

BASELINE INFORMATION

GIS DATA

	Data	Data Type	Originating Entity
1	Impaired Segments. Stream segments on 303d list.	ESRI Shapefile	TCEQ
2	CCN Water	ESRI Shapefile	TCEQ
3	CCN Wastewater	ESRI Shapefile	TCEQ
4	Wastewater Outfalls	ESRI Shapefile	TCEQ
5	Major/ Minor Aquifers	ESRI Shapefile	TWDB
6	River Basin	ESRI Shapefile	TCEQ
7	Hydrologic Unit Code (HUC)	ESRI Shapefile	TNIRS
8	National Hydrography Dataset (NHD). Stream segments.	ESRI Shapefile	USGS
9	FEMA Q3 (Floodplain)	ESRI Shapefile	TNIRS
10	Original Texas Land Surveys boundaries and bay tracts (OTLS).	ESRI Shapefile	GLO
11	Kendall Appraisal District Data	ESRI Shapefile and text files	KAD
12	Census Boundaries	ESRI Shapefile	TNIRS
13	Census block and census tract data for 2000	ESRI Shapefile	US Census Bureau
14	Texas 2009 TIGER/Line County Shapefiles. They include spatial data for geographic features such as roads, railroads, rivers, and lakes, as well as legal and statistical geographic areas.	ESRI Shapefile	US Census Bureau
15	TWDB Groundwater Database (gwdb). Location of groundwater wells in Kendall County	Geodatabase	TWDB

PLANNING, WATER SUPPLY AND WATER QUALITY DATA

Date Collected	Description	Source
Apr-09	TWDB Groundwater Database	TWDB
Dec-09	TWDB Water Use Survey for 2006 and 2007	TWDB
Dec-09	Population Projection from Texas State Data Center	Texas State Data Center
Jan-10	Clean River Program data for Guadalupe River	GBRA
Jan-10	List of Water Systems in Kendall County	TCEQ
Jan-10	Wastewater Discharge Permits for City of Boerne	TCEQ
Jan-10	Wastewater Discharge Permits for City of Fair Oaks Ranch	TCEQ
Jan-10	Wastewater Discharge Permits for WCID1	TCEQ
Jan-10	Wastewater Discharge Permits for Cordillera Ranch	TCEQ
Jan-10	Wastewater Discharge Permits for WCID2	TCEQ
Feb-10, Mar-10	Region L Planning Data	TWDB, Region L
Feb-10	Wastewater flow data for Boerne	City of Boerne
Feb-10	Wastewater flow data for Cordillera Ranch	GBRA
Feb-10	Wastewater flow data for WCID 1	WCID1
Mar-10	Boerne ISD enrollment data and projections from 1991 through 2015	Boerne ISD

BASELINE INFORMATION

REPORTS, STUDIES, AND ORDINANCES

Description	Report Date	Source/ Download location
Cow Creek GCD Management Plan	Dec-09	http://www.ccgcd.org/CCGCD%20Management%20Plan%202009%2012%2014.pdf
Thoroughfare Planning Citizens Committee Report	May-07	http://www.co.kendall.tx.us/development/transportation-planning-citizens-committee
City of Boerne Master Plan	Sep-06	
City of Boerne Demographics		http://www.ci.boerne.tx.us/planning/Demographics/tabid/509/Default.aspx
City of Boerne Rules and Regulations		http://www.ci.boerne.tx.us/planning/PublicDocumentLibrary/tabid/507/Default.aspx
City of Boerne Ordinances		http://library7.municode.com/default-test/home.htm?infobase=12228&doc_action=whatsnew
Kendall County Permit Applications		http://thecrossingatkenberg.org/sitebuildercontent/sitebuilderfiles/kendall_co_permit_applications.pdf
Western Canyon Water Supply Project		http://www.gbra.org/Projects/WesternCanyon.aspx
City of Fair Oaks Ranch Subdivision Ordinances		Provided by City of Fair Oaks Ranch.
Caldwell County Study	Aug-09	http://www.gbra.org/Library/Reports.aspx
Watershed Protection Plans	None	
Stormwater Ordinances		Some available as part of County and City development regulations.

Kendall County Regional Water and Wastewater Planning Study Water Utility Survey

Utility Survey

Utility Name: _____

Person Completing this Survey:

Name: _____

Title: _____

Contact Information: _____

Date: _____

Do you supply (please check all that applies):

- ☐ Potable Water Service
- ☐ Wastewater Collection and Treatment

Public Water System (PWS) Information

PWS Name	PWS ID
_____	_____
_____	_____
_____	_____

Please fill out a separate survey form for each water system if you have multiple water systems.

Water Usage

What are your sources of water (please check all that applies):

- ☐ Groundwater – self produced –permitted annual volume: _____
- ☐ Groundwater – purchased from other –permitted annual volume: _____
- ☐ Surface Water – own water rights/ self treat – maximum annual volume: _____
- ☐ Surface Water – buy raw from others/ self treat – max. annual volume: _____
- ☐ Surface Water – buy treated water from others – max. annual volume: _____
- ☐ Other (please describe): _____

Please list Certificates of Convenience and Necessity (CCN) that your Utility holds for water.

CCN Number	CCN Name
_____	_____
_____	_____
_____	_____

Annual water usage during calendar year 2009: _____

Water usage by month during calendar year 2009:

January	February	March	April	May	June

July	August	September	October	November	December

Historic peak day volume for water delivery: _____mgd. Date of occurrence:

Please provide the following water use data:

Year	Volume of Water Pumped into System (Million Gallons)		
	Total	Groundwater	Surface Water
2009			
2008			
2007			
2006			
2005			

Please provide the following customer data:

Year	Number of Connections				Sales			
	Single Family	Multi Family	Commer- cial	Industrial	Single Family	Multi Family	Commer- cial	Industrial
Jan 01 2010								
Jan 01 2009								
Jan 01 2008								
Jan 01 2007								
Jan 01 2006								

Please provide your projected water usage (based on your planning):

Year	Number of Connections				Sales			
	Single Family	Multi Family	Commer- cial	Industrial	Single Family	Multi Family	Commer- cial	Industrial
Jan 01 2011								
Jan 01 2012								
Jan 01 2013								
Jan 01 2014								
Jan 01 2015								

Please Describe your Water Production Facilities:

Name	Type (well/ treatment plant)	Rated Capacity (mgd)

Population:

Based on best available information; please provide an estimate of population in you service area in Kendall County.

Past Population

Year	Estimated Population Served in Utility Service Area*
Jan 01, 2010	
Jan 01, 2009	
Jan 01, 2008	
Jan 01, 2007	
Jan 01, 2006	

*Please indicate population in Kendall County Only

Population Projection

Year	Estimated Population Served in Utility Service Area*
Jan 01 2011	
Jan 01 2012	
Jan 01 2013	
Jan 01 2014	
Jan 01 2015	

*Please indicate population in Kendall County Only

Growth:

Please provide a description of where you think growth/development is going to be located in your area. List any planned or ongoing development that you are aware of in Kendall County. Please attach a map to show location as necessary.

Water Quality

Please describe any quality issues or concerns you have experienced with your source water:

Please list all NPDES Permits held by your utility:

Permit Number	Date Granted	Permitted Volume (million gallons/ year)

Please describe any concerns you have regarding point or non-point source pollutant discharge in Kendall County that may impact water quality:

Drought Management and Water Conservation

Does your utility have a state approved drought contingency plan?

- ☐ Yes. If yes, please attach a copy.
- ☐ No

Was your utility impacted by recent drought?

- ☐ Yes. If yes, please answer the items below.
- ☐ No

Date and length of Drought: _____

How was your utility impacted? _____

☐ Percent change in demand during drought: _____

☐ Percent change in supply during drought: _____

Response measures employed: _____

What would you do differently in a future drought? _____

Have you implemented any water conservation measures? If yes, please describe the measures.

What future measures are being considered to encourage water conservation?

Wastewater Services

Please describe your wastewater service facility:

- ☐ Do not operate wastewater service
- ☐ Own and operate wastewater collection system
- ☐ Own and operate wastewater treatment plant
- ☐ Other (please describe): _____

Please list Certificates of Convenience and Necessity (CCN) that your Utility holds for wastewater.

CCN Number	CCN Name
_____	_____
_____	_____
_____	_____

Annual wastewater flow treated during calendar year 2009 (please break down by plants in case of multiple plants): _____

Please list the wastewater flow treated by month during calendar year 2009:

	January	February	March	April	May	June
Treatment Plant 1						
Treatment Plant 2						

	July	August	September	October	November	December
Treatment Plant 1						
Treatment Plant 2						

Historic peak day volume for wastewater treatment: _____mgd. Date of occurrence: _____

Please provide the following wastewater data:

Calendar Year	Volume of Wastewater Treated (Million Gallons)
2009	
2008	
2007	
2006	
2005	

Please provide the following customer data:

Year	Number of Sewer Connections					
	Total	Single Family	Multi Family	Commercial	Industrial	Other
Jan 01 2010						
Jan 01 2009						
Jan 01 2008						
Jan 01 2007						
Jan 01 2006						

Please provide your projection on future sewer connection (based on your planning):

Year	Number of Sewer Connections					
	Total	Single Family	Multi Family	Commercial	Industrial	Other
Jan 01 2011						
Jan 01 2012						
Jan 01 2013						
Jan 01 2014						
Jan 01 2015						

Please describe your wastewater treatment facilities:

Name	Type of Treatment Plant	Rated Capacity (mgd)

Future Development

Please describe any considered/ proposed plans to meet water needs in support of future growth:

Please describe any considered/ proposed plans to meet wastewater needs in support of future growth:

Please describe any planned additions, changes, and/or upgrades that will be implemented to the water production or wastewater treatment facilities of your utility:

Comments

Please provide any other comments relevant to the Kendall County Water and Wastewater planning study:

Please return your completed survey by February 8th, 2010 to:

Reem Zoun, PE
AECOM
400 West 15th St, Suite 500
Austin, TX 78701
Ph. 512 472 4519 Fax: 512 472 7519

Should you have any questions, please contact:

Reem Zoun , PE
Phone: 512 457 7742
Email: reem.zoun@aecom.com

or

Bill Thaman, PE
Phone: 512 457 7717
Email: bill.thaman@aecom.com

January 20 2010

To Whom It May Concern:

Guadalupe Blanco River Authority (GBRA) is in the process of undertaking a regional water and wastewater planning study for Kendall County for a forty year planning window. AECOM Technology Corporation will provide professional services for this study.

As a part of this regional planning process, we request that you fill out the attached survey for each water system in your jurisdiction.

Please forward the completed survey to the following contact address:

Reem Zoun, PE
Project Engineer, AECOM Water
400 West 15th St, Suite 500, Austin, TX 78701
reem.zoun@aecom.com
Tel 512 457 7742 Fax 512 472 7519

Please contact us with any further questions. We thank you for your assistance.

Sincerely,

Guadalupe Blanco River Authority

Water Utility Survey Address List

Organization	Name	Salutation	Address	City, State, Zip	Phone Nos.	Email
City of Boerne Public Works Director	Mike Mann	Mr. Mann	P. O. Box 1677	Boerne, Texas 78006	830 249 9511	mmann@ci.boerne.tx.us ;
Kendall County WC & ID	Keith Marquart	Mr. Marquart	P.O.Box 745	Comfort, Texas 78013	830 995 2227	kmkcwcid@hctc.net ;
City of Fair Oaks Ranch	Ron Emmons, Director of Public Works	Mr. Emmons	7286 Dietz Elkhorn	Fair Oaks Ranch, Texas 78015	210 698 0900	remmons@fairoaksranc htx.org
Cordillera Ranch	Chris Hill	Mr. Hill	808 Highway 46 East	Boerne, Texas 78006	830 336 3570	chill@dhinv.com ;
Kendall County Utility Company	Stan Scott	Mr. Scott	P. O. Box 1335	Boerne, Texas 78006	830 537 5755	kcuc@gvtc.com ;
Comfort ISD	John Chapman, Superintenden t	Mr. Chapman	327 High Street	Comfort, TX 78013		
Boerne ISD	John P. Kelly, Ph.D.	Dr. Kelly	123 W. Johns Road	Boerne, TX 78006		
Cow Creek Groundwater Conservation District General Manager	Micah Voulgaris	Mr. Voulgaris	216 Market Avenue, Suite 105	Boerne, Texas 78006	830 816 2504	manager@ccgcd.org ;
Lerin Hills M.U.D.	Allen Boone Humphries Robinson LLP		3200 Southwest Freeway, Suite 2600	Houston, Texas 77027-7537		
Kendall County WCID #2			3 Greenway Plaza, Suite 2000	Houston, Texas 77046-0307	713-651-0111	
Guadalupe River State Park	Daniel Pepin	Mr. Pepin	3350 Park Rd 31	Spring Branch TX 78070	830-438-2656	

Water Utility Survey Address List

Wiedenfeld Water Works, INC (Platten Creek Water System)			P.O. Box 418	Center Point, TX 78010	830-634-2321	
Aqua Utilities Inc. (Stonegate Water System, Walnut Hills, Kendall Pointe, Ten West Ranches)	Tom Myers, Area Supervisor	Mr. Myer	512 Rodriguez St.	Kerrville, TX 78028	830-257-6301	tgmyers@aquaamerica.com
WATER SERVICES INC (Cascade Mobile Home Park)			12535 REED RD	SUGAR LAND, TEXAS 77478-2837	281-207-5800	
Foothills Mobile Home Ranch	Henry E Martin	Mr. Martin	99 SEPTEMBER LN	BOERNE, TX 78006-3546	830-249-2229	
Shady Rest Mobile Home Park	William A Pankratz	Mr. Pankratz	113 CLEAR SKY	BOERNE, TX 78015-3200	830-755-4427	
Cardinal Mobile Home Park TXKADA LTD	Kenneth D Muller	Mr. Muller	PO BOX 1828	BOERNE, TX 78006-6828	210-325-1009	
Elms Mobile Home Park	Trent Jones	Mr. Jones	407 W Ojai Ave, Apt A C/O ASK NOW INVESTMENTS INC	OJAI, CA 93023-2464	805-640-7667	
Sherwood-Mount Pisgah WSC	Bernard Briscoe, Director	Mr. Briscoe	241 MOUNT PISGAH DR	COMFORT, TEXAS 78013-2704	210-845-4062	
Waring Knoll Subdivision	Lief Zars	Mr. Zars	438 SANDAU RD	SAN ANTONIO, TX 78216-3621	210-341-5153	

Water Utility Survey Response Log

Date	Entity	Responder Name	Note
2/2/2010	Elms Mobile Home Park	Trent Jones	I no longer have a well or water system - we are now part of the city of Boerne water system.
2/18/2010	Comfort ISD	Randy Hector	Completed survey received (partially complete).
2/19/2010	Boerne ISD	Don Tillis	Email: Boerne ISD received the survey. We receive water from City of Boerne and Saws. I assume we do not need to fill out survey.
3/9/2010	City of Boerne	Mike Mann	Email. Filled survey.
5/5/2010	City of Fair Oaks Ranch	Ron Emmons	Mail. Filled Survey.

Kendall County Regional Water and Wastewater Planning Study Water Utility Survey

Utility Survey

Utility Name: City of Boerne

Person Completing this Survey:

Name: Michael Mann

Title: Public Works Director

Contact Information: 402 E Blanco, Boerne TX 78006

Date: 01/26/10

Do you supply (please check all that applies):

- ☒ Potable Water Service
☒ Wastewater Collection and Treatment

Public Water System (PWS) Information

PWS Name	PWS ID
<u>City of Boerne</u>	<u>1300001</u>
<u></u>	<u></u>
<u></u>	<u></u>

Please fill out a separate survey form for each water system if you have multiple water systems.

Water Usage

What are your sources of water (please check all that applies):

1,850 A-F

- N/A → ☒ Groundwater – self produced – permitted annual volume: 1,850 A-F
- ☐ Groundwater – purchased from other – permitted annual volume: _____
- ☒ Surface Water – own water rights/ self treat – maximum annual volume: 833 A-F
- ☐ Surface Water – buy raw from others/ self treat – max. annual volume: _____
- ☒ Surface Water – buy treated water from others – max. annual volume: 3,611 A-F
- ☐ Other (please describe): _____

Please list Certificates of Convenience and Necessity (CCN) that your Utility holds for water.

CCN Number

CCN Name

106716

City of Boerne

Annual water usage during calendar year 2009:

1,748 A-F

Water usage by month during calendar year 2009:

January	February	March	April	May	June
<u>130.0</u>	<u>117.6</u>	<u>136.4</u>	<u>140.2</u>	<u>157.8</u>	<u>176.3</u>
July	August	September	October	November	December
<u>197.9</u>	<u>198.0</u>	<u>144.4</u>	<u>118.5</u>	<u>116.8</u>	<u>114.2</u>

Historic peak day volume for water delivery: 3.2 mgd. Date of occurrence:

06/16/08

Please provide the following water use data:

Year	Volume of Water Pumped into System (Million Gallons)		
	Total	Groundwater	Surface Water
2009	569.6	81.6	488.0
2008	645.1	192.1	453.0
2007	497.3	123.5	373.8
2006	555.3	173.9	381.4
2005	546.7	316.2	230.5

Please provide the following customer data:

Year	Number of Connections				Sales Mgal			
	Single Family	Multi Family	Commercial	Industrial	Single Family	Multi Family	Commercial	Industrial
Jan 01 2010	3661	42	701	-	289.9	16.9	190.0	-
Jan 01 2009								
Jan 01 2008								
Jan 01 2007								
Jan 01 2006								

Total
4404
4281
3717
3461
3229

Please provide your projected water usage (based on your planning):

Worst Case - Highest Anticipated growth

Year	Number of Connections				Sales Mgal			
	Single Family	Multi Family	Commercial	Industrial	Single Family	Multi Family	Commercial	Industrial
Jan 01 2011	3761	43	720	-	298.0	17.5	195.1	-
Jan 01 2012	3987	46	763	-	315.9	18.5	206.9	-
Jan 01 2013	4406	51	843	-	349.0	20.5	228.7	-
Jan 01 2014	5059	58	969	-	400.7	23.5	262.5	-
Jan 01 2015	5717	66	1106	-	457.6	26.9	299.9	-

Please Describe your Water Production Facilities:

Name	Type (well/ treatment plant)	Rated Capacity (mgd)
Wells 1-9	well	est 1.4 mgd continuous
WTP	plant	1.5 mgd (max)

Population:

Based on best available information; please provide an estimate of population in you service area in Kendall County.

Past Population

Year	Estimated Population Served in Utility Service Area*
Jan 01, 2010	11,332
Jan 01, 2009	11,000
Jan 01, 2008	10,300
Jan 01, 2007	9,725
Jan 01, 2006	9,500

*Please indicate population in Kendall County Only

Population Projection

Year	Estimated Population Served in Utility Service Area*
Jan 01 2011	11,620
Jan 01 2012	12,250
Jan 01 2013	13,362
Jan 01 2014	14,612
Jan 01 2015	16,375

*Please indicate population in Kendall County Only

Growth:

Please provide a description of where you think growth/development is going to be located in your area. List any planned or ongoing development that you are aware of in Kendall County. Please attach a map to show location as necessary.

Most of our anticipated growth will be in the South-central portion of the current city limits & in the Esperanza development east of the city (map already provided)

Water Quality

Please describe any quality issues or concerns you have experienced with your source water:

We have had higher than ordinary levels of manganese in our raw water (lake) after large flood events

Please list all NPDES Permits held by your utility:

Permit Number	Date Granted	Permitted Volume (million gallons/ year)
N/A		

Please describe any concerns you have regarding point or non-point source pollutant discharge in Kendall County that may impact water quality:

septic systems which are improperly maintained & livestock (elevated bacteria). Lawn/crop fertilization (nitrogen & phosphorus). Wetlands Watershed Study ongoing.

Drought Management and Water Conservation

Does your utility have a state approved drought contingency plan?

- ☒ Yes. If yes, please attach a copy.
☐ No

Was your utility impacted by recent drought?

- ☒ Yes. If yes, please answer the items below.
☐ No

Date and length of Drought: 11/07 - 8/09

How was your utility impacted? Water use was restricted -
lawn irrigation allowed only one time per week.
Cow Creek GCD restricted well pumping by 40%.

- ☐ Percent change in demand during drought: - 5%
☐ Percent change in supply during drought: - 12%

Response measures employed: limited landscape irrigation,
pressure washing, etc., established recycled
construction water fill station

What would you do differently in a future drought? ~~HA~~ maximize
production of recycled water

Have you implemented any water conservation measures? If yes, please describe the measures.

Year-round landscape irrigation limited to
mid late evening through mid morning. Limitations
on types of turf that can be planted.

What future measures are being considered to encourage water conservation?

Significantly expand recycled water
distribution for irrigation purposes.

Wastewater Services

Please describe your wastewater service facility:

- ☐ Do not operate wastewater service
☒ Own and operate wastewater collection system
☒ Own and operate wastewater treatment plant
☐ Other (please describe):

Please list Certificates of Convenience and Necessity (CCN) that your Utility holds for wastewater.

CCN Number

CCN Name

20273

City of Boerne

Annual wastewater flow treated during calendar year 2009 (please break down by plants in case of multiple plants):

329,292,000 gallons

Please list the wastewater flow treated by month during calendar year 2009: gallons

	January	February	March	April	May	June
Treatment Plant 1	25,560,000 25,560 k	23,028 k	26,376 k	25,368 k	27,564 k	25,956 k
Treatment Plant 2	N/A					

	July	August	September	October	November	December
Treatment Plant 1	27,096 k	26,388 k	27,312 k	33,636 k	29,808 k	31,200 k
Treatment Plant 2	N/A					

Historic peak day volume for wastewater treatment: 7,344 ~~mgd~~ mgd. Date of occurrence: 7/3/02

Please provide the following wastewater data:

Calendar Year	Volume of Wastewater Treated (Million Gallons)
2009	329.3
2008	323.1
2007	513.6
2006	295.8
2005	352.1

Please provide the following customer data:

Year	Number of Sewer Connections					
	Total	Single Family	Multi Family	Commercial	Industrial	Other
Jan 01 2010	449	3627	41	481	—	—
Jan 01 2009	411					
Jan 01 2008	3978					
Jan 01 2007	3550					
Jan 01 2006	3309					

Conservative
(Worst Case)
Development
Projection

Please provide your projection on future sewer connection (based on your planning):

Year	Number of Sewer Connections					
	Total	Single Family	Multi Family	Commercial	Industrial	Other
Jan 01 2011	4229	3696	42	448 491	-	-
Jan 01 2012	4431	3872	44	515 515	-	-
Jan 01 2013	4830	4220	48	562 562	-	-
Jan 01 2014	5252	4589	52	611	-	-
Jan 01 2015	5869	5128	58	683	-	-

Please describe your wastewater treatment facilities:

Name	Type of Treatment Plant	Rated Capacity (mgd)
Boerne WWTP	Activated sludge	1.2

Future Development

Please describe any considered/ proposed plans to meet water needs in support of future growth:

Currently planning for ~~construction of a~~
~~second plant @ 1.4 MGD~~ expansion of treatment
facilities @ Boerne City Lake for peaking (1.5-4.5 MGD)

Please describe any considered/ proposed plans to meet wastewater needs in support of future growth:

Currently planning for construction of a second
WWTP @ 1.4 MGD (expandable to 5.2 MGD). This
plant is sited to accept flows routed to first plant
if/when necessary.

Please describe any planned additions, changes, and/or upgrades that will be implemented to the water production or wastewater treatment facilities of your utility:

See above

Comments

Please provide any other comments relevant to the Kendall County Water and Wastewater planning study:

Please return your completed survey by February 8th, 2010 to:

Reem Zoun, PE
AECOM
400 West 15th St, Suite 500
Austin, TX 78701
Ph. 512 472 4519 Fax: 512 472 7519

Should you have any questions, please contact:

Reem Zoun, PE
Phone: 512 457 7742
Email: reem.zoun@aecom.com

or

Bill Thaman, PE
Phone: 512 457 7717
Email: bill.thaman@aecom.com

ORDINANCE NO. 2005-77

AN ORDINANCE AMENDING THE CODE OF ORDINANCES, CITY OF BOERNE, TEXAS, CHAPTER 22, UTILITIES, ARTICLE II. WATER SYSTEM, DIVISION 1. GENERALLY; AND DIVISION 2. CONSERVATION AND EMERGENCY DROUGHT MANAGEMENT;

WHEREAS, it becomes necessary from time to time to make certain changes in ordinances of the City of Boerne, Texas;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS:

That the Code of Ordinances, City of Boerne, Texas, Chapter 22, UTILITIES, ARTICLE II. WATER SYSTEM, DIVISION 1. GENERALLY; AND DIVISION 2. CONSERVATION AND EMERGENCY DROUGHT MANAGEMENT is hereby amended as follows:

ARTICLE II. WATER SYSTEM

DIVISION 1. GENERALLY.

Sec. 22-41. Prohibited Uses of Water - Year Round Restrictions.

(a) *Irrigation outside restricted hours.* Landscape watering with hose-end sprinklers or automatic irrigation systems shall be prohibited between the hours of 10:00 a.m. and 8:00 p.m. on any day of the week, year-round.

(b) *Defenses.* It shall be a defense to prosecution under subsection 22-41(a), Prohibited Uses of Water -Year Round Restrictions-- *Irrigation outside restricted hours*, if:

- (1) The person is irrigating a landscaped area by means of:
 - (i) A hand-held hose with a manual or automatic shutoff nozzle; or
 - (ii) A bucket or watering can with a holding capacity of not greater than five (5) gallons; or
 - (iii) A properly functioning drip irrigation system;
- (2) The landscape watering is performed by commercial enterprises in the business of growing or maintaining plants for sale, including plant nurseries; provided, however, that such landscape watering shall be performed solely for the establishment, growth, and maintenance of such plants;
- (3) A landscape watering permit has been issued pursuant to section 22-42 to allow for landscape watering on any newly planted or transplanted landscaping so as to accomplish a reasonable establishment and maintenance of growth; or
- (4) Operation of an automatic irrigation system is performed solely for the purpose of conducting maintenance and testing.

(c) *Water from hydrants and blow-offs.* It is unlawful for a person to use water from hydrants and blow-offs for any purpose other than firefighting, fire flow testing, flushing of mains, or other actions necessary for the proper operation of the public water supply system, unless provided for under section 22-32. Water for construction generally, Boerne City Code of Ordinances.

ARTICLE II. WATER SYSTEM

DIVISION 2. CONSERVATION AND EMERGENCY DROUGHT MANAGEMENT

Sec. 22-51. Generally.

(a) Declaration of Policy, Purpose and Intent

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Boerne (the City) hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited (under this Conservation and Emergency Drought Management Ordinance) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in this Ordinance.

(b) Public Involvement

Opportunity for the public to provide input into the preparation of the Ordinance was provided by the City of Boerne by means of public input opportunities during City Council meetings held on November 22 and December 13, 2005.

(c) Public Education

The City of Boerne will periodically provide the public with information about the Ordinance, including information about the conditions under which each stage of the Ordinance is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of the City of Boerne newsletter (the Boerne Beacon), City of Boerne website, press releases, utility bill notifications and/or other methods noted herein.

(d) Coordination with Regional Water Planning Groups

The service area of the City of Boerne is located within the South Central Texas Regional Water Planning Group (Region L). The City of Boerne will provide a copy of this Ordinance to the Region L Water Planning Group to ensure consistency with the appropriate approved regional water plans.

Sec. 22-52. Water Sources.

The primary water sources for the City of Boerne will be the Boerne City Lake and City-owned wells, and additional water will be obtained from Canyon Reservoir through the Guadalupe Blanco River Authority (GBRA) as part of the Western Canyon Regional Water Supply Project.

In the event that water from the Boerne City Lake or City-owned wells is unavailable due to production system limitations, supply source contamination, or system outage due to failure of or damage to major system components, water purchased from the GBRA will be utilized. Should a situation occur which would limit the amount of water allocated by the GBRA, water allotment to the City of Boerne shall be determined by the GBRA Drought Contingency Plan.

Sec. 22-53. Emergency action by City Manager.

The City Manager may cause any of the water usage restrictions prescribed in this Division to be implemented, in such combination and at such time as may be determined, upon presentation of evidence that a critical water shortage exists, or is imminent, which determination precludes sole reliance upon the water depth of Boerne City Lake and/or well levels as the determinant for implementation of each stage of water usage restrictions as herein described. The action of the City Manager shall be affirmed or reversed at the next meeting of the City Council subsequent to the date upon which implementation began, or at a special called meeting conforming to applicable provision of state statutes.

Sec. 22-54. Application.

The provisions of this division shall apply to all persons, corporations and other entities including without limitation any customer or property wherever situated utilizing water provided by the City.

**Sec. 22-55. Criteria for Initiation and Termination of Drought Response Stages.
(Except When a Critical Water Shortage Exists)**

(a) Upon determination that the lake and/or well levels, or other pertinent conditions, indicate that each implementation point has been reached, the Director of Public Works shall report the condition of the water supply to the City Manager.

(b) The City Manager shall report the water supply conditions to the City Council within 3 days (72 hours) of notification from the Director of Public Works.

(c) Upon receipt of the initial water supply condition report, the City Council shall determine by resolution the implementation date of Stage I and all consequent water use restrictions. Thereafter, each subsequent stage shall take effect immediately after City Council's notification by the City Manager that the new implementation conditions have been reached.

(d) The City Council may terminate emergency water use restrictions or water stage restrictions in the order in which they were implemented, when, in the discretion of the City Council, conditions warrant such termination. Public notice of such termination, giving the effective date and listing the restrictions being terminated, shall be posted electronically, if feasible, and in the usual physical location for posting of public notices.

(e) No person, corporation or other entity including without limitation any customer or property wherever situated utilizing water provided by the City shall knowingly make, cause, use or permit the use of water received from the City for residential, commercial, industrial, agricultural, governmental or any other purpose in a manner contrary to any provision of this division or in an amount in excess of that use permitted by the conservation stage in effect. The stages for water conservation shall be designated as follows:

(1) *Stage I, Water Watch.* Voluntary conservation measures with the desired result of a fifteen (15) percent reduction in overall water consumption. This stage shall be implemented when the water storage volume in the Boerne City Lake is sixty (60) percent of capacity or the water depth is thirty (30) feet and/or the well

levels have dropped to a level that dictates conservation measures are necessary; or other pertinent conditions exist that require restrictions at this level.

(2) *Stage II, Water Alert.* Mandatory compliance of conservation measures with the desired result of a thirty-five (35) percent reduction in overall water consumption. This stage shall be implemented when the water storage volume in the Boerne City Lake is fifty (50) percent of capacity or the water depth is twenty-six (26) feet and/or the well levels have dropped to a level that dictates conservation measures are necessary; or other pertinent conditions exist that require restrictions at this level.

(3) *Stage III, Water Warning.* Mandatory compliance of conservation measures with the desired result of a fifty (50) percent reduction in overall water consumption. This stage shall be implemented when the water storage volume in the Boerne City Lake is thirty-five (35) percent of capacity and the water depth is twenty-two (22) feet and/or the well levels have dropped to a level that dictates conservation measures are necessary; or other pertinent conditions exist that require restrictions at this level.

(4) *Stage IV, Water Emergency.* Mandatory compliance conservation measures with the desired result of a sixty (60) percent reduction in overall water consumption. This stage shall be implemented when the water storage volume in the Boerne City Lake is twenty-five (25) percent of capacity and the water depth is nineteen (19) feet and/or the well levels have dropped to a level that dictates conservation measures are necessary; or other pertinent conditions exist that require restrictions at this level.

Sec. 22.56. Drought Response Stages

(a) *Stage I. Water Watch,* voluntary compliance, fifteen (15) percent reduction.

(1) Formal public notification by the City Manager or his duly authorized representative of a water shortage.

(2) Request public to initiate voluntary water use curtailments, limiting consumption to one hundred seventy-five (175) gallons per capita per day.

(3) Increase efforts to disseminate information to the public on such subjects as water saving tips, water saving devices, irrigation practices, etc.

(4) Request the discontinued operation of all ornamental fountains, water falls, and similar amenities drawing water from City supply, except for those fountains/structures with a re-circulating system.

(5) Curtail all nonessential public water uses such as City vehicle washing, street cleaning, park landscape irrigation, golf course irrigation. Curtail all nonessential public water uses by governmental entities for athletic playing field irrigation, etc.

(6) Request general reduction of outdoor water use for lawn or garden irrigation. Confine watering and sprinkling to the hours of 6:00 a.m. to 10:00 a.m. and 8:00 p.m. to 12:00 midnight with the exception of commercial nurseries, florists and agricultural usage.

(7) Request general curtailment of indoor water use.

(8) Request that washing of automobiles, trucks, trailers, recreational vehicles, boats, airplanes and other mobile equipment be done with a hand-held bucket. Hand-held hoses should be equipped with a positive shutoff nozzle. Washing may occur on the immediate premises of a commercial washing facility.

(9) Request commercial nurseries, commercial sod farms and other similar establishments to curtail all nonessential water use.

(10) Request that restaurants not serve water to customers except when specifically requested by the customer.

(11) Work with industrial customers to develop and implement individual water conservation plans.

(b) *Stage II. Water Alert, mandatory compliance, thirty-five (35) percent reduction.*

(1) All of the restrictions of Stage I shall apply in addition to those hereinafter set forth.

(2) Formal notification of public by City Manager and/or his duly authorized representative through media notice, direct mailing to all general services customer.

(3) Continue public education program set forth in Stage I.

(4) All restaurants are prohibited from serving water to their customers except when specifically requested by the customer.

(5) Irrigation utilizing individual sprinklers or sprinkler systems of lawns, gardens, landscaped areas, trees, shrubs, and other plants is prohibited except on a designated outdoor water use day (see section 22-57 Designated outside water use days) and only then during the hours of 3:00 a.m. to 8:00 a.m. and 8:00 p.m. to 10:00 p.m. However, this restriction does not apply to the irrigation of commercial nurseries, commercial sod farms, and similarly situated commercial establishments. Said establishments will be requested to curtail all nonessential water use. Irrigation of lawns, gardens, landscaped areas, trees, shrubs, or other plants is permitted at anytime if:

- a. A hand-held hose is used;
- b. A hand-held, faucet-filled bucket of five (5) gallons or less is used; or
- c. A drip irrigation system is used.

(6) The operation of any ornamental fountain or other structure making similar use of water is prohibited. This restriction does not apply to those fountains/structures with a re-circulating system. However, the use of treated water to fill, refill, or maintain the level of any fountain is prohibited.

(7) The use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts or other hard-surfaced area, or building or structure is prohibited.

(8) The use of water for dust control is prohibited.

(9) The washing of building exteriors is prohibited, except in the interest of public health.

(10) The washing of automobiles, trucks, trailers, recreational vehicles, boats, airplanes and any other type of mobile equipment is prohibited except that individuals may wash these implements if they use a bucket, pail, or other receptacles; and further provided, that service stations shall wash their customer's cars with a bucket, pan, pail or other receptacle not larger than five (5) gallons capacity; however, an individual or filling station after such washing, shall be permitted to rinse the automobile, truck, trailer, recreational vehicle, boat, airplane and any other type of mobile equipment off with a hose with a positive shutoff nozzle, using only a reasonable amount of water in so doing. Commercial or automatic car wash establishments shall use minimum practical water settings.

(11) The refilling or adding of water to swimming and/or wading pools is prohibited except on designated outdoor water use days between the hours of 12:00 midnight to 12:00 noon and 7:00 p.m. to 12:00 midnight. However, this restriction does not apply to public swimming pools which must be maintained pursuant to health regulations.

(12) Allowing defective plumbing in a home, business establishment or any location where water is used on the premises is prohibited. Wasting of any water by reason of defective plumbing as hereinabove mentioned is prohibited and shall include the existence of out-of-repair water closets, underground leaks, defective faucets and taps. Allowing water to flow constantly through a tap, hydrant, valve or otherwise by any user of water connected to the City system, shall be considered wasting of water and is prohibited.

(13) The following uses of water are defined as "waste of water" and are prohibited:

- a. Allowing water to run off into a gutter, ditch, or drain; or
- b. Failing to repair a controllable leak;
- c. Washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas, except to alleviate immediate health or fire hazards.

(14) Any use of water for the purposes or in a manner prohibited in this section shall be deemed to be a waste of water; and any person in whose name a water meter connection is registered in the utilities department, which water connection serves premises upon which a violation occurs, shall constitute in evidence a prima facie presumption that the person in whose name such water connection is registered was the person who permitted or caused the act of waste charged to occur on the premises.

(15) The City Manager and/or his duly authorized representative(s) shall consider requests of water users for special consideration to be given to their respective particular circumstances and shall hear and decide such requests; and is hereby authorized, in special cases, to grant such variance from the terms of this article as will not be contrary to the public interest, where, owing to special conditions, a literal enforcement of the provisions of this article will result in unnecessary hardship, and so that the spirit of this article shall be observed and

substantial justice done. Should a permit for special exception be granted, it shall be in effect from the time of granting; provided, that the permit is prominently posted on the premises within two (2) feet of the street number located on the premises. Should the City Manager receive written protest after granting of any such permit which indicates the conditions of the permit are not being met, the City Manager or his duly authorized representative(s) may reconsider the permit. After the conclusion of reconsideration, the City Manager shall take such action by way of revocation of such permit, or refusal to revoke the same, or modification of such permit as the City Manager may deem proper under the circumstances.

(16) The City Manager shall update members of the City Council on a weekly basis of any water situation changes, and issuance of special permits or revocation of special permits that may have occurred.

(c) *Stage III. Water Warning, mandatory compliance, fifty (50) percent reduction.*

(1) All of the restrictions of Stages I and II shall apply in addition to those hereafter set forth.

(2) All variances granted by the City Manager under Stage II shall become null and void upon implementation of Stage III.

(3) The sprinkling or watering of lawns is prohibited. The City Council may authorize the watering of trees, shrubbery, annual, biennial or perennial plants, vines, gardens, vegetables and flowers through the means of a hand-held hose equipped with a positive shutoff nozzle, drip irrigation or a hand-held bucket or watering can. When authorized, such watering shall be done only between the hours of 6:00 a.m. and 8:00 p.m. on designated outside water use days. Commercial nurseries shall be excepted from this prohibition and shall be permitted to water nursery stock by means of a hand-held hose equipped with a positive shut-off nozzle, drip irrigation or hand-held bucket or watering can between the hours of 8:30 a.m. and 6:00 p.m. on any day. Commercial nurseries shall be permitted to use sprinkler irrigation systems to maintain nursery stock provided irrigation water is recaptured and re-circulated. Residential homeowners and occupants may install and water on day of purchase those classes of plantings described herein, excluding lawns.

(4) The washing of automobiles, trucks, trailers, boats, airplanes, and other types of mobile equipment not occurring upon the immediate premises of a commercial car wash or a commercial service station and not in the immediate interest of the public health, safety, and welfare shall be prohibited.

(5) The washing of automobiles, trucks, trailers, boats, airplanes, or other types of mobile equipment upon the immediate premises of a commercial car wash or a commercial service station in the immediate interest of the public health, safety, and welfare, shall occur only between the hours of 12:00 noon and 5:00 p.m.

(6) The following water uses are hereby determined to be nonessential and are prohibited:

- a. The use of water for the expansion of commercial nursery facilities.
- b. The use of water for scenic and recreational ponds and lakes (except for the minimum amount required to support aquatic life) or for the filling

of swimming pools or Jacuzzi pools (except where the pool is required by a medical doctor's prescription).

c. The use of water to put new agricultural land into production.

d. The use of water for new planting or landscaping.

(7) A drought surcharge, at the rate of five dollars (\$5.00) per one thousand (1,000) gallons for residential water used in excess of ten thousand (10,000) gallons per billing cycle, shall be implemented.

(d) *Stage IV. Water Emergency, mandatory compliance, sixty (60) percent reduction.*

(1) All restrictions of Stages I, II and III shall apply in addition to those hereinafter set forth.

(2) All variances granted by the City Manager under Stage III shall become null and void upon implementation of Stage IV.

(3) The draining and filling of public swimming pools not equipped with filtration and re-circulation equipment is prohibited; said pools shall be closed.

(4) The operation of any ornamental fountain or similar structure is prohibited.

(5) Commercial nurseries, commercial sod farms, and similarly situated commercial establishments shall water only on designated days between the hours of 10:00 a.m. and 5:00 p.m. and shall utilize only hand-held hoses, drip irrigation systems, or hand-held buckets.

(6) No applications for new, additional, further expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or other water service facilities of any kind shall be allowed, approved, or installed except as approved by the City Council.

(7) All outside water use for any purpose is prohibited without the specific authorization of the City Council.

(8) The drought surcharge shall be increased to ten dollars (\$10.00) per one thousand (1,000) gallons of residential water used in excess of six thousand (6,000) gallons per billing cycle.

Sec. 22.57. Designated outside water use days.

TABLE INSET:

Last Digit of Address	Day
0 or 1	Monday
2 or 3	Tuesday
4 or 5	Wednesday
6 or 7	Thursday
8 or 9	Friday

Sec. 22-58. Special exemptions.

None of the water and use regulations in section 22-56 above shall apply to the following uses of water:

(a) The necessary use of water by a governmental entity in pursuit of its governmental functions for the benefit of the general public, such as for capital improvement construction projects, flushing of utility lines, concrete work, and for building construction purposes;

(b) The necessary use of water, other than for landscape irrigation, for land development, such as roadway construction, flushing and installation of utility lines, concrete and asphalt work, and for building construction processes;

(c) The necessary use of water for emergency maintenance or repair of water distribution, wastewater collection, residential and commercial plumbing and permanently installed landscape irrigation systems.

Sec. 22-59. Enforcement.

(a) Any person, corporation, association, customer or user of water of the water system of the City violating a provision of this division for the first time during Stage I and/or Stage II or equivalent usage restriction stages may receive a written warning.

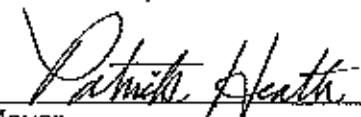
(b) Any person, corporation or association violating a provision of this division for a second time during Stage I and/or Stage II, or for the first time during Stage III or Stage IV, shall be issued a citation and upon conviction shall be fined not to exceed one thousand dollars (\$1,000.00) and each day or fraction of a day during which this division or any part thereof shall be violated shall be deemed a separate offense and punishable as such.

(c) If any person, firm, corporation, association, customer or user of water from the water system of the City is found guilty upon a second conviction of a violation of this division the Director of Public Works shall be directed to discontinue water service to the premises or have installed a flow restriction device where such violation occurs, upon authorization by the City Council.

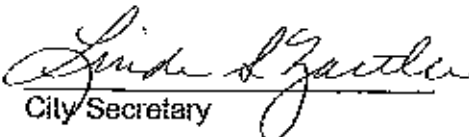
Passed and approved this the 13th day of December, 2005.

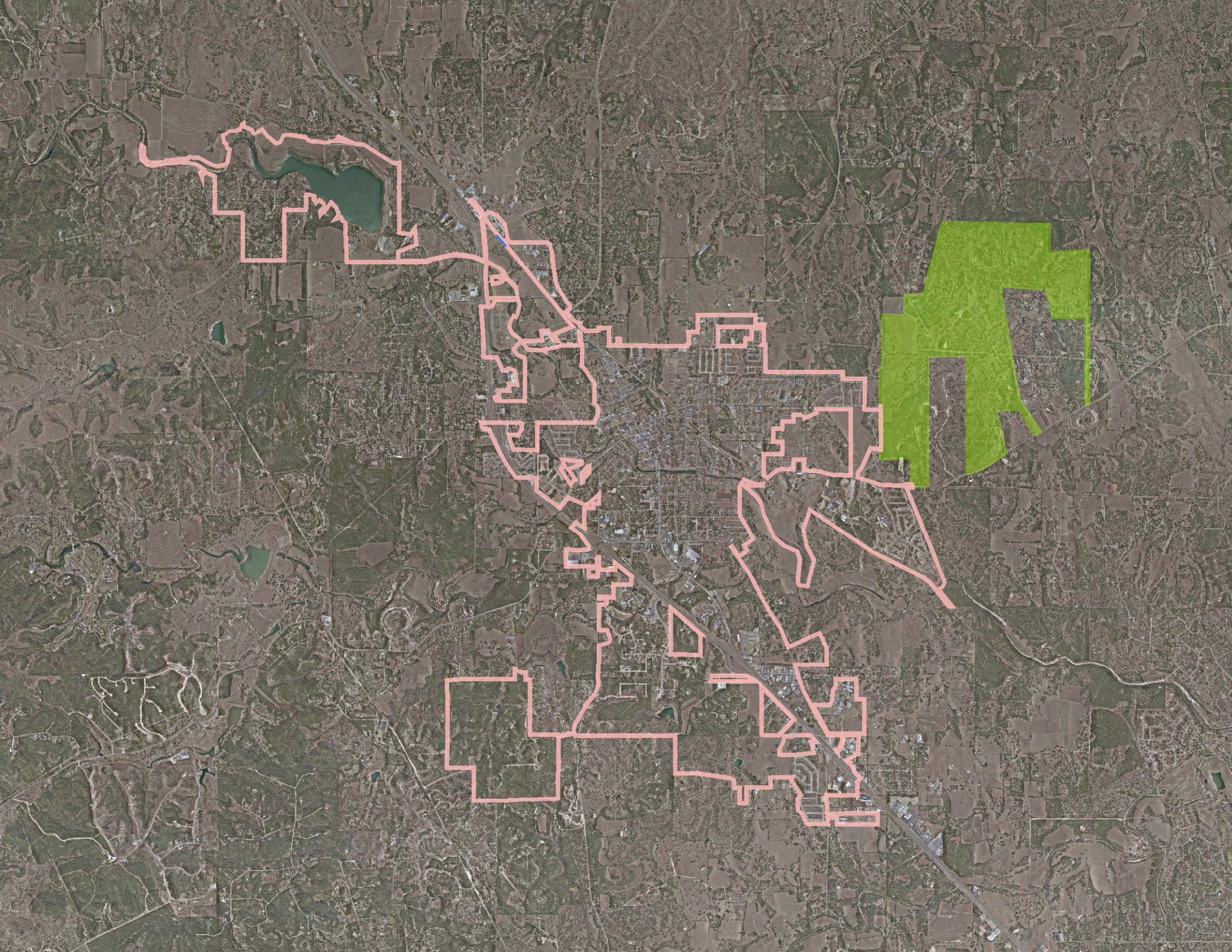
Passed, approved and adopted this the 10th day of January, 2006.

APPROVED;


Mayor

ATTEST:


City Secretary





7286 Dietz Elkhorn · Fair Oaks Ranch, Texas 78015 · (210) 698-0900 · (866) 258-2505

May 5, 2010

Reem Zoun, P.E.
AECOM
400 West 15th Street
Suite 500
Austin, TX 78701

RE: Kendall County Regional Water/Wastewater Planning Study
Water Utility Survey

Dear Ms. Zoun,

I apologize for my delay in responding to your survey request for the City of Fair Oaks Ranch. Answers to the survey are attached. I am available if you require any additional information or clarification to the survey.

The City recently updated the Water Conservation Plan and Drought Contingency Plan Ordinances. These can be found on the City's website at <http://www.fairoaksranchtx.org/Archive.aspx?AMID=45>

Sincerely,

Ronald C. Emmons, P.E.
Public Works Director
City of Fair Oaks Ranch

Attachments
rce

Kendall County Regional Water and Wastewater Planning Study Water Utility Survey

Utility Survey

Utility Name: Fair Oaks Ranch Utilities

Person Completing this Survey:

Name: Ron Emmons

Title: Public Works Director

Contact Information: 7286 Dietz Elkhorn

Fair Oaks Ranch, TX 78015

Date: _____

Do you supply (please check all that applies):

- ☒ Potable Water Service
- ☒ Wastewater Collection and Treatment

Public Water System (PWS) Information

PWS Name	PWS ID
<u>Fair Oaks Ranch Utilities</u>	<u>0150216</u>
_____	_____
_____	_____

Please fill out a separate survey form for each water system if you have multiple water systems.

Water Usage

What are your sources of water (please check all that applies):

- ☒ Groundwater – self produced –permitted annual volume: _____
- ☐ Groundwater – purchased from other –permitted annual volume: _____
- ☐ Surface Water – own water rights/ self treat – maximum annual volume: _____
- ☐ Surface Water – buy raw from others/ self treat – max. annual volume: _____
- ☒ Surface Water – buy treated water from others – max. annual volume: 890 AF
- ☐ Other (please describe): _____

Please list Certificates of Convenience and Necessity (CCN) that your Utility holds for water.

CCN Number	CCN Name
<u>11246</u>	<u>City of Fair Oaks Ranch</u>
_____	_____
_____	_____

Annual water usage during calendar year 2009: 483,149,000

Water usage by month during calendar year 2009:

January	February	March	April	May	June
33,398,000	34,093,000	38,840,000	44,316,000	46,066,000	57,150,000

July	August	September	October	November	December
62,490,000	59,642,000	34,646,000	24,030,000	25,394,000	23,084,000

Historic peak day volume for water delivery: 3.062 mgd. Date of occurrence: June 17, 2008

Please provide the following water use data:

Year	Volume of Water Pumped into System (Million Gallons)		
	Total	Groundwater	Surface Water
2009	483.149	205.335	277.814
2008	536.151	262.615	273.536
2007	342.437	91.586	250.851
2006	472.911	310.826	162.085
2005	463.838	463.838	0

Please provide the following customer data:

Year	Number of Connections				Sales			
	Single Family	Multi Family	Commer- cial	Industrial	Single Family	Multi Family	Commer- cial	Industrial
Jan 01 2010	2340	12	47	0				
Jan 01 2009	2313	12	52	0				
Jan 01 2008	2286	10	54	0				
Jan 01 2007	2221	12	53	0				
Jan 01 2006				0				

Please provide your projected water usage (based on your planning):

Year	Number of Connections				Sales			
	Single Family	Multi Family	Commer- cial	Industrial	Single Family	Multi Family	Commer- cial	Industrial
Jan 01 2011								
Jan 01 2012								
Jan 01 2013								
Jan 01 2014								
Jan 01 2015								

Please Describe your Water Production Facilities:

Name	Type (well/ treatment plant)	Rated Capacity (mgd)
Elmo Davis Plant	Water Treatment - groundwater	
Plant No. 2	" " "	
Plant No. 3	" " "	
Plant No. 5	Take Point - GBR A	

Population:

Based on best available information; please provide an estimate of population in you service area in Kendall County.

Past Population

Year	Estimated Population Served in Utility Service Area*
Jan 01, 2010	
Jan 01, 2009	
Jan 01, 2008	
Jan 01, 2007	
Jan 01, 2006	

*Please indicate population in Kendall County Only

Population Projection

Year	Estimated Population Served in Utility Service Area*
Jan 01 2011	
Jan 01 2012	
Jan 01 2013	
Jan 01 2014	
Jan 01 2015	

*Please indicate population in Kendall County Only

Growth:

Please provide a description of where you think growth/development is going to be located in your area. List any planned or ongoing development that you are aware of in Kendall County. Please attach a map to show location as necessary.

Growth in Stone Creek Ranch subdivision (see attached map)
Note that any growth beyond Stone Creek Ranch would need to justify where the water will come from.

Water Quality

Please describe any quality issues or concerns you have experienced with your source water:

THM concerns with purchased surface water. G-BRA closely monitors delivered water.

Please list all NPDES Permits held by your utility:

Permit Number	Date Granted	Permitted Volume (million gallons/ year)
WQ 00 11867-001		0.5 MGD via irrigation of 280 acres @ 2.0 acre-feet max application rate

Please describe any concerns you have regarding point or non-point source pollutant discharge in Kendall County that may impact water quality:

I am concerned about Boerne's planned WWTTP that will discharge into the Gbolo Creek upstream of Fair Oaks Ranch. This creek has multiple recharge features that likely impact the aquifers.

Drought Management and Water Conservation

Does your utility have a state approved drought contingency plan?

- ☒ Yes. If yes, please attach a copy.
☐ No

Was your utility impacted by recent drought?

- ☒ Yes. If yes, please answer the items below.
☐ No

Date and length of Drought: _____

How was your utility impacted? Entered Stage 2 Water Restriction

- ☐ Percent change in demand during drought: _____
☐ Percent change in supply during drought: _____

Response measures employed: Enforced Stage 2, which imposes
a surcharge on customers excessive water use (above
25,000 gallons a month).

What would you do differently in a future drought? _____

Have you implemented any water conservation measures? If yes, please describe the measures.

What future measures are being considered to encourage water conservation?

Investigating a fixed base Automated Meter Reading system.

Wastewater Services

Please describe your wastewater service facility:

- ☐ Do not operate wastewater service
- ☒ Own and operate wastewater collection system
- ☒ Own and operate wastewater treatment plant
- ☐ Other (please describe): _____

Please list Certificates of Convenience and Necessity (CCN) that your Utility holds for wastewater.

CCN Number

CCN Name

20497

City of Fair Oaks Ranch

Annual wastewater flow treated during calendar year 2009 (please break down by plants in case of multiple plants): _____

79,026,380 gallons

Please list the wastewater flow treated by month during calendar year 2009:

	January	February	March	April	May	June
Treatment Plant 1	6,922,630	5,954,040	6,673,370	6,459,150	6,757,300	6,327,090
Treatment Plant 2						

	July	August	September	October	November	December
Treatment Plant 1	6,295,700	6,136,120	6,134,120	7,549,860	6,906,370	6,905,630
Treatment Plant 2						

Historic peak day volume for wastewater treatment: 1,887,610 mgd. Date of occurrence: July 2002

Please provide the following wastewater data:

Calendar Year	Volume of Wastewater Treated (Million Gallons)
2009	79.02638
2008	79.49676
2007	109.60201
2006	68.38006
2005	71.40651

← Note - missing 43 days of data

Please provide the following customer data:

Year	Number of Sewer Connections					
	Total	Single Family	Multi Family	Commercial	Industrial	Other
Jan 01 2010	1372	1237	12	10	0	113
Jan 01 2009	1340	1224	12	14	0	90
Jan 01 2008	1314	1153	10	15	0	136
Jan 01 2007	1250	1076	12	14	0	148
Jan 01 2006						

Please provide your projection on future sewer connection (based on your planning):

Year	Number of Sewer Connections					
	Total	Single Family	Multi Family	Commercial	Industrial	Other
Jan 01 2011						
Jan 01 2012						
Jan 01 2013						
Jan 01 2014						
Jan 01 2015						

Please describe your wastewater treatment facilities:

Name	Type of Treatment Plant	Rated Capacity (mgd)
Fair Oaks Ranch WWTP	Activated Sludge	0.5

Future Development

Please describe any considered/ proposed plans to meet water needs in support of future growth:

Please describe any considered/ proposed plans to meet wastewater needs in support of future growth:

Please describe any planned additions, changes, and/or upgrades that will be implemented to the water production or wastewater treatment facilities of your utility:

Water - An elevated tank in Kendall County to improve
fire flow capabilities.
- Several inter-connections of water distribution system

Comments

Please provide any other comments relevant to the Kendall County Water and Wastewater planning study:

Please return your completed survey by February 8th, 2010 to:

Reem Zoun, PE
AECOM
400 West 15th St, Suite 500
Austin, TX 78701
Ph. 512 472 4519 Fax: 512 472 7519

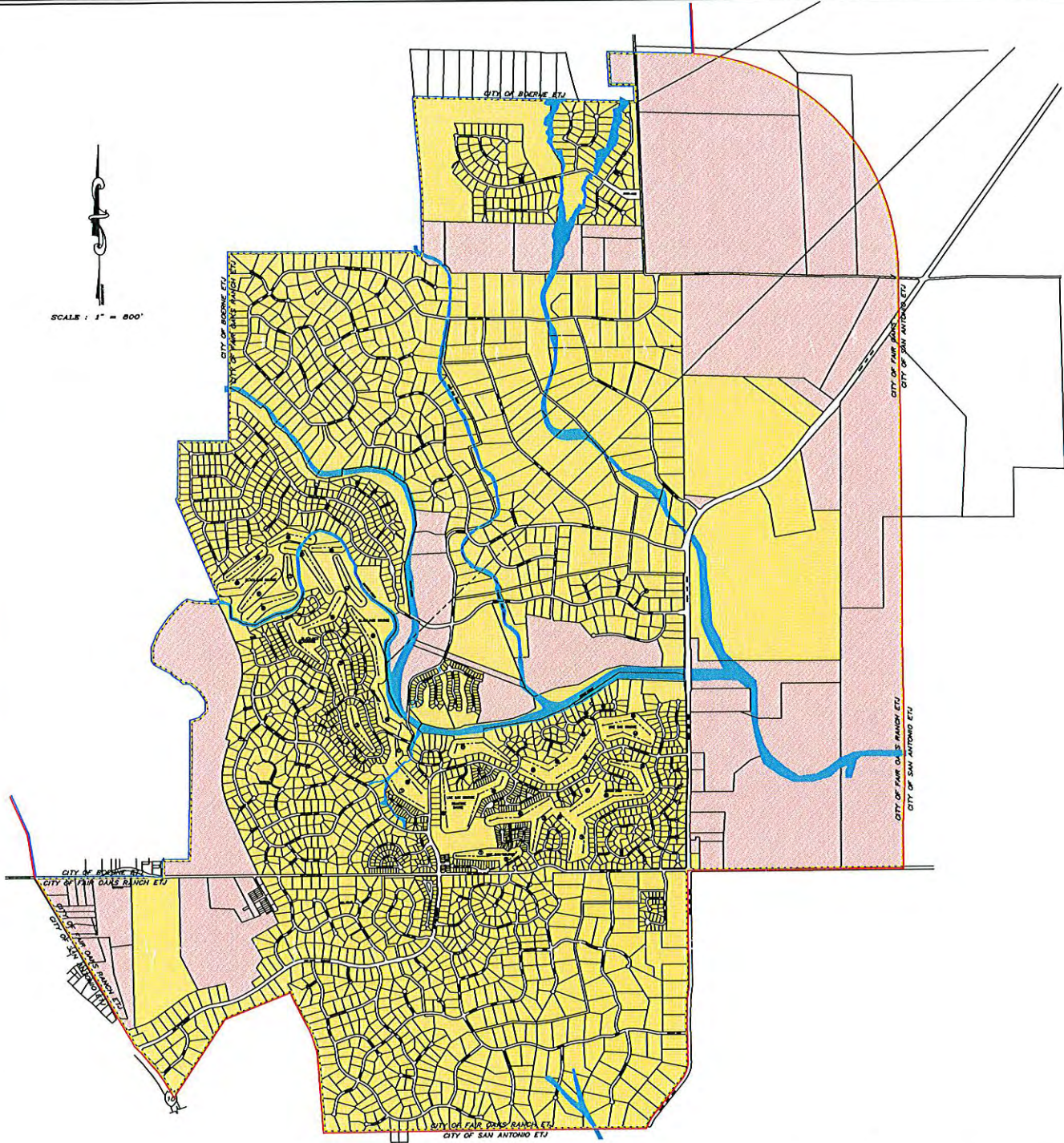
Should you have any questions, please contact:

Reem Zoun, PE
Phone: 512 457 7742
Email: reem.zoun@aecom.com

or

Bill Thaman, PE
Phone: 512 457 7717
Email: bill.thaman@aecom.com

SCALE : 1" = 800'



CURRENT CITY LIMITS AND E.T.J. MAP

LEGEND	
	DENOTES ANNEXED AREAS
	DENOTES AREAS THAT ARE WITHIN THE CITY OF FAIR OAKS RANCH ETJ