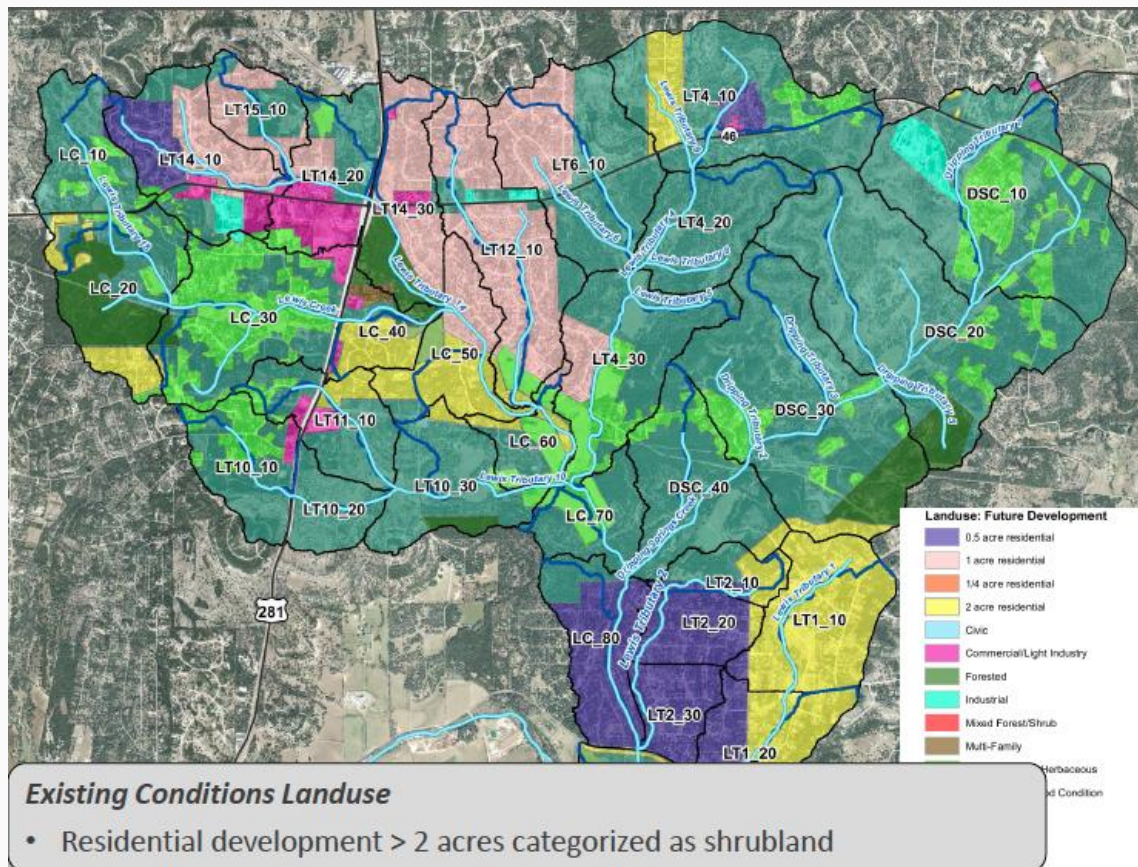


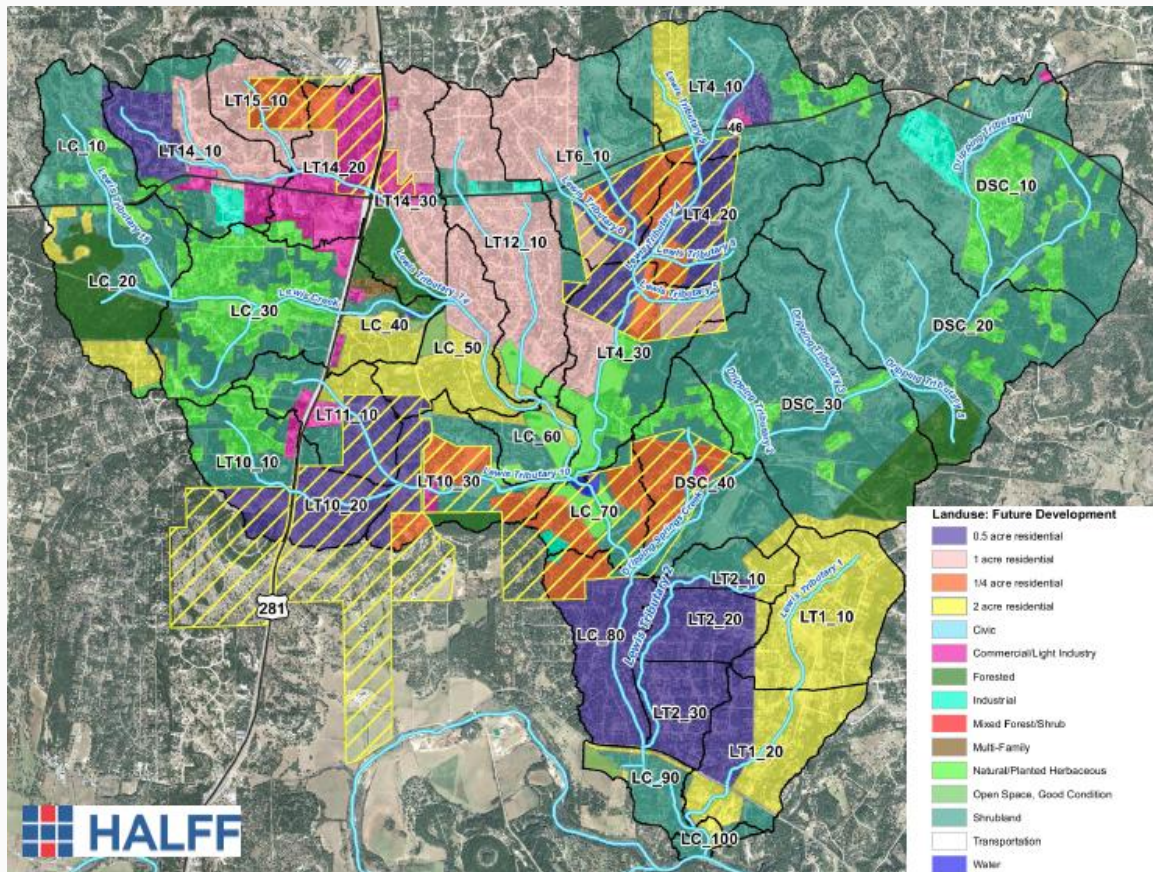
# 4S Ranch, Bulverde and ETJ

Water Quality Permit amendment



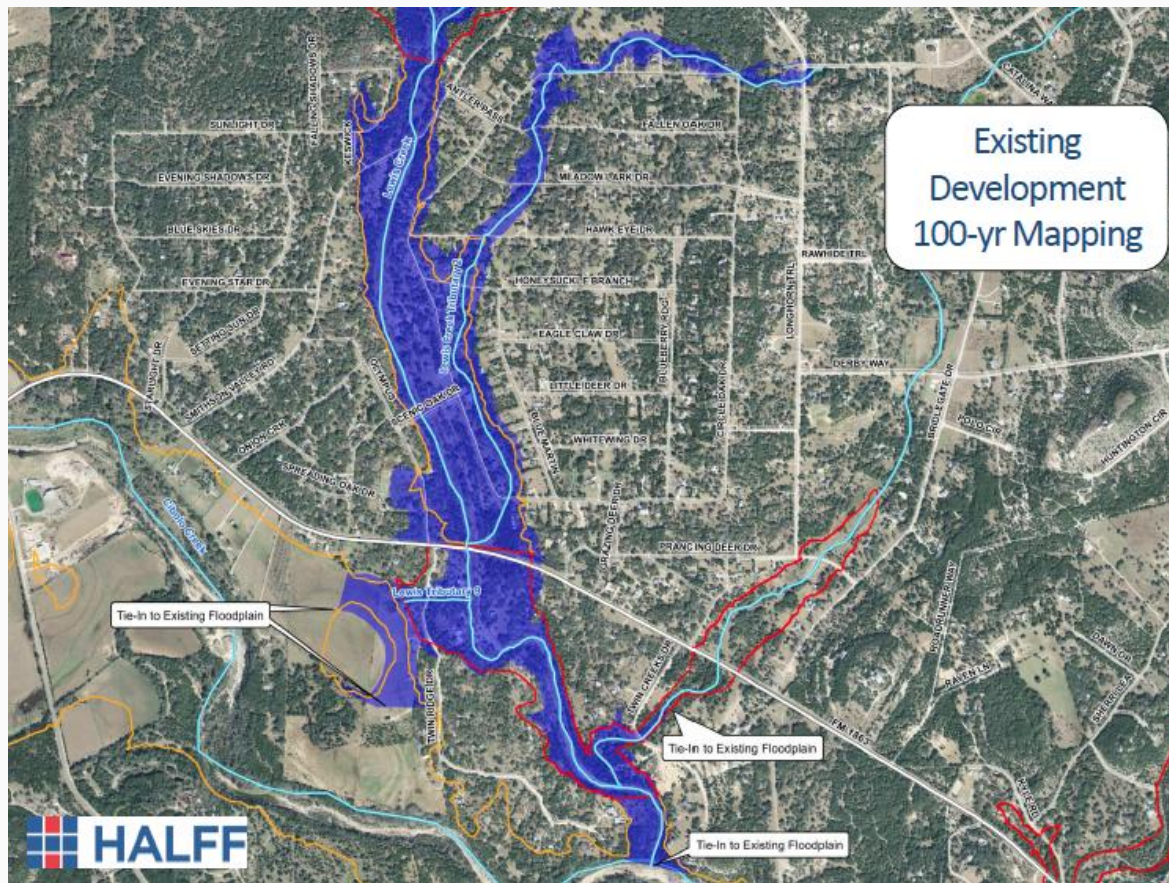


Source: "Existing Conditions Landuse." *Lewis Creek Drainage Study*. N.p., n.d. Web. 10 Nov. 2015. <<http://bulverdetx.gov/245/Lewis-Creek-Drainage-Study>>.

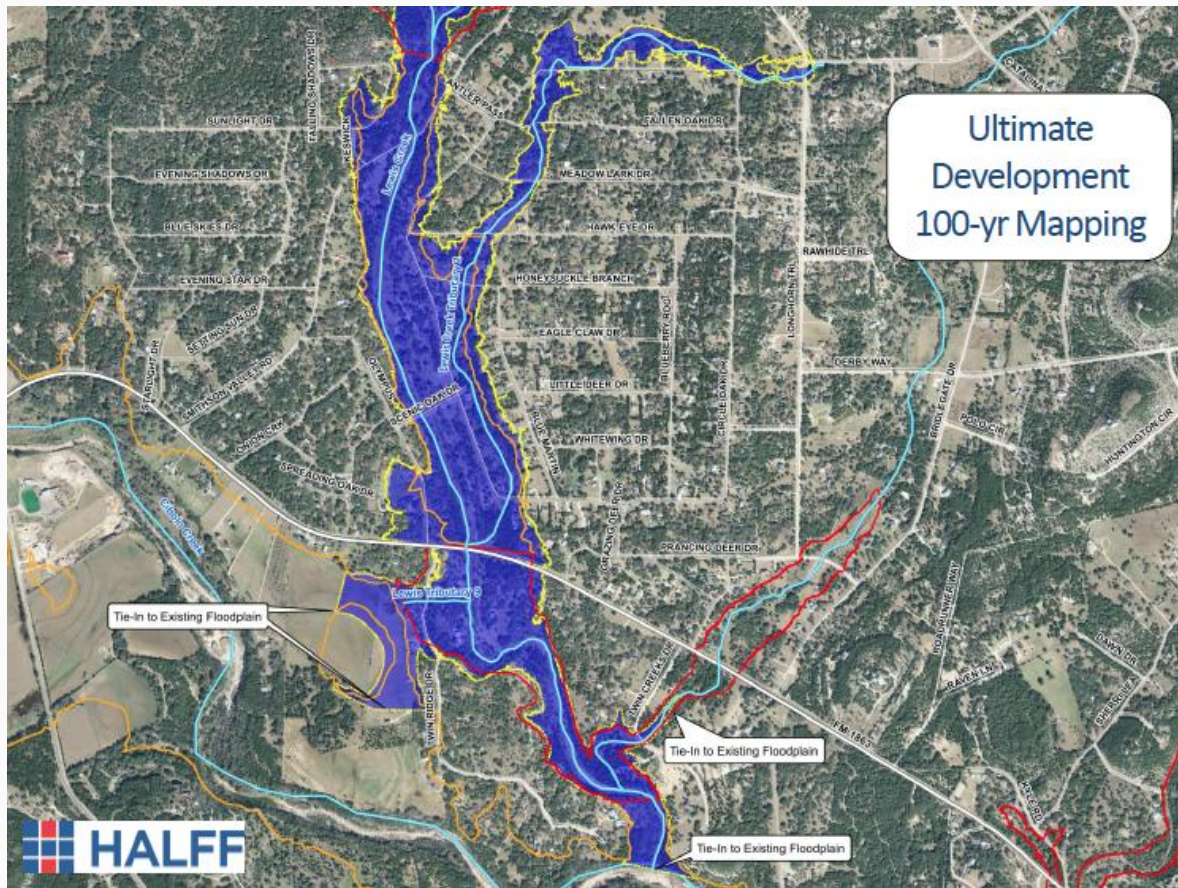


Source: "5-10 Year Development Projection Landuse." *Lewis Creek Drainage Study*. N.p., n.d. Web. 10 Nov. 2015. <<http://bulverdetx.gov/245/Lewis-Creek-Drainage-Study>>.



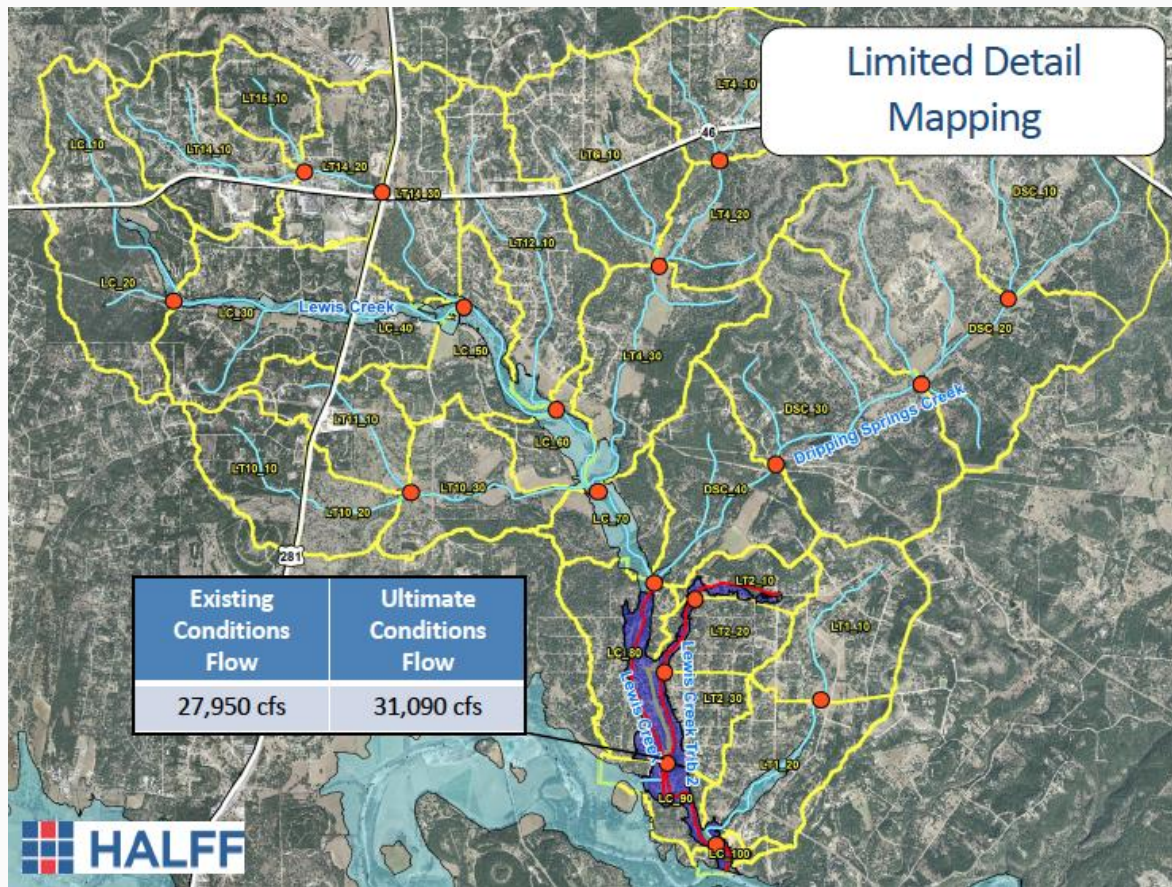


Source: "Existing Development 100-year Mapping." *Lewis Creek Drainage Study*. N.p., n.d. Web. 10 Nov. 2015. <<http://bulverdetx.gov/245/Lewis-Creek-Drainage-Study>>.



Source: "Ultimate Development 100-year MAPPING." *Lewis Creek Drainage Study*. N.p., n.d. Web. 10 Nov. 2015. <<http://bulverdetx.gov/245/Lewis-Creek-Drainage-Study>>.

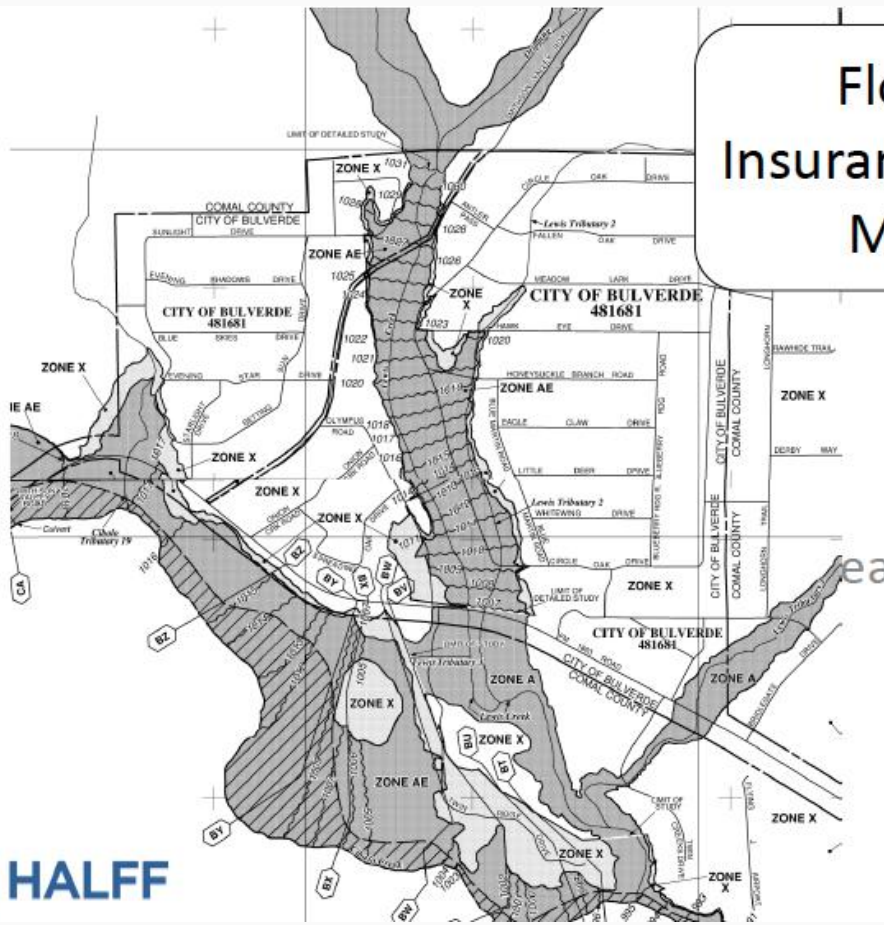




Source: "Existing Conditions Landuse." *Lewis Creek Drainage Study*. N.p., n.d. Web. 10 Nov. 2015. <<http://bulverdetx.gov/245/Lewis-Creek-Drainage-Study>>.

Residents whose homes are not currently in the floodplain are getting flooded.

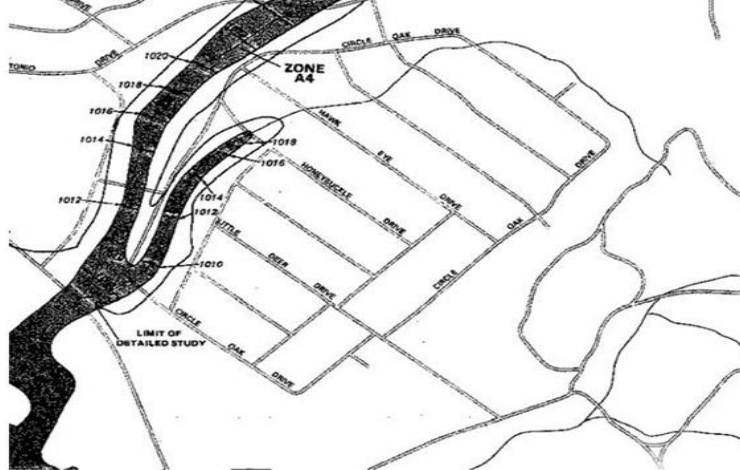
# Flood Insurance Rate Map



Source: "Flood Insurance Rate Map." *Lewis Creek Drainage Study*. N.p., n.d. Web. 10 Nov. 2015. <<http://bulverdetx.gov/245/Lewis-Creek-Drainage-Study>>.

Flood Advisory  
Committee  
Comal County Map

1996  
Floodplain



2006  
Floodplain





*Dedicated to the scientific study of caves and karst.  
Affiliated with the Texas Memorial Museum, The University of Texas at Austin,  
the National Speleological Society, and the Texas Speleological Association.*

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22 October 2005

SALES INVOICE

To: **Chance Sparks, CFM**  
**Director of Planning and Development**  
**City of Bulverde**  
**30360 Cougar Bend**  
**Bulverde, TX 78163**

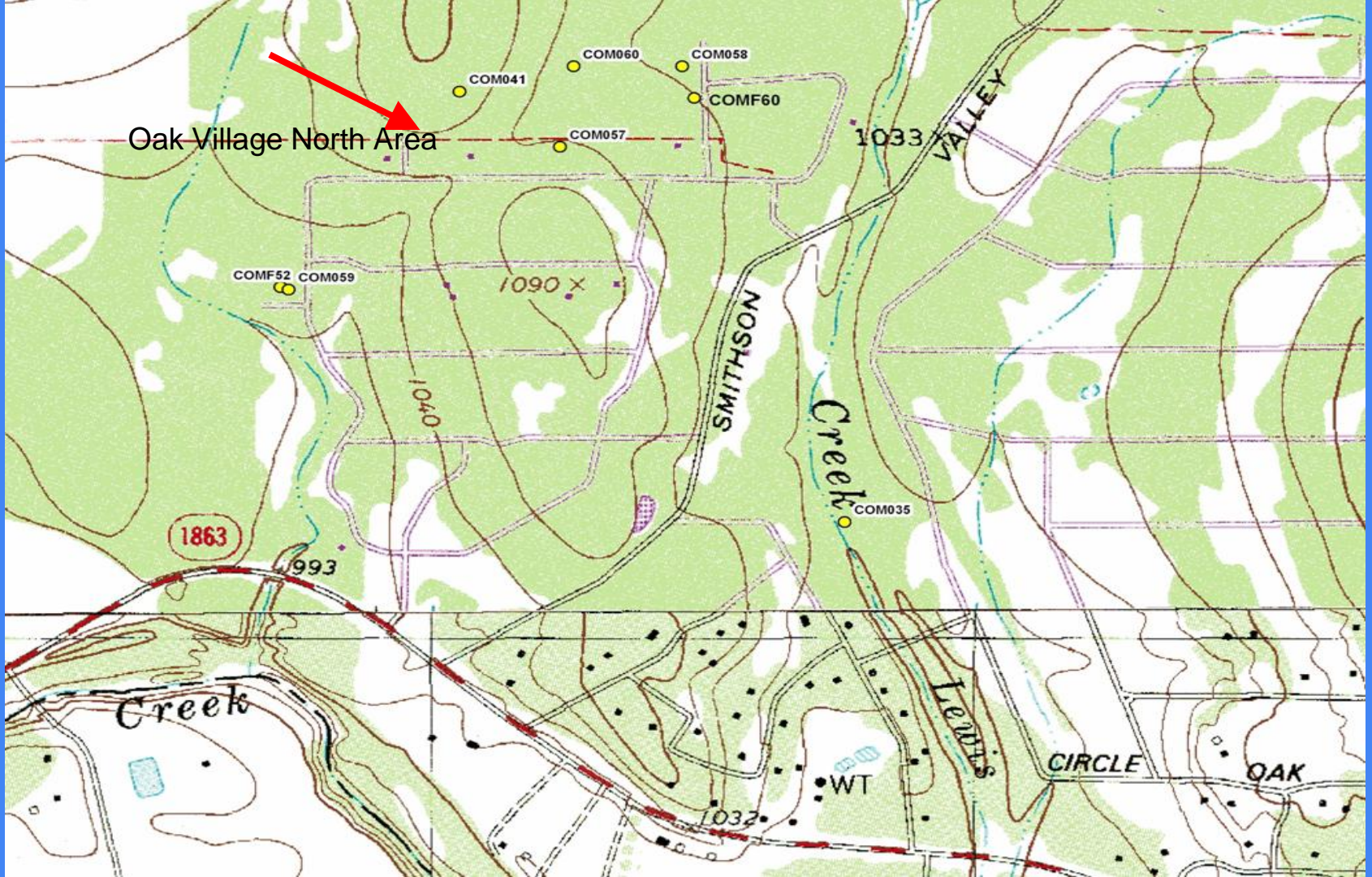
For:  
Data search fee, Oak Village North, Comal County, Texas; 1 hr x \$25/hr

\$25.00

Total due  
\$25.00

*Make check payable to "Texas Speleological Survey"  
and send to Orion Knox at address above.  
Thank you for supporting the TSS.*

Oak Village North Area





<b>Name</b>	<b>Stream Segment</b>	<b>Daily Average Flow</b>	<b>Cubic Feet per Second</b>
45 Ranch WWTP	1908, Lewis Creek	480,000	0.74281
Bulverde 46 Water Recycling Center	1908, Upper Cibolo	60,000	0.09283
C D Reed WWTP	1908, Upper Cibolo	180,000	0.2785
Cibolo Valley WWTP	1908, Upper Cibolo Creek	500,000	0.7736
CISD Smithson Valley High School	1908, Dripping Springs Creek	27,000	0.04178
Johnson Ranch WWTP	1908, Upper Cibolo Creek	75,000	0.116
Park Village WWTP	1908, Upper Cibolo Creek	195,000	0.3017
Spring Branch Middle School	1908, Upper Cibolo Creek	13,000	0.02011

			Permit Type	TCEQ ID Number			Stream Segment	Limit -Daily AVERAGE flow in
4S RANCH WWTP	6000 FT N OF INTERX OF SMITHSON VALLEY RD & FM 1863	COMAL	WASTEWATER	WQ0015095001	PERMIT	ACTIVE	1908, Lewis Creek	480,000
BULVERDE 46 WATER RECYCLING CENTER	400 OLD BOERNE RD BULVERDE TX 78163 3285	COMAL	WASTEWATER	WQ0014131001	PERMIT	ACTIVE	1908, Upper Cibolo	60,000
C D REED WWTP	1015 E AMMANN RD BULVERDE TX 78163 2019	COMAL	WASTEWATER	WQ0015092001	PERMIT	ACTIVE	1908, Upper Cibolo	180,000
CIBOLO VALLEY WWTP	1600 SE OF 281 AND 1863	COMAL	WASTEWATER	WQ0014988001	PERMIT	ACTIVE	1908, Upper Cibolo Creek	500,000
CISD SMITHSON VALLEY HIGH SCHOOL	14001 HIGHWAY 46 W SPRING BRANCH TX 78070 7053	COMAL	WASTEWATER	WQ0014295001	PERMIT	ACTIVE	1908, Dripping Springs Creek	27,000
JOHNSON RANCH WWTP	3695 FM 1863 BULVERDE TX 78163	COMAL	WASTEWATER	WQ0014975001	PERMIT	ACTIVE	1908, Upper Cibolo Creek	75,000
PARK VILLAGE WWTP	APPROXIMATELY 5,900 FT DUE SOUTH OF THE INTERSECTION	COMAL	WASTEWATER		PERMIT	ACTIVE		



# Ultimate Flow Condition Reported in the Half Study for the City of Bulverde

- ❖ Total: 854.13 gallons per minute
- ❖ 13,954,204.478448 US gpm
  - 31,090 cubic ft per sec.
- ❖ 13,954,204.478448 US gpm to acre feet to 74,057 acre feet





Water supply wells in this area are considered Groundwater Under the Influence of Surface Water and so what is permitted to flow into streams IS interacting with your drinking water.

[https://www.tceq.texas.gov/drinkingwater/swmor/swmor/index\\_monitoring.html](https://www.tceq.texas.gov/drinkingwater/swmor/swmor/index_monitoring.html)

Edwards Aquifer Authority 210- 222-2204

Trinity Glen Rose Ground Water Conservation District 210 - 698-1155

TCEQ Region 13- 210-490-3096

TCEQ Corporate office 512- 239-1000

# Water Pollution Abatement Plans and Contributing Zone Plans

Are submitted in Phases.

Contain Geologic Assessments  
outlining sensitive features.

Can run concurrently with or come  
AFTER a TPDES permit (for a Waste  
water treatment discharge permit )

TPDES permits do not require approval  
or input from the Edwards Aquifer  
TCEQ staff

For informed decision making, cities  
should require these plans to be in  
place and approved before accepting  
a project

Contributing Zone plans do not require that higher level of review  
as Water Pollution Abatement Plans - no Geologic Assessment  
involved

<http://www.tceq.state.tx.us/assets/public/permitting/waterquality/forms/00582.pdf>

No consideration for Cumulative Impact in TCEQ permitting process.

Streams are receiving:

- gravity fed sewer lines and the consequent sewage spills

- waste water treatment plant effluent that creates wetlands comprised of water not treated to drinking water, or contact recreation standards

- stormwater runoff that carries lawn pesticides, fertilizers, oil spills, Polycyclic Aromatic Hydrocarbons,

while permits are never denied and dealt as if there is infinite capacity for this sensitive area to deal with pollutant discharge.



# Improving Standards

Negotiated settlements have produced more protections that are piecemeal and NOT subsequently applied to sensitive areas outside of agreed upon projects.

No calculations or caps on cumulative impacts on a region.

Beneficial reuse - purple pipe adaptation to resource

No consideration given to interaction of permitting of Waste water discharge and public supply wells

sampling point needed along Cibolo Creek directly after the confluence of Lewis and Dripping Springs Creeks

## Questions pg. 1

Has a soil analysis been completed and submitted as part of the WQ application?

Did the Wastewater section include the Edwards Aquifer Region 13 staff in analyzing this WQ permit?

If not, why not? Does the section issuing the permit know the answers to the following questions? If not, why are they not considered relevant to making a technical decision surrounding water quality in this sensitive area?

Did 4S claim this on their Contributing Zone Application?

“Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached”

where are the Drainage Paths and patterns from the site to surface streams?

where are the Drainage paths and patterns to neighboring properties?

Will Guadalupe Blanco River Authority be the operator of the WWTP?

What is the Impervious Cover on this phase of the project?

## Questions (2)

Has this administrative requirement been met?

Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.

[http://www.tceq.state.tx.us/assets/public/compliance/field\\_ops/eapp/F-10257\\_contributing\\_zone\\_plan\\_application.pdf](http://www.tceq.state.tx.us/assets/public/compliance/field_ops/eapp/F-10257_contributing_zone_plan_application.pdf)

What are the measures for minimizing surface stream contamination as asked for in Attachment P , in the Contributing Zone Application?

“Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that result in water quality degradation.”

What are the BMPs for On Site Stormwater?

What are the BMPs for surface Streams?

Where is the stormwater generated by the project being diverted to?

## Questions (3)

What sampling data has been used to establish limitations for BOD, and nutrients?

Lewis Creek is ephemeral with pockets of wetlands, being that it flows to the Cibolo (on the recharge zone) why is TCEQ not asking for a Denitrification plant, Ultraviolet disinfection?

Why are the standards 5 5 and .5?

Has any staff been out to the site?

If so whom and when?

Are you aware the developers map in the public notice shows an outdated version of the flood plain?



## Questions (4)

Tier 1-

[https://www.tceq.texas.gov/permitting/401certification/401certification\\_definition.htm](https://www.tceq.texas.gov/permitting/401certification/401certification_definition.htm)

1

Where is this application and it's attachment?

Since it pertains to 4S is this information on file at the library?

Did any staff go out to the site to verify Best Management Practices are used as stated?

Has it been handed over to the City of Bulverde?  
the Groundwater Conservation district?  
the USACE district engineer?

Tier 2- review for 401 Certification Dredge Fill

did the following authorities receive notice?

according to TAC 279?

[https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&n\\_tloc=&n\\_ploc=&nq=1&n\\_tac=&ti=30&pt=1&ch=279&rl=5](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&n_tloc=&n_ploc=&nq=1&n_tac=&ti=30&pt=1&ch=279&rl=5)

## Questions (5)

1) the adjacent landowners;

(2) the mayor and health authorities of the city or town in which the activity is or will be located or in which waste is or will be disposed;

(3) the county judge and health authorities of the county in which the facility is located or in which waste is or will be disposed;

(4) the Texas Parks and Wildlife Department;

(5) the United States Department of Interior Fish and Wildlife Service;

(6) the Texas Water Development Board;

(7) the United States Commerce Department, National Marine Fisheries Service;

(8) the EPA, Region 6;

(9) the Texas General Land Office;

(10) the Secretary of the Coastal Coordination Council; and

(11) the applicant.

(c) Any public notice issued under subsection (b) of this section shall contain:

(1) the applicant's name and mailing address, together with the name and mailing address of the party conducting the activity, if different from the applicant;

(2) a brief written description of the activity;

(3) a statement that the applicant is seeking certification under the federal CWA, §401;

(4) a statement that any comments concerning the application may be submitted to the executive director of the agency, Attention 401 Coordinator, MC 150, P.O. Box 13087, Austin, Texas 78711-3087, and a deadline for written public comment of no less than 30 days;

(5) a statement that a copy of the application is available for review in the office of the federal licensing or permitting agency's office; and

(6) a statement indicating how persons can request a public meeting.

(d) The executive director may waive notice requirements of this section when it is determined that a certification will be waived.

(e) The executive director may waive notice and meeting requirements of this section and §§279.6 - 279.8 of this title (relating to Public Comments, Public Meetings, and Notice of Public Meeting) and issue a final agency action in accordance with §§279.10 - 279.12 of this title (relating to Final Agency Action on National Pollutant Discharge Elimination System (NPDES) Permits; Final Agency Action on Department of the Army Permits; and Other State Certification) when an emergency as defined in §279.3 of this title (relating to Definitions) has been determined to exist and it is in the public interest to issue a certification decision in less than 30 days.