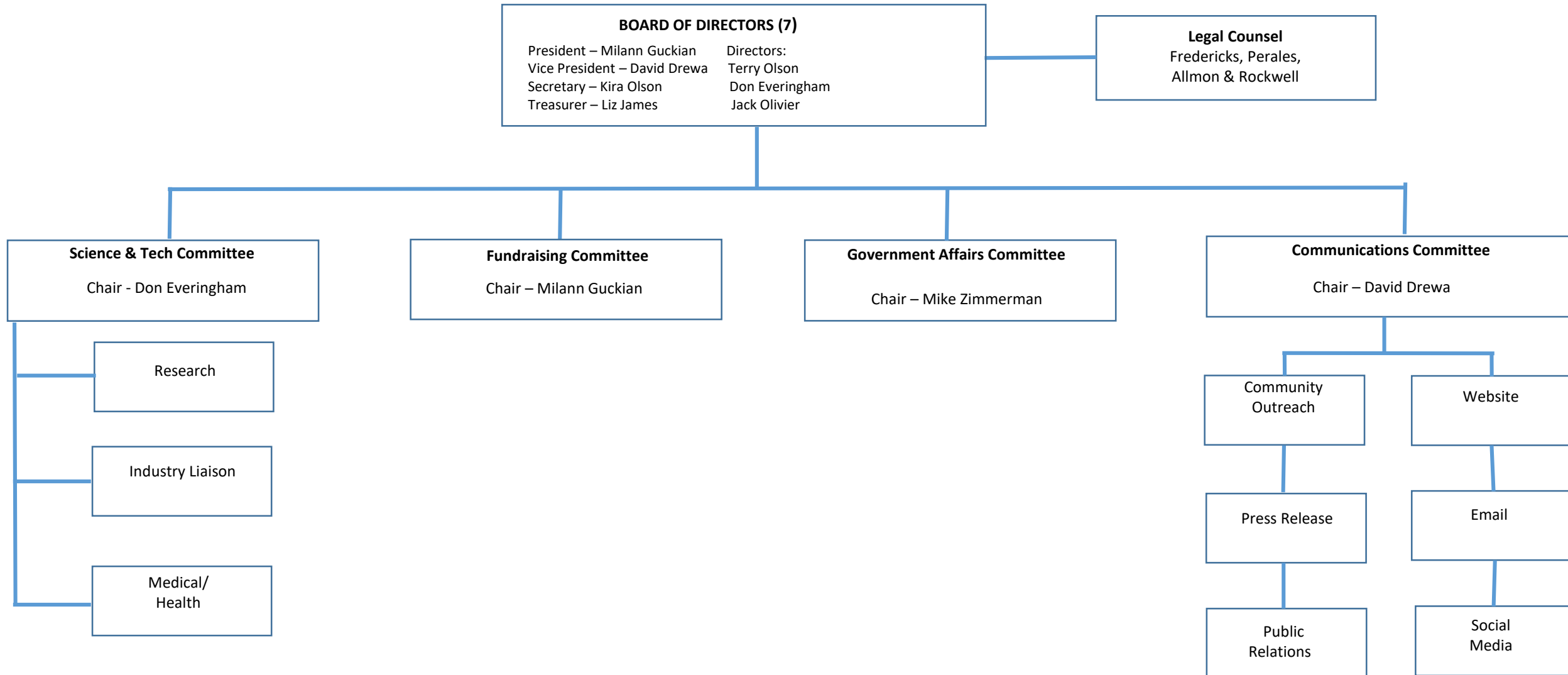
- My story
- All volunteer grassroots group of Hill Country Residents banded together to fight the Aggregate Industry specifically Vulcan's Quarry at SH46 and FM3009
- Started as Facebook page - Friends of Dry Comal Creek
- Needed a bigger target audience, became Stop3009VulcanQuarry
- Needed to expand to fight the over-aggression of the aggregate industry in the Texas Hill Country so we Metamorphosized into Preserve our Hill Country Environment, a 501(c)4 nonprofit organization.

Our Mission Statement

To protect, preserve and restore the air, water, land, wildlife, unique features and quality of life in the Texas Hill Country against the aggressive and insufficiently regulated expansion of the aggregate industry.

WHO WE ARE

Preserve our Hill Country Environment (PHCE) ORGANIZATION STRUCTURE



WHO WE ARE PRESERVE OUR HILL COUNTRY ENVIRONMENT (PHCE)

SCIENCE & TECH COMMITTEE

Comprised of Engineers, Hydrologist, Scientist/Academia, Pathologists and Geologists

15 – PHCE Members (5 – Engineers, 1 - Hydrologist, 6 – Scientist/Academia, 1 - Pathologist, 2 - Geologist)

12 – Texas Members (5 – Engineers, 1 - Hydrologist, 3 - Scientist/Academia, 1 – Pathologist, 2 - Geologist)

3 – Out-of-State Members (3 - Scientist/Academia)

HOW WE GOT HERE - CHRONOLOGY

Neighbors (Garden Ridge to Spring Branch to New Braunfels)

- 2017
 - - June:
 - Vulcan Materials purchased approx. 1500 acres (2.4 square miles)
 - Operates 24 hours/day, 365 days/year for a total of 8,760 hours/year
 - Permitting for a Portable Rock Crushing Plant
 - 1,500,000 tons per year
 - Trucks haul approximately 20 tons per load, conservatively equates to 205 trucks/day, 75,000 truck/year
 - Blasting, Water usage, Noise, Light, Traffic and Reclamation were not considered in the permit application
 - - July:
 - Vulcan applied for Air Quality Permit from Texas Commission on Environmental Quality (TCEQ)
 - Requires Vulcan to meet **MINIMUM** standards within fence line of property
 - Vulcan must comply with Texas Clean Air Act (TCAA)
 - Protection of health and physical property of general public
 - Must comply with Best Available Control Technology (BACT)
 - - August:
 - Area residents met to discuss proposed quarry and what we could do
 - Friends of Dry Comal Creek got over 300 neighbors to file registered complaints w/TCEQ over Vulcan's air permit
 - - October:
 - Created Working group and Website Stop3009VulcanQuarry

HOW WE GOT HERE - CHRONOLOGY

- 2018
 - - February:
 - TCEQ Public Meeting on permit held w/over 500 residents in attendance
 - - April:
 - Created Preserve our Hill Country Environment (PHCE) dba Stop 3009 Vulcan Quarry and Friends of Dry Comal Creek
 - Elected BOD, submitted Bylaws and Articles of Incorporations as a 501c4 nonprofit corporation
 - - September:
 - TCEQ Commissioner and Executive Director issue Decision Letter and Response to Comments (RTC) naming eleven (11) Affected Parties (AP) and 20 Issues for consideration
 - - December:
 - TCEQ grants Contested Case Hearing (CCH) w/State Office of Administrative Hearing (SOAH)

HOW WE GOT HERE - CHRONOLOGY

- 2019
 - - January:
 - Attained 501c4 status (Nonprofit)
 - - March:
 - SOAH Preliminary Hearing held w/200 residents jamming the courtroom – ALJ added CISD, GEAA, Harrison Ranch Group and an additional 80 households to those considered Affected Parties
 - PHCE and area residents work w/state legislators to forward Aggregate Production Operations (APO) issues and regulations
 - - June:
 - CCH held in Austin
 - - September:
 - ALJ recommends granting the permit – Attorney's filed exceptions to Proposal for Decision (PFD) and rebuttals to exceptions
 - - Up Next – TCEQ will consider recommendations/exceptions and put us on their docket for decision

ACCOMPLISHMENTS

- Have delayed start-up of Vulcan site for almost 2 years
- Educated vast numbers of local/area/statewide residents to the ill-effects of APO's and what open-pit surface mining means for Texas
- Through our Social Media outlets we were able to provide direction and updates to residents on upcoming meetings, news events, press coverage and how-to information
- Succeeded in garnering large participation at Public Meetings and Hearings, in citizen postings to TCEQ, Facebook and Nextdoor and in numerous letter writing campaigns to our local, state and national politicians and news organizations
- Working together w/other local, regional, and statewide grassroots organizations to strategize, plan and work toward a more sustainable future for Texas
 - Comal Environmental Education Coalition (CEEC), Comal County Conservation Alliance (CCCA), Boerne to Bergheim Coalition for a Clean Environment (BBCCE), Texas Environmental Protection Coalition (TEPC) and the Hill Country Alliance (HCA) to name a few.
 - We are also following closely what is happening w/development in Honey Creek and the sand mines (Monarch Silica) in South Bexar County.

ACCOMPLISHMENTS

- Hosted Fundraising events to help raise monies to pay for legal/experts/advertising & marketing/education
- There were approximately 100 APO and water bills drafted/submitted during the 2019 Legislative session
 - Through citizens efforts in letter writing campaigns, numerous trips to Austin to testify and alignment w/state legislators - 17 bills were passed (3 – APO, 14 – water) and some bad bills for Texas never made it out of committee.
- Science and Tech committee completed an Air Monitoring program for 2018 and successfully got a program started for 2019
- TCEQ installed two new Air Monitors in/around area APO's
 - Comal County off Loop 337/Independence at the NBU tower and Bexar County off Loop 1604 and Bulverde Parkway

New Comal County Air Monitor at NBU Water tower off Loop 337 New Braunfels



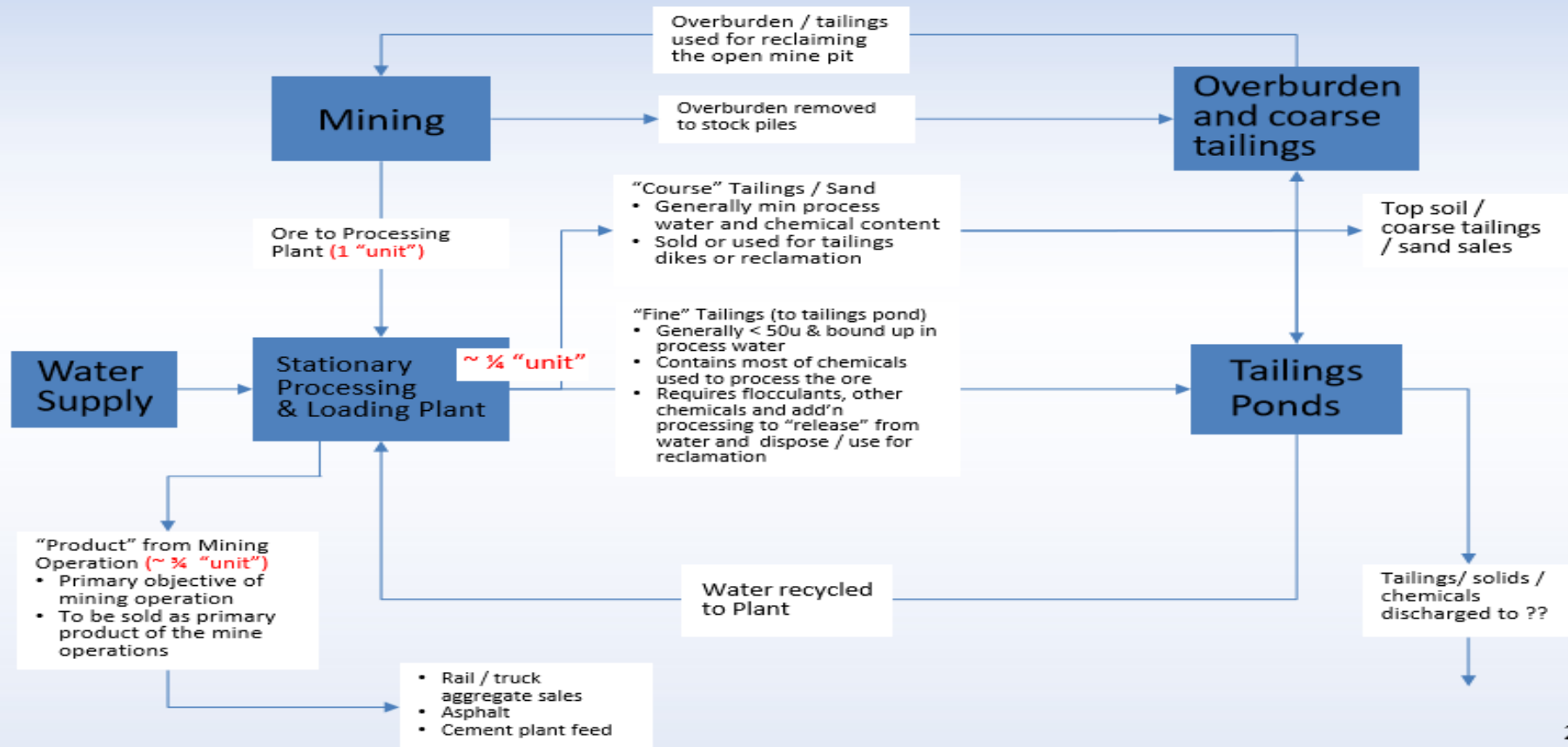
New North Bexar County Air Monitor Bulverde Parkway North of Loop 1604



AIR/APO'S

Don Everingham

Surface Mining Basics



APO Key Issue Resolution

Objective

- Preserve the rugged, natural beauty of the Hill Country, its clean air and adequate supply of water for our children, friends, retirees, tourists and new families
- Resolve APO issues to achieve long-term, balanced and equitable impacts on all involved

Background

- APOs are a rapidly growing \$24 billion open-pit mining industry in Texas
- International, nation-wide and local APOs are exploiting rapid area growth to provide aggregate materials mined from nearby, high-quality resources (e.g., Balcones Fault zone)
- APO growth has caused serious concerns and major stakeholder conflicts

Status

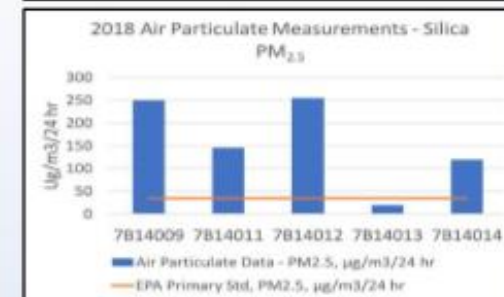
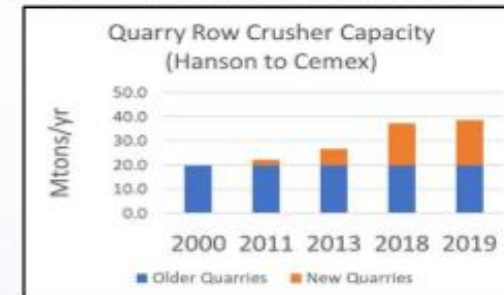
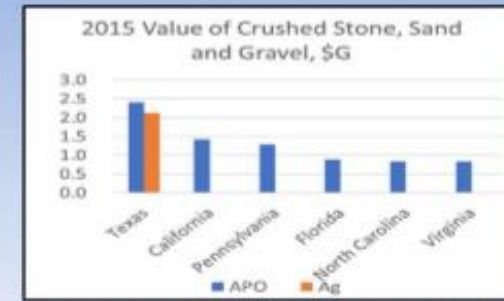
- An extensive series of mine faces is clearly visible north of the IH-35 corridor
- The rugged Hill Country is being damaged and turned into a massive “moonscape” of scared land
- Since 2000, APO land holdings and crusher capacity have doubled
- TCEQ oversight is limited to air and stormwater; EIAs and reclamation are not required
- Approx. 100 bills drafted/submitted during 2019 legislature; 17 passed (3 APO, 14 Water)
- 2018 air monitoring program indicated air quality exceeded the EPA limit
- Major unanswered questions/concerns remain on water availability
- Truck traffic is causing severe congestion, gridlock, dangerous safety concerns and is non-sustainable
- Massive large-city noise and light trespass on populated, near-by properties is increasing

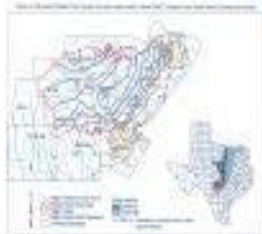
Resolution

- Address six (6) Key issues with dialogue, educational and legislative initiatives
 - Large, long-life open-pit surface mining operations – SMCRA-like regulation needed
 - Air particulate emissions - quantify and address cumulative impact on air quality
 - Water use - availability of regional water supplies to support large APO water use
 - SW and GW contamination - address concerns including impacts on the ERZ
 - Truck traffic - Manage safety & impacts on public infrastructure and limited capacity roads
 - Quarry noise and light trespass – limit impacts on surrounding properties

Next Steps

- Update work plans; follow-up & align with legislative contacts, incl. Committee Chairs / Vice-Chairs
- Develop stakeholder consensus for 2021 legislature
- Consolidate numerous citizen and APO protestant groups – HCA initiative
- Participate in Interim Charges/Select Committee(s) on APO issues
- Support Rep and Senator work group interactions with regulatory and other state agencies
- Work sessions with local govt; e. g., formulate traffic control and truck inspection plans





The psychology faculty has high-levelled a major plan in Texas to help management. Since psychology faculty don't integrate the connection between surface water and psychology.



Legend



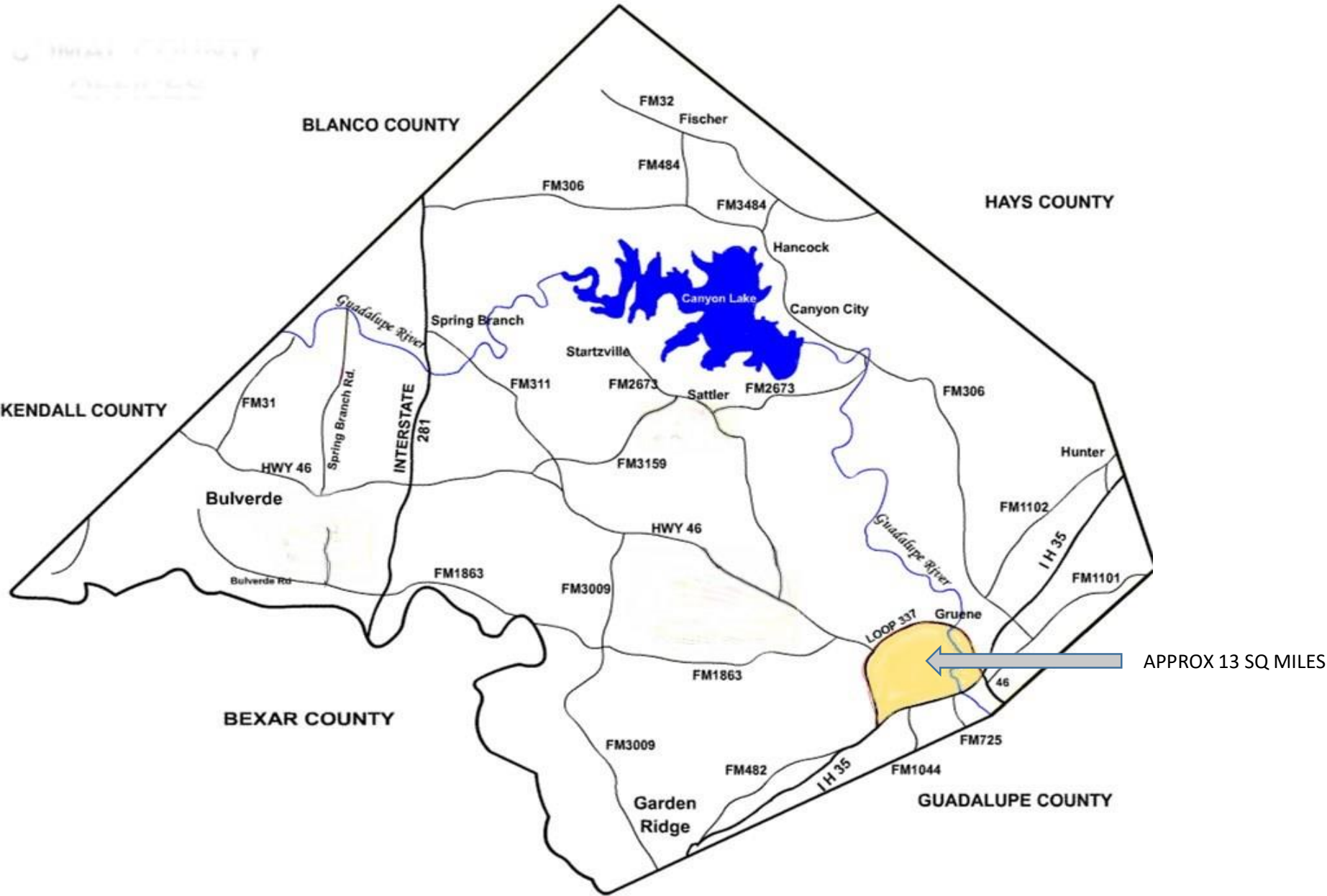
May 2018

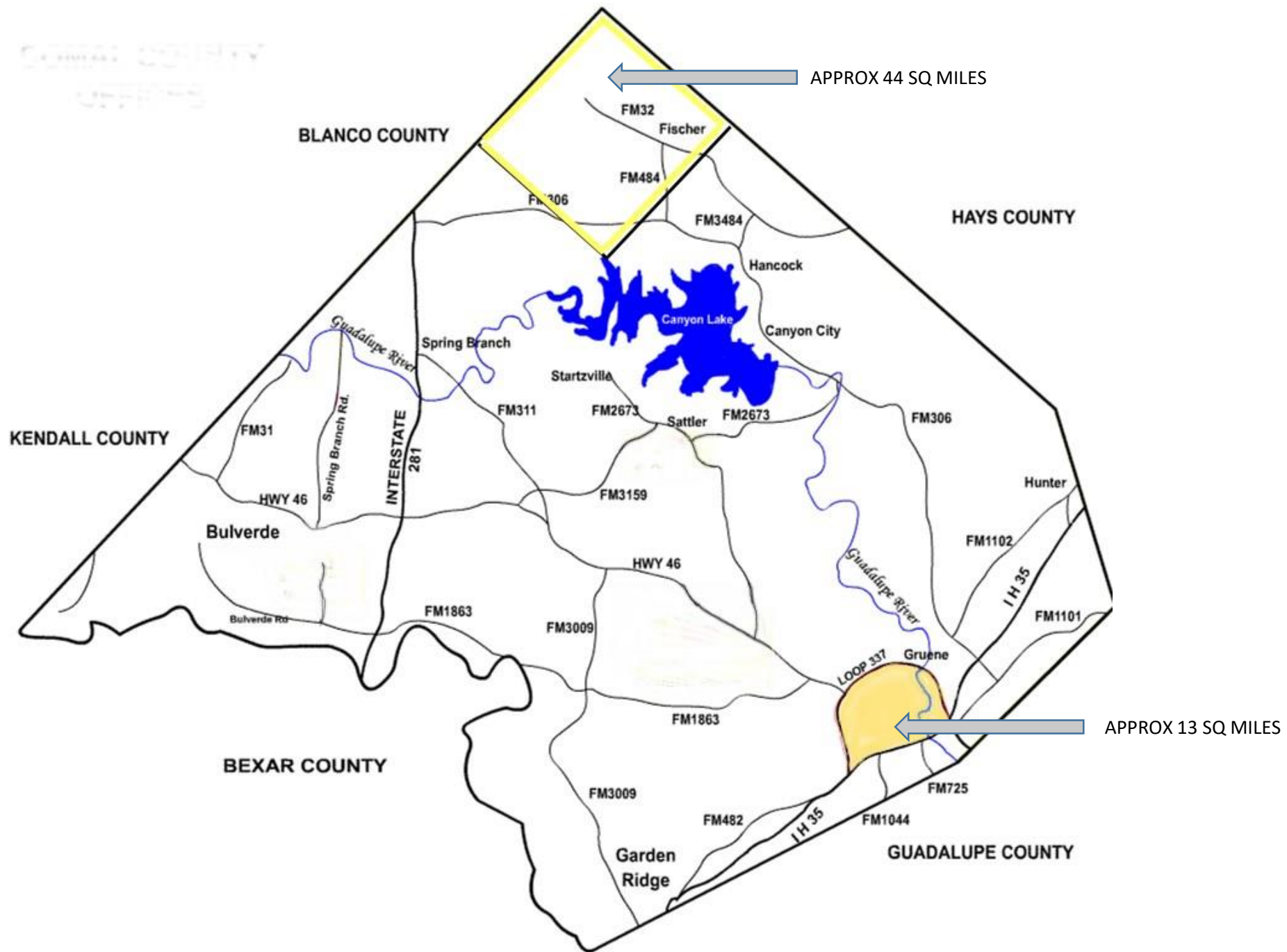
Mining Impact On Texas Hill Country

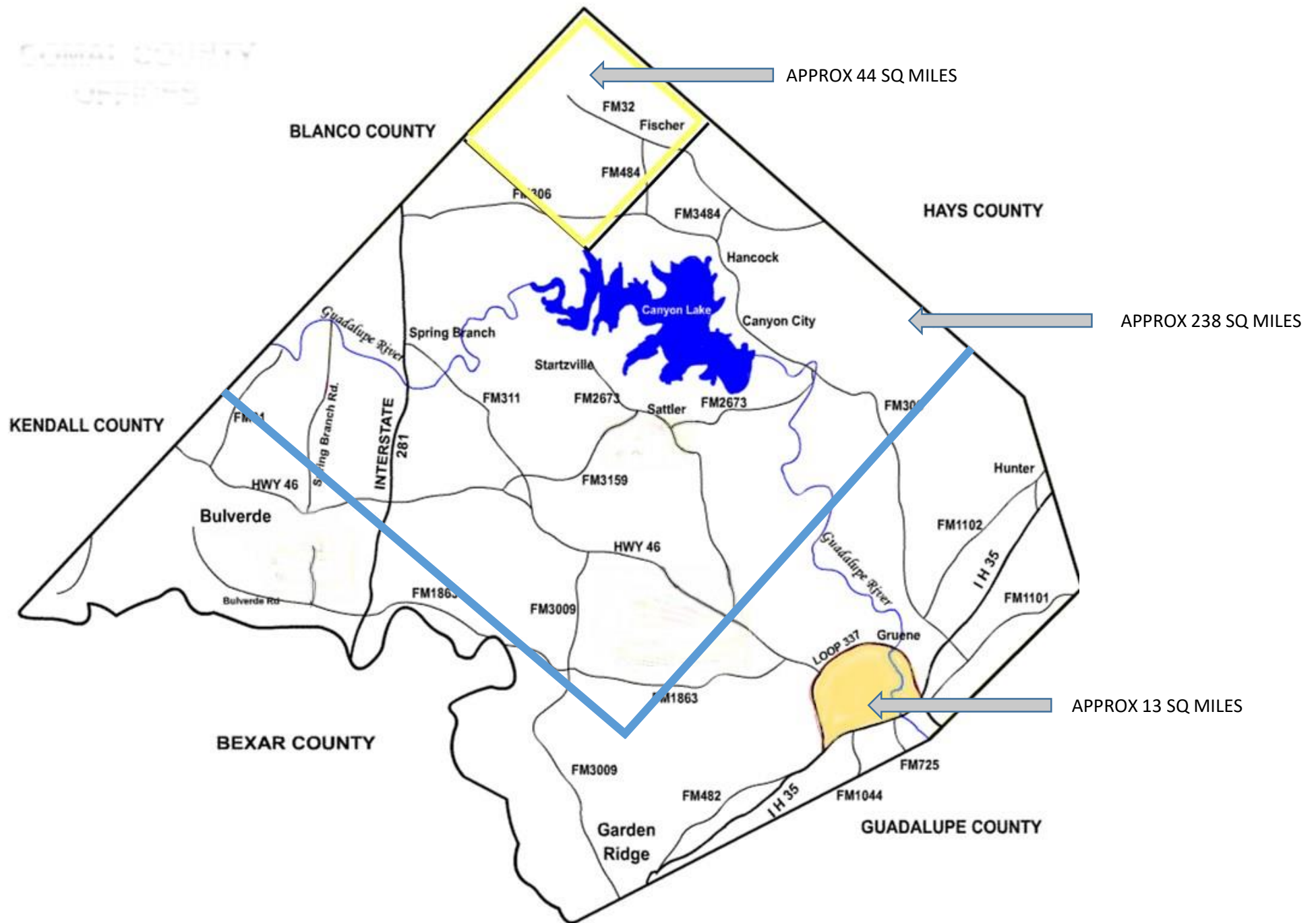
Trinity Edwards Aquifers
Balcones Fault Zone & Escarpment

SCOPE OF THE AGGREGATE INDUSTRY IN COMAL COUNTY

Mike Zimmerman







WATER/CAVES

Jack Olivier





EDWARDS AQUIFER REGION

1615 N. St Mary's Street • San Antonio, Texas 78215 • 210.222.2204 • 1.800.292.1047 • www.edwardsaquifer.org

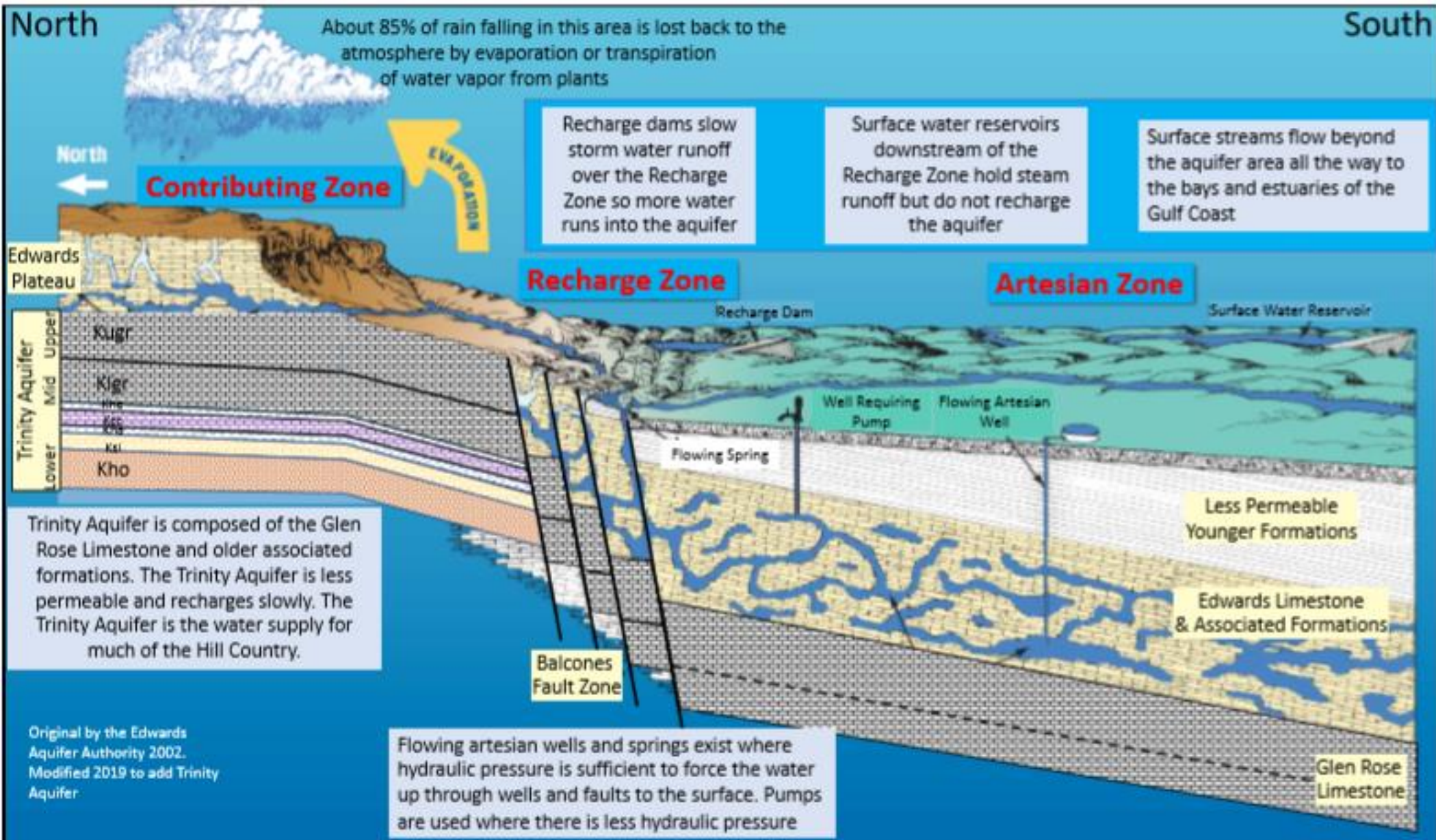
Drainage basins in the drainage area collect surface water runoff and funnel it into streams that cross the recharge zone.



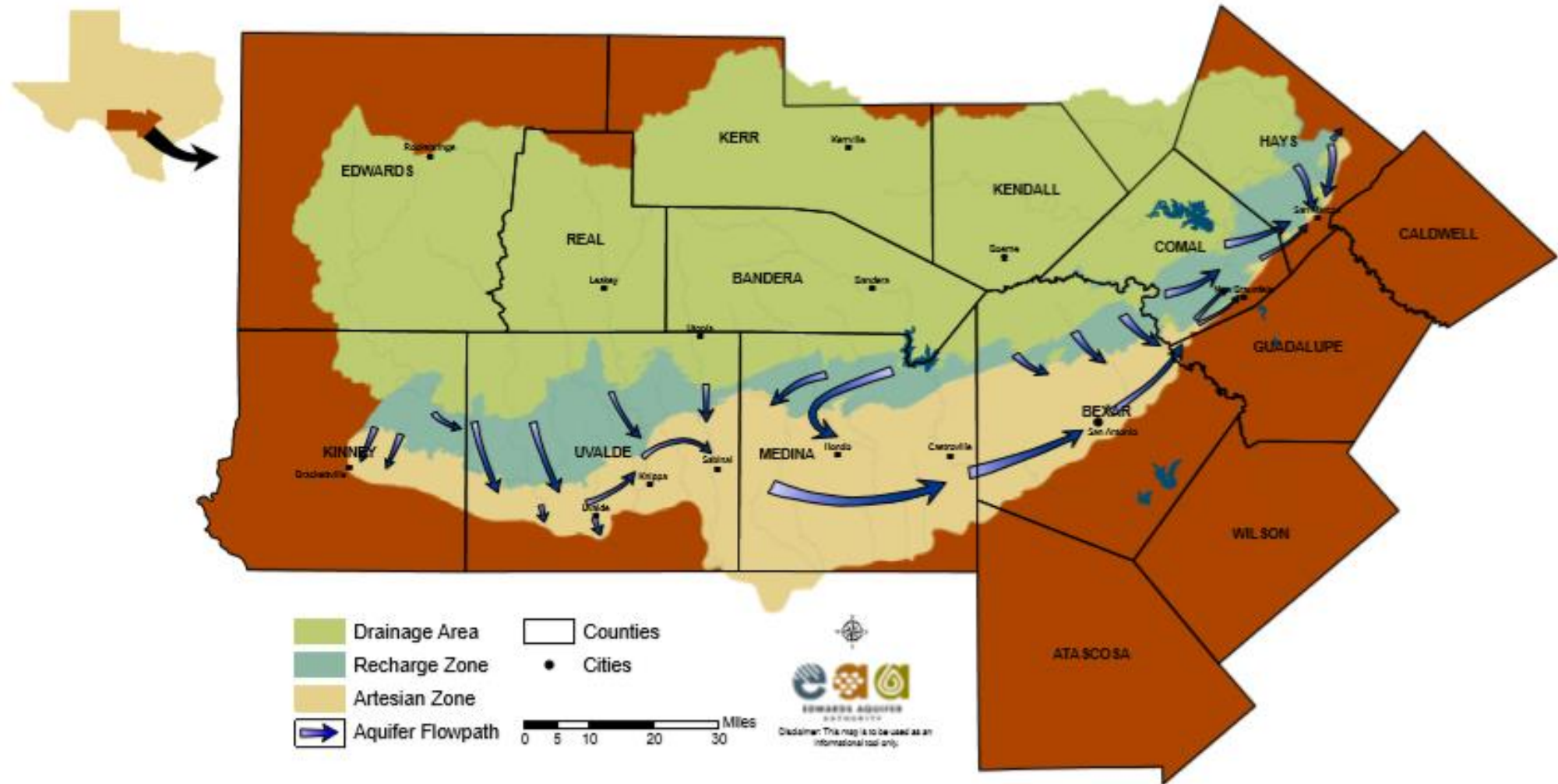
In the artesian zone, the water flows generally from west to east.

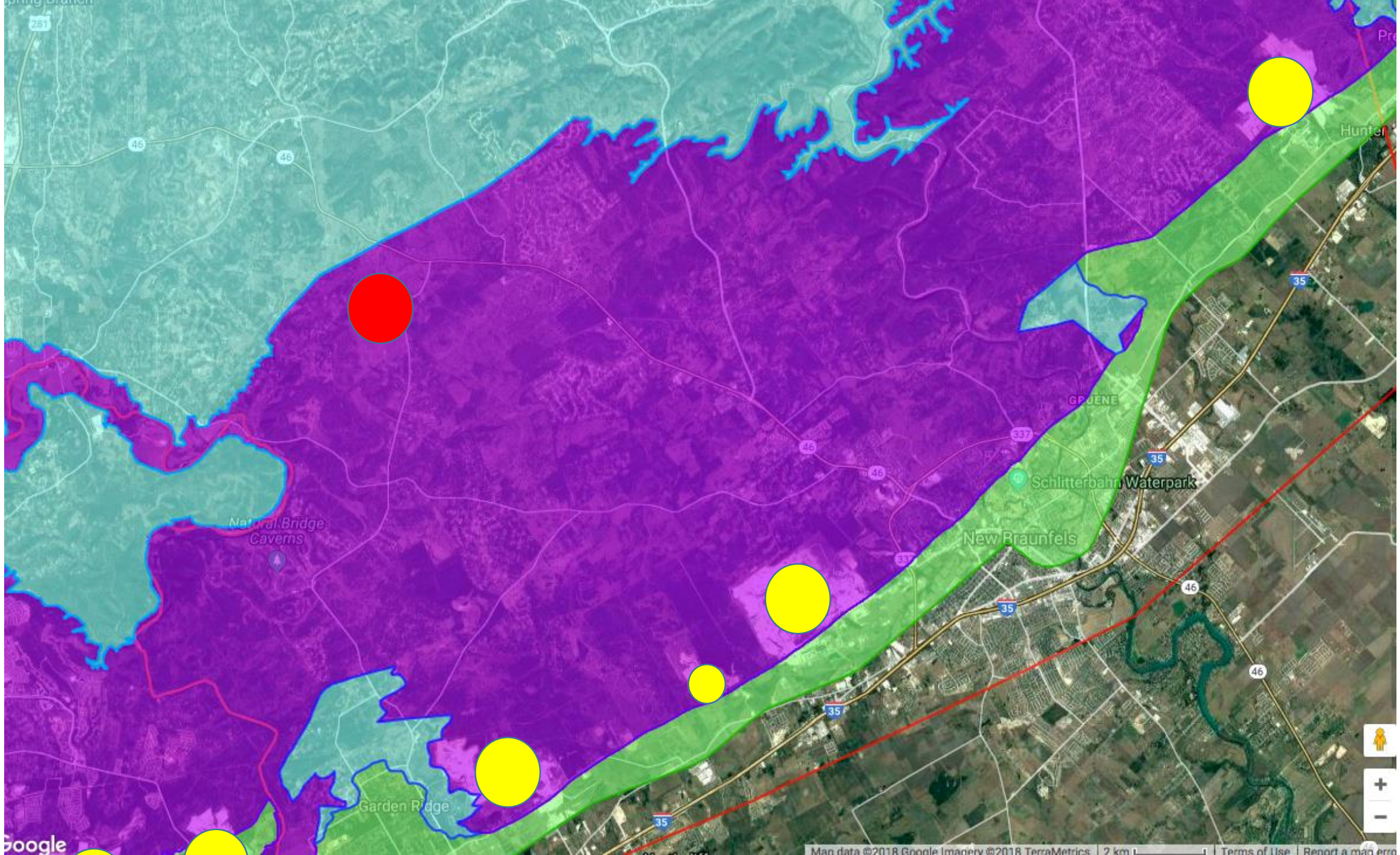
Water movement through the Edwards Limestone is generally slower south and east of the fresh water zone. This water remains in contact with the limestone and gypsum longer, allowing dissolved mineral concentrations to increase to over 1,000 milligrams/liter.

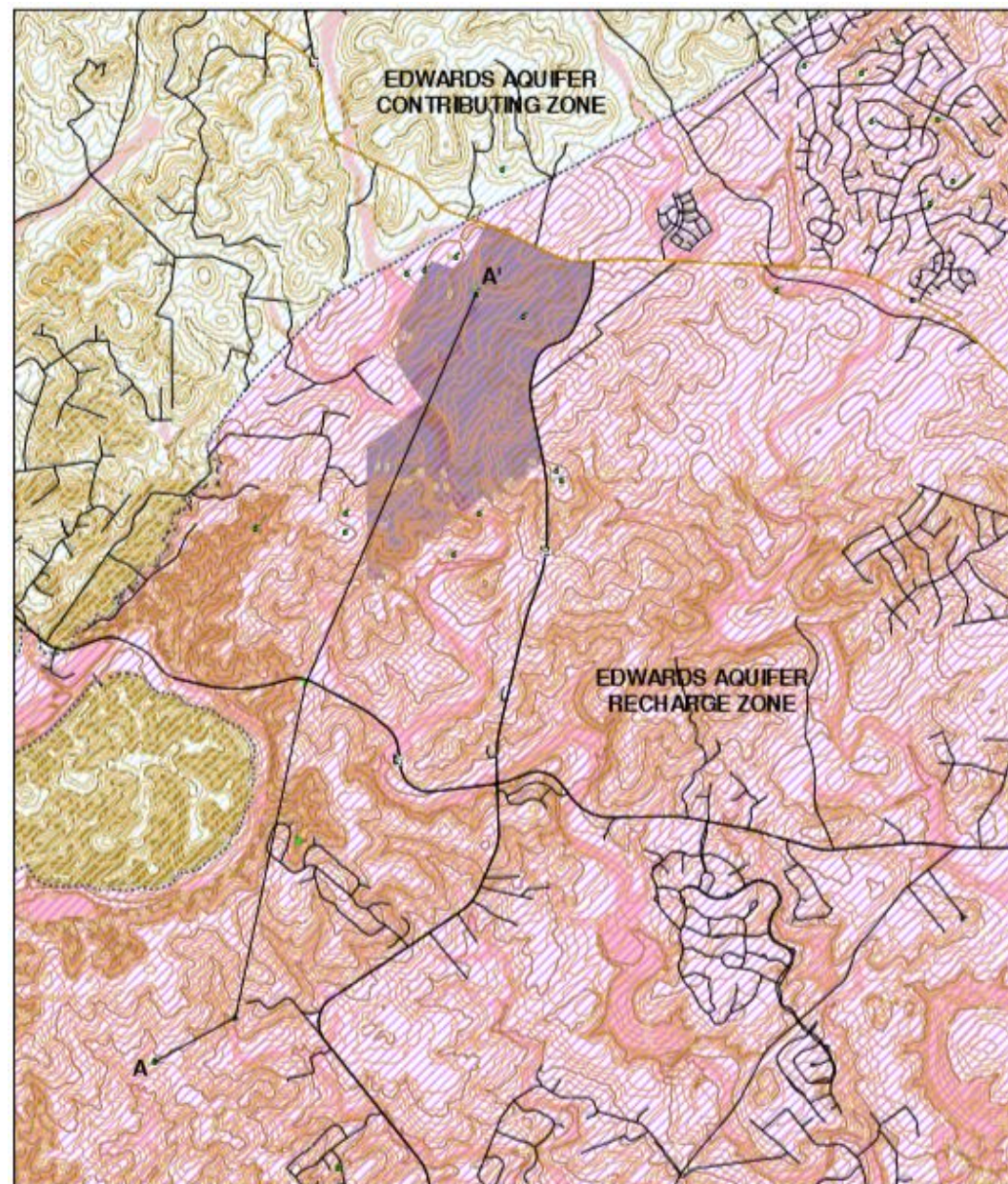




General Aquifer Flowpath







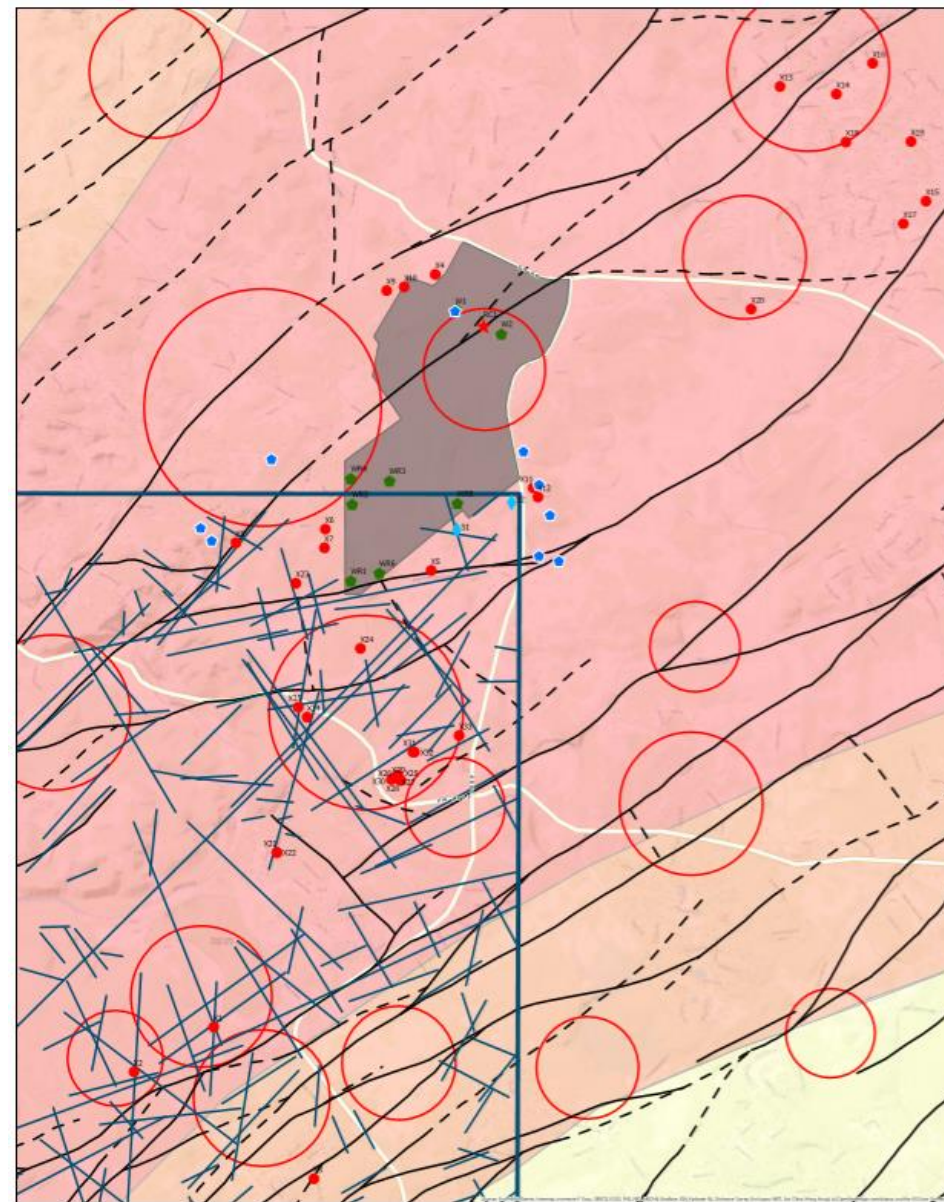
CONTOUR MAP



Legend

0 Reference Point Farm roads Highways Roads Recharge Zone Contributing Zone Edwards 20' Interval Edwards 10' Interval 100 ft. Reservoir

This map was prepared by the Comal County Engineer's Office for the purpose of showing the location of the Edwards Aquifer Contributing Zone and Recharge Zone. It is not intended to be used for any other purpose. The map is based on data provided by the Texas Department of Transportation and the Texas Department of Water Resources. The map is not a legal document and should not be used for any legal purpose.



Faults, Fractures, and Caves around Vulcan Quarry **Comal County, Texas**

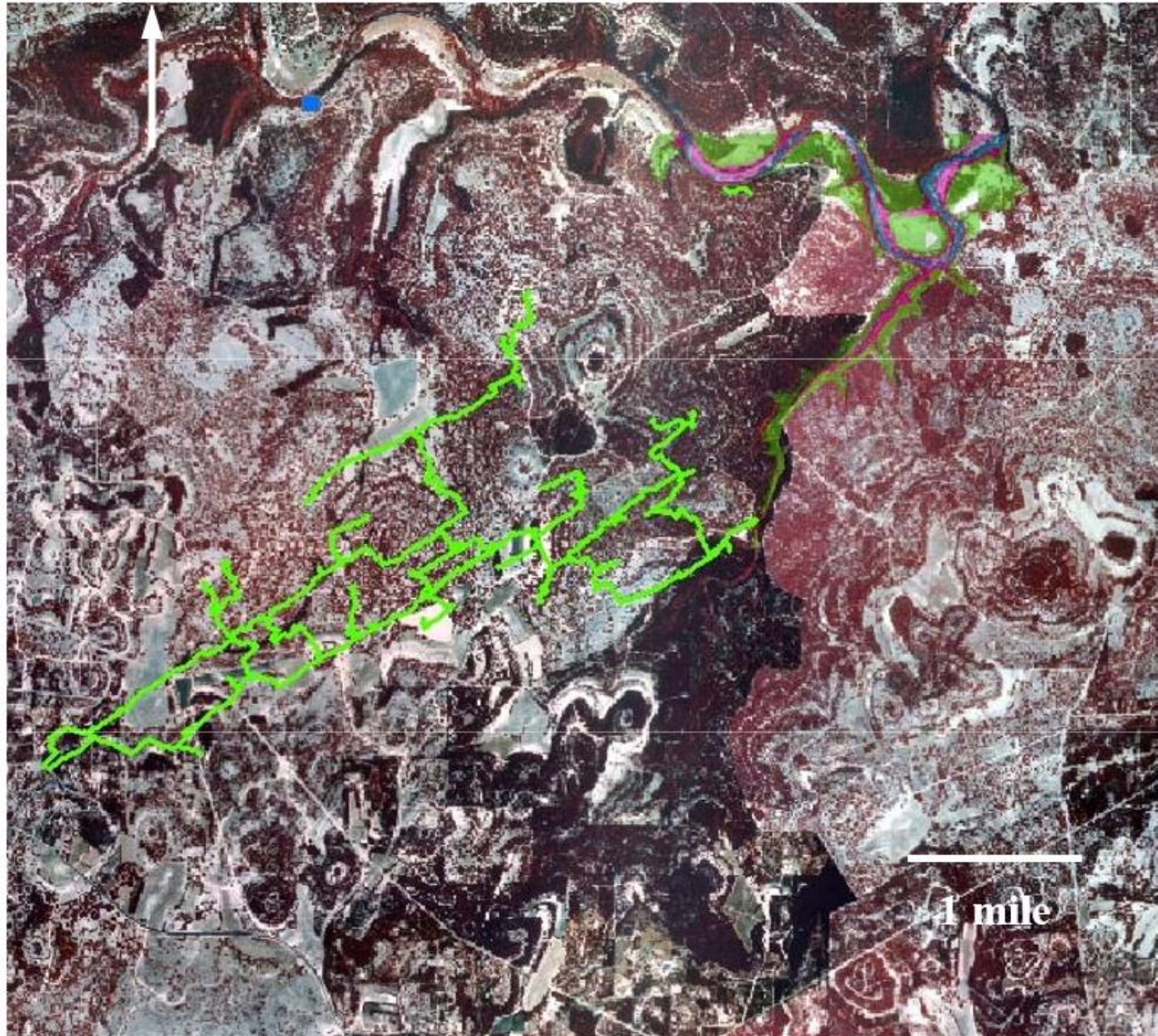
[Cave locations and clusters not for distribution to the general public]

Explanation	
Vulcan Quarry - PROPOSED	Fault (USGS)
Spring	Fault (USGS)
Well	Photo/lineaments (Karlberg)
Cave	Cave Clusters
Rock Crusher	Incidence of Short-Fractures per Quadrangle (BEG)
Lost Circulation Zones (TWDB)	250
	300
	350



Cave Locations Observed by J.M. Oliver with Permission From Industrial Landowners
 Cave cluster locations observed with permission from Texas Speleological Survey, 2019
 Photo/lineaments
 Clark, A.R., Gable, J.A., and Munro, R.W., 2010, Geologic framework and hydrogeology of the Edwards and Trinity aquifers within northern Brewer and Comal Counties, Texas, U.S. Geological Survey Scientific Investigations Map 106, 1 sheet, scale 1:25,000, pamphlet, <https://doi.org/10.3133/sir1006>
 Photo/lineaments Source:
 Kierling, E.H., 2010, Geomorphology and hydrogeology of the Edwards Plateau, Central Texas, Texas Speleological Survey
 Longwell Short Fracture Source:
 Harnett, G.G., Caputo, J.C., and Leland, P.C., 1978, Regional distribution of fractures in the Southern Edwards Plateau, and their relationship to karst and cave, Bureau of Economic Geology, The University of Texas at Austin

Cave maps often provide insight into the preferential flowpaths of a karst aquifer



**Honey Creek Cave,
Comal County, Texas.**

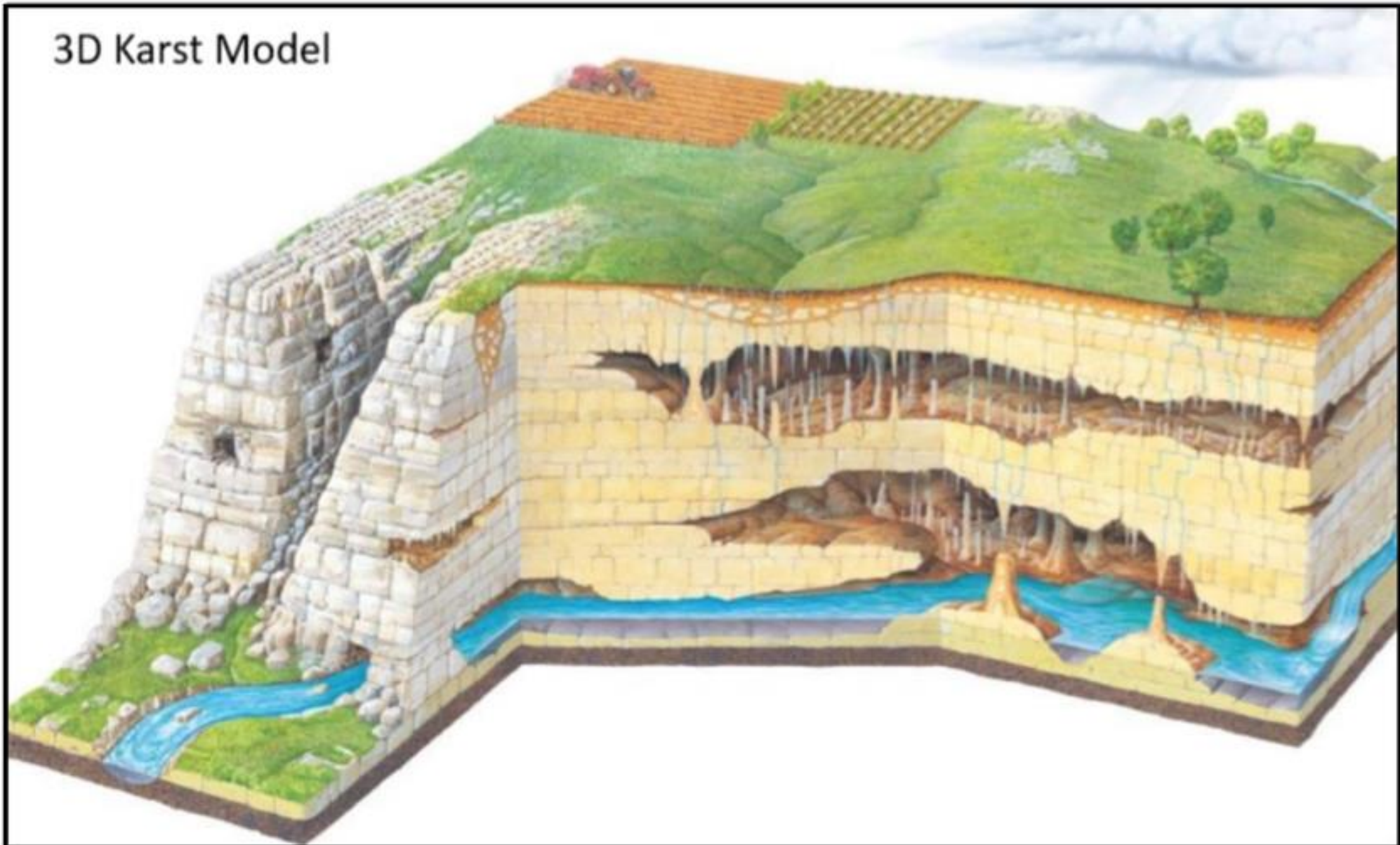
**Mapped length of cave is
19+ miles**

Map provided by
Kurt Menking, Bexar
Grotto of NSS

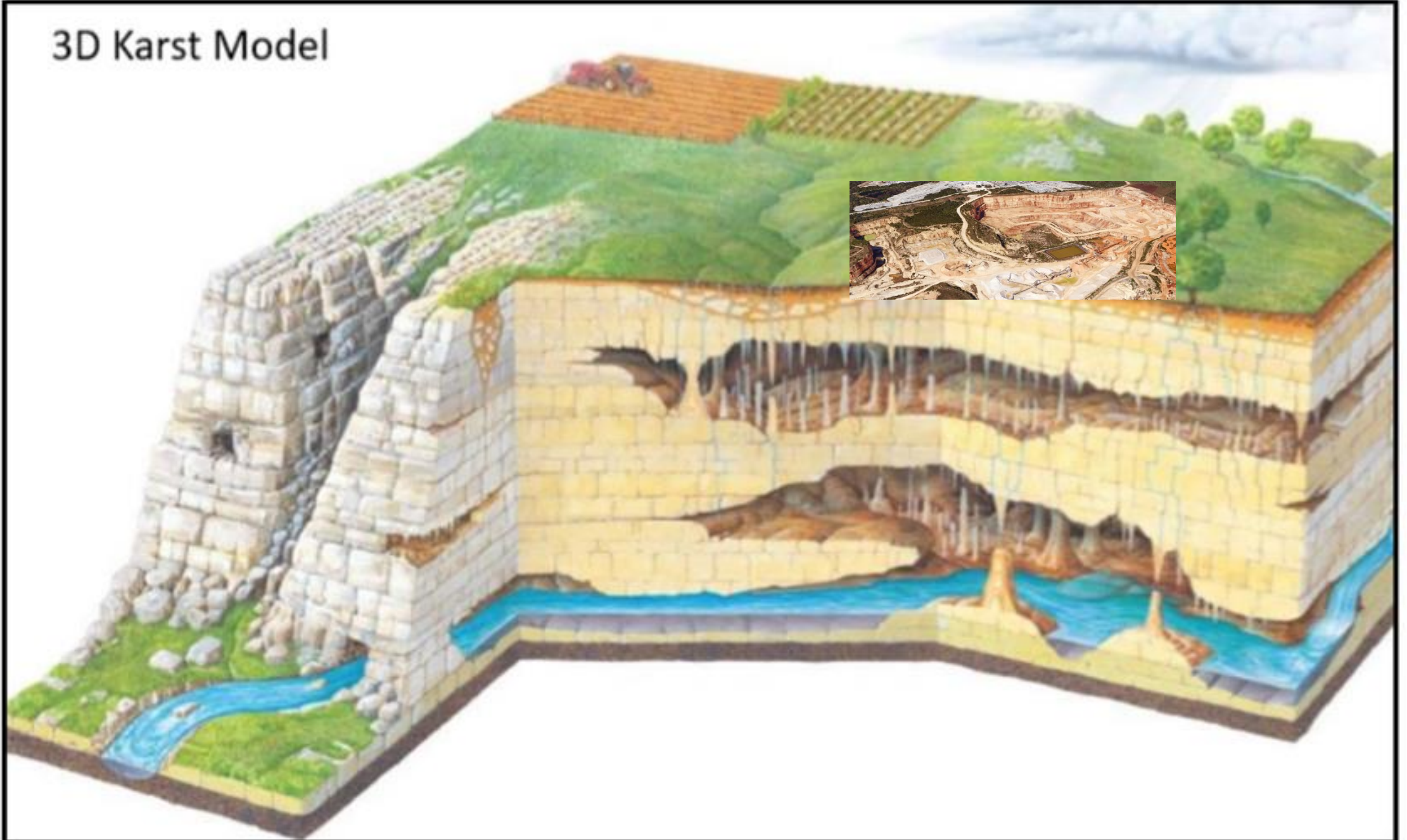




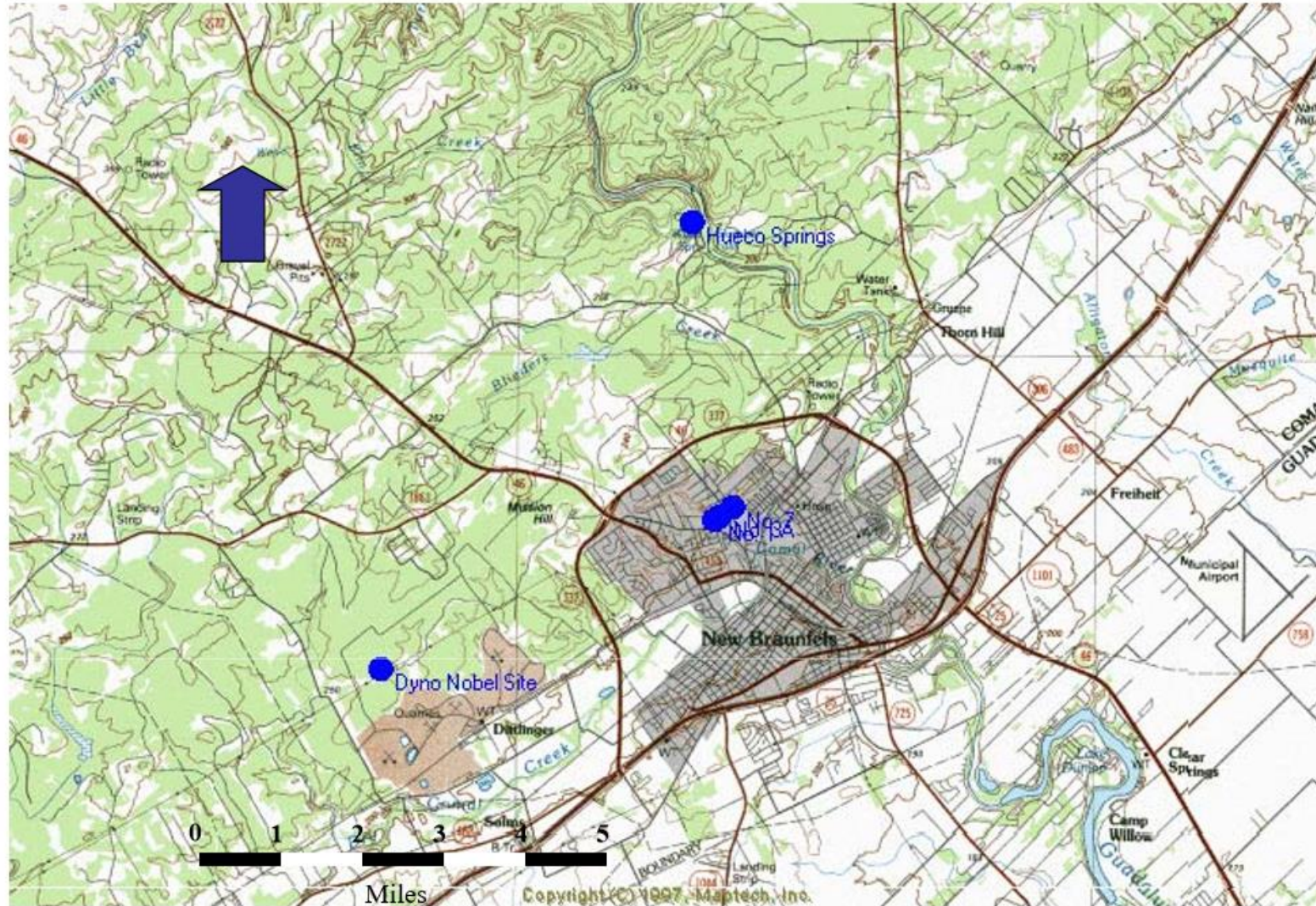
3D Karst Model

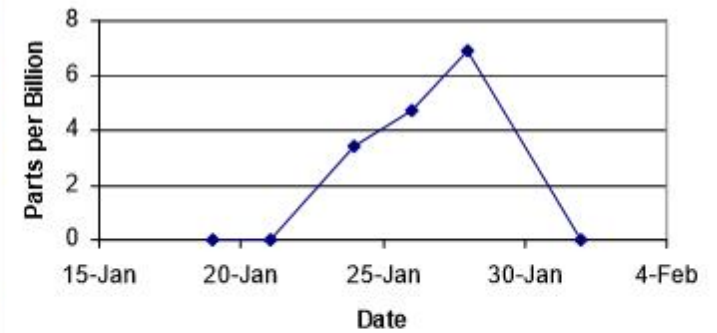
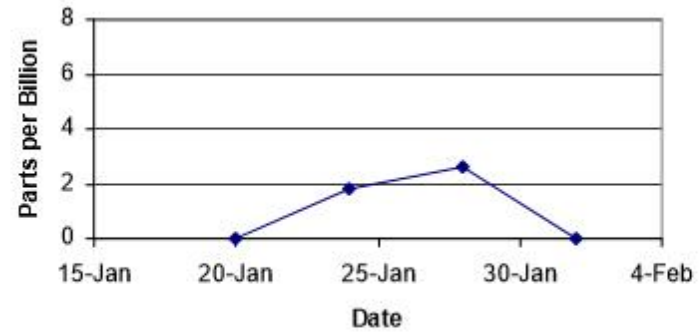
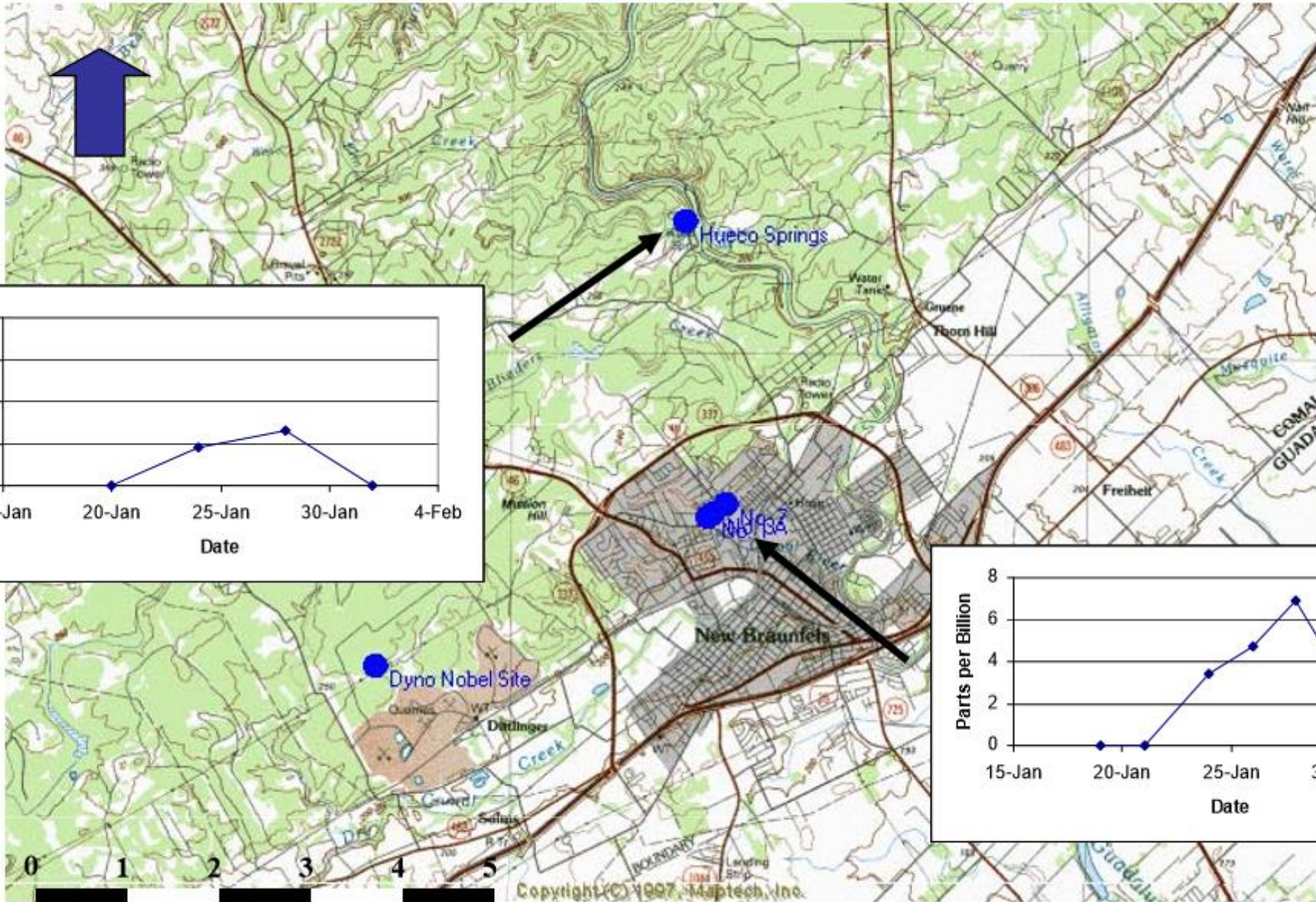


3D Karst Model



Location of 2,000 gallon diesel fuel spill and Comal Springs - largest spring in western US with average discharge of 280 cfs





Texas Commission on Environmental Quality (TCEQ)

Edwards Aquifer Protection Program (EAPP)

Best Management Practices (BMPs)

Water Pollution Abatement Plan (WPAP)

Storm Water Pollution Prevention Plan (SWPPP)

Geologic Assessment (GA)

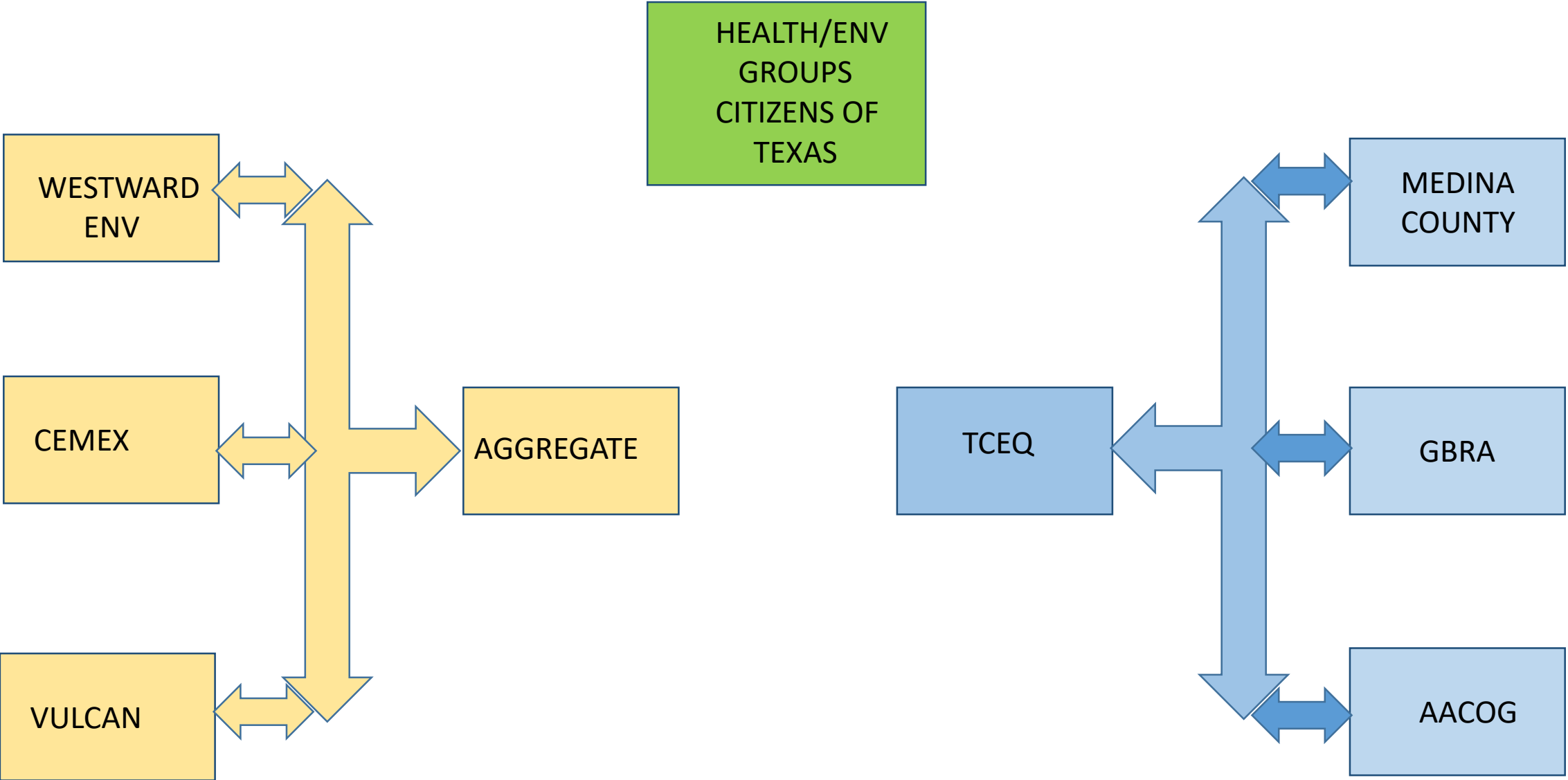
30-Day Public Comment Period

No Automatic Public Meeting

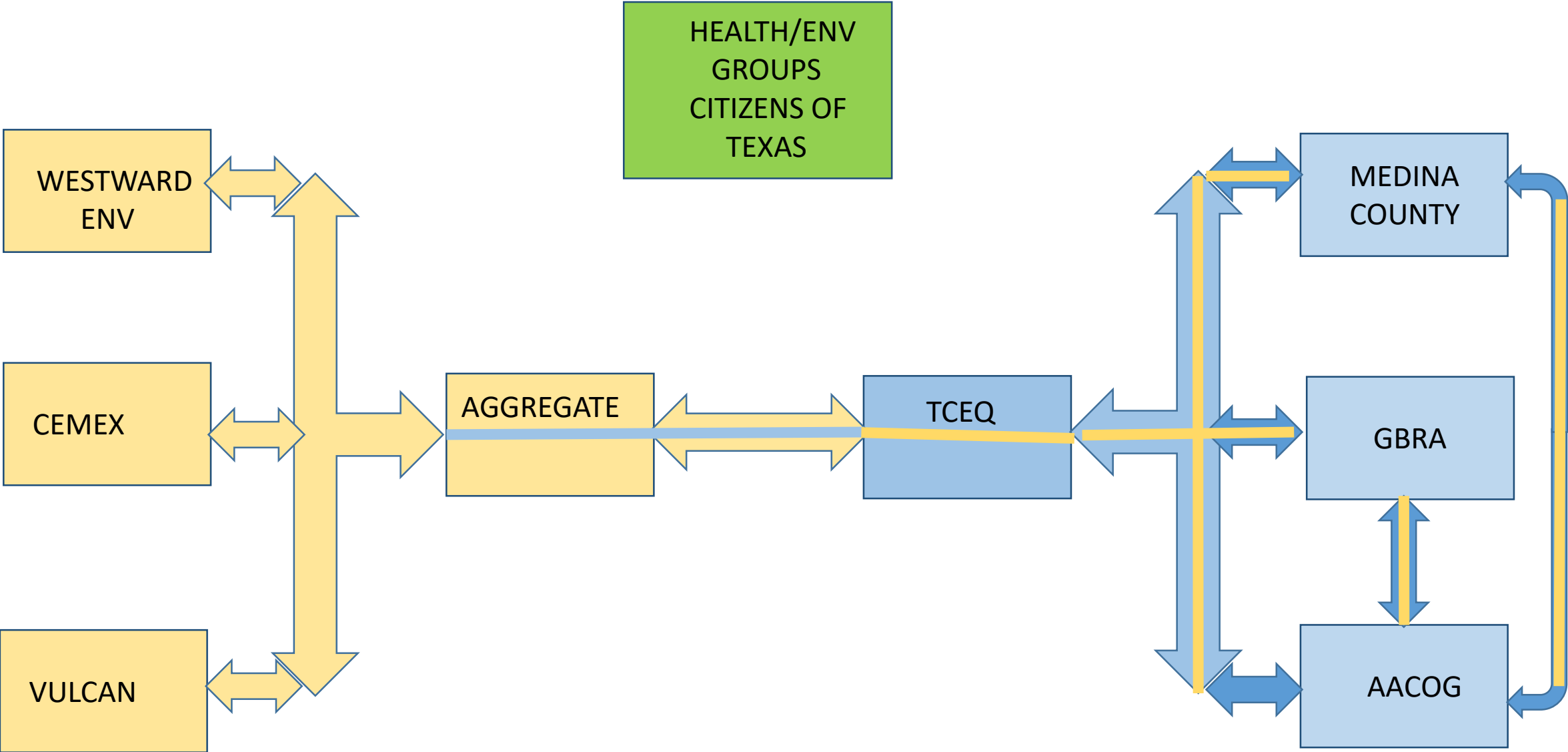
TCEQ Mission Statement:

“The Texas Commission on Environmental Quality strives to protect our state’s public health and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.”

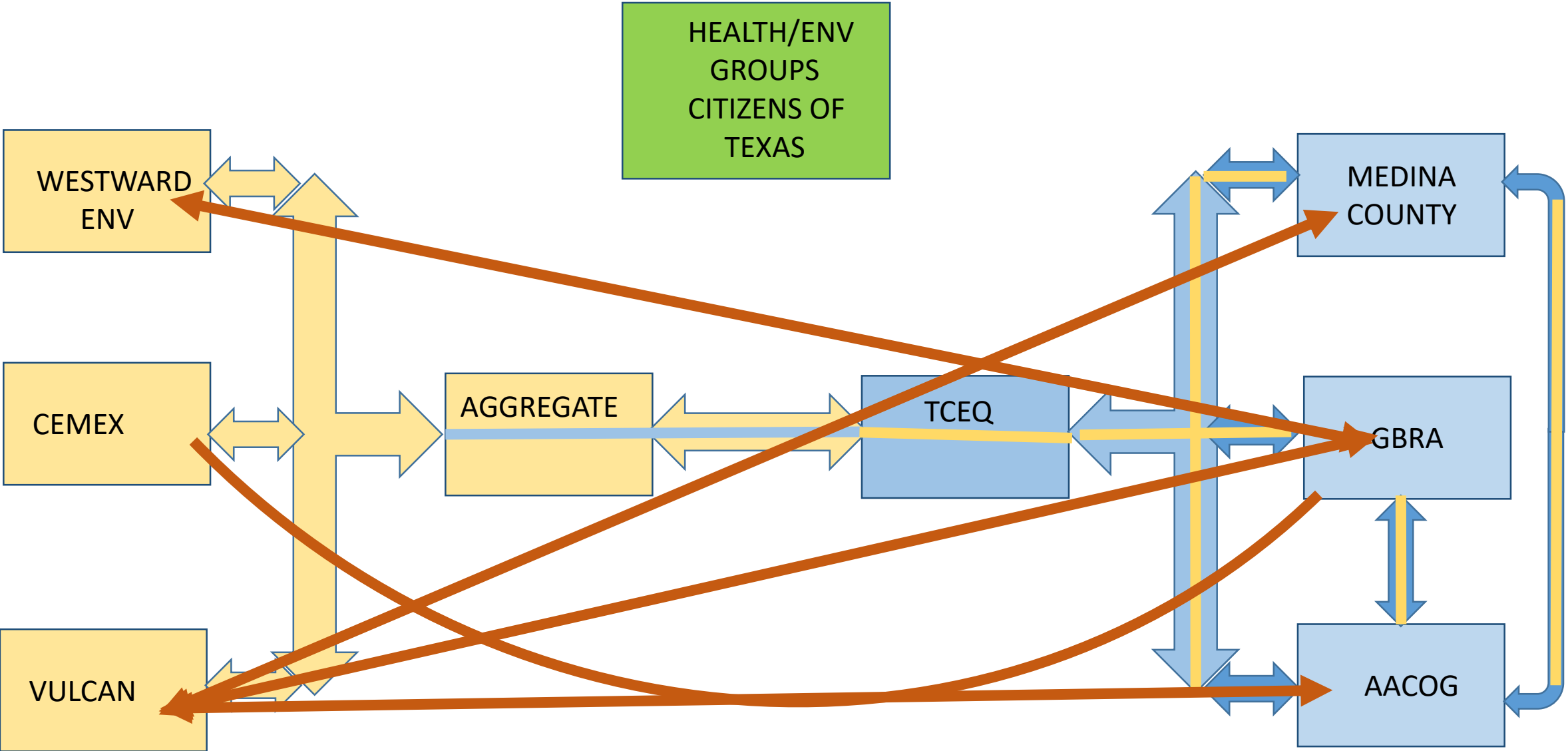
RELATIONSHIP BETWEEN TCEQ, AGGREGATE, GOV'T – Mike Zimmerman



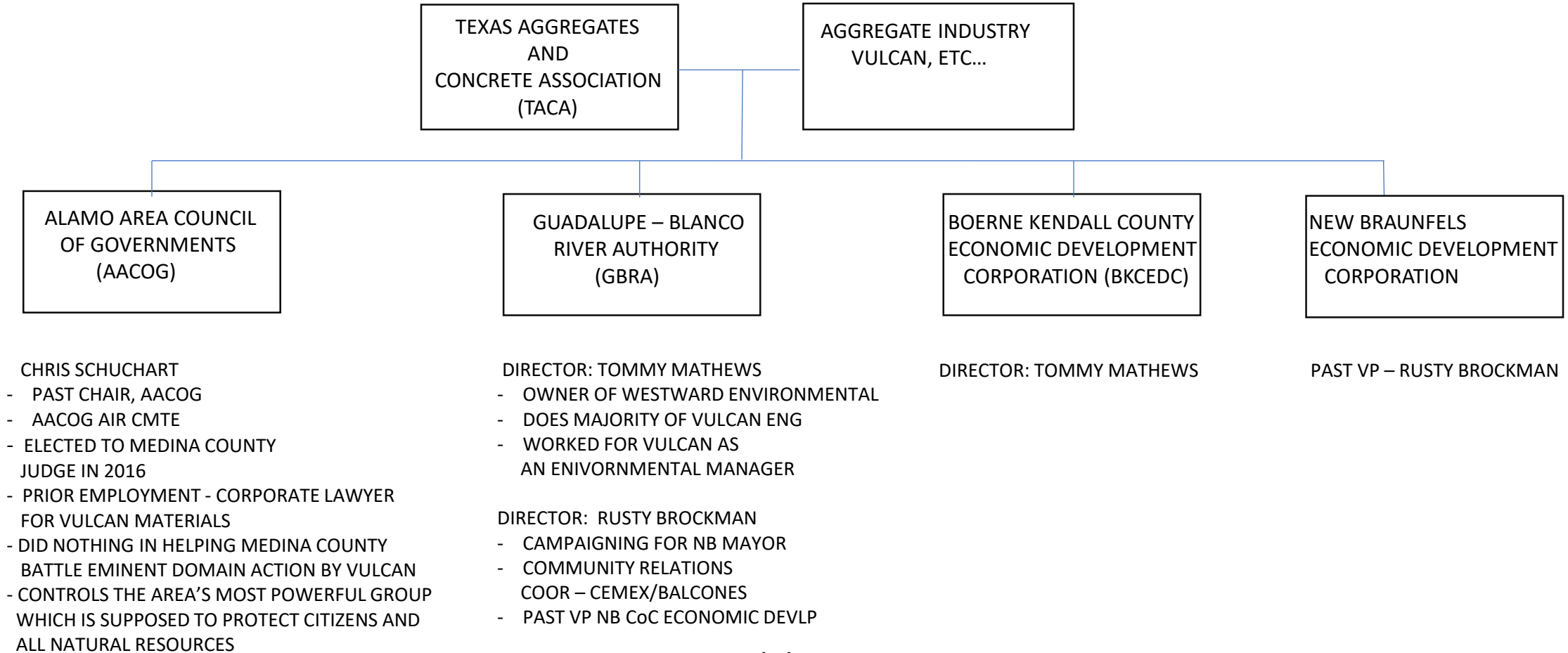
RELATIONSHIP BETWEEN TCEQ, AGGREGATE, GOV'T



RELATIONSHIP BETWEEN TCEQ, AGGREGATE, GOV'T



LOOK WHO'S CONTROLLING THE AIR AND WATER FOR BEXAR, COMAL, KENDALL, BLANCO, GUADALUPE, WILSON, HAYS, CALDWELL, GONZALES, DEWITT, REFUGIO, AND CALHOUN COUNTIES



WHERE DO WE GO FROM HERE - WHAT YOU CAN DO

Milann Guckian

Where do we go from here

- TCEQ Commissioners will get all court documents, set a date on the Commissioners docket and render their decision
- All parties will have the opportunity to file a motion for reconsideration on the air permit
- Vulcan will need to submit EAPP, WPAP and SWPPP.
 - Residents to post comment to TCEQ website w/in 30 days on how bad it is for open-pit mining to be on the EARZ
 - Request a Public Meeting

What can each of you do

- Contact elected officials
 - Write, call or personally visit – the more they hear, the better they listen
- Get Involved
- Need volunteers to assist with key work groups in this grassroots “David vs Goliath” fight
- Do something every day to address the issue – no matter how small you think it is
- Post a sign
- Donate
 - To date: Legal representation/experts/air monitoring programs/sampling and data retrieval/administrative costs/advertising and marketing have cost over \$160,000
 - We will need additional resources to continue the battle for our health, quality of life, air, water, natural resources and our future generations.

Help us Preserve our Hill Country Environment

ELECTED OFFICIALS

- Local
 - Mayors, Chamber of Commerce, County Commissioners (based on your city)
- State
 - House – Kyle Biedermann, District 73
 - Senate – Donna Campbell
- Federal
 - Senate
 - John Cornyn
 - Ted Cruz
 - House
 - Chip Roy
- Check out our website: <https://www.stop3009vulcanquarry.com/>
 - There are templates on the website you can use but it's important to put your own twist on the issues, focus on those issues personal to you and your family.

KEY WORK GROUPS

- Leadership
 - Working with entire community groups to educate on process to eliminate/mitigate
- Fundraising
 - Ensures people know how and where to donate
 - Works with Finance committee to manage current revenues
- Media/Outreach
 - Develops media lists and writing and submitting press releases
 - Develops and advertises common message for the group – consistency
 - E-mail campaigns and weekly updates vis social media (Facebook, etc.)
- Secretary/Meeting planner/Organizer
 - Obtaining e-mail contacts and maintains list
 - Organizes meetings (location, set up/ tear down, takes notes)
- Research
 - Simply put, how the quarry will ruin our lives and way of life

YOUR TURN

- Comment/Questions
 - Limit 2 minutes
 - Provide name and address
 - How will this impact you?