# GBRA Kendall County Water and Wastewater Planning Study Schedule

## Project Meetings:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>01/11/2010</td>
<td>Public Kickoff Meeting</td>
<td>Boerne Community Center</td>
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<tr>
<td>03/23/2010</td>
<td>First Advisory Committee Meeting</td>
<td>Cibolo Nature Center</td>
<td>1:30 to 3:30 pm</td>
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<tr>
<td>05/27/2010</td>
<td>Second Advisory Committee Meeting</td>
<td>Cibolo Nature Center</td>
<td>1:30 to 3:30 pm</td>
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<td>07/01/2010</td>
<td>Mid-Point Public Meeting</td>
<td>Boerne Community Center</td>
<td>5:30 to 7:30 pm</td>
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<td>07/22/2010</td>
<td>Final Advisory Committee Meeting</td>
<td>Greater Boerne Chamber of Commerce</td>
<td>1:30 to 3:30 pm</td>
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<td>09/14/2010</td>
<td>Final Public Meeting</td>
<td>Boerne Community Center</td>
<td>5:30 to 7:30 pm</td>
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<tr>
<td>Mike Mann</td>
<td>City of Boerne</td>
<td>P. O. Box 1677</td>
<td>Boerne, Texas 78006</td>
</tr>
<tr>
<td>Ron Emmons</td>
<td>City of Fair Oaks Ranch</td>
<td>7286 Dietz Elkhorn</td>
<td>Fair Oaks Ranch, Texas 78015</td>
</tr>
<tr>
<td>Melissa Bryant</td>
<td>San Antonio River Authority</td>
<td>100 E. Guenther Street</td>
<td>San Antonio, Texas 78204</td>
</tr>
<tr>
<td>Micah Voulgaris</td>
<td>Cow Creek Groundwater Conservation District</td>
<td>216 Market Avenue, Suite 105</td>
<td>Boerne, Texas 78006</td>
</tr>
<tr>
<td>Keith Marquart</td>
<td>Kendall County WC&amp;ID</td>
<td>P.O.Box 745</td>
<td>Comfort, Texas 78013</td>
</tr>
<tr>
<td>David Welsch</td>
<td>Guadalupe-Blanco River Authority</td>
<td>933 E. Court</td>
<td>Seguin, TX 78155</td>
</tr>
<tr>
<td>John Kight</td>
<td></td>
<td>33 Tower Road</td>
<td>Boerne, TX 78006-7921</td>
</tr>
<tr>
<td>Fred Bartel</td>
<td></td>
<td>101 Waring Welfare Rd</td>
<td>Boerne, TX 78006-7925</td>
</tr>
<tr>
<td>Rick Tobolka</td>
<td>Kendall County</td>
<td>201 E. San Antonio St., Suite 101</td>
<td>Boerne, TX 78006</td>
</tr>
<tr>
<td>Grady Jolley</td>
<td>Nunley Jolley Cluck Aelvoet LLP</td>
<td>1580 South Main, Suite 200</td>
<td>Boerne, TX 78006</td>
</tr>
<tr>
<td>Shad Schmidt</td>
<td>Marlin Atlantis</td>
<td>Galleria Tower II 13455 Noel Road, 23rd floor</td>
<td>Dallas, TX 75240</td>
</tr>
<tr>
<td>Marty Bryant</td>
<td>Cibolo Creek Nature Center</td>
<td>28614 Whirlaway Circle</td>
<td>Boerne, TX 78015</td>
</tr>
<tr>
<td>Kathleen Ligon</td>
<td>Texas Water</td>
<td>P.O. Box 13231</td>
<td>Austin, TX 78711-3231</td>
</tr>
</tbody>
</table>
Kendall County and City of Fair Oaks Ranch Regional Water and Wastewater Study
Advisory Committee

| Mike Schultz, Director | Development Board | GBRA 116 W. Blanco Rd. #100 | Boerne, TX 78006 | Kathleen.Ligon@twdb.state.tx.us | mschultz@TheTrustCompany.com | (210) 827-0852 |
March 4, 2010

Mike Mann
City of Boerne
P. O. Box 1677
Boerne, Texas 78006

Subject: Kendall County and the City of Fair Oaks Ranch Regional Water and Wastewater Planning Study

Dear Mr. Mann:

The GBRA is pleased to have you serve on the advisory committee for this regional planning study. We would like to hold our first meeting of the committee on March 23, 2010, starting at 1:30 p.m. in the Cibolo Nature Center (map attached). Please let us know by return email if you will be able to attend.

The purpose of this initial meeting will be to obtain your review and comments regarding growth projections and development processes in the study area. Our consultant for this study, AECOM, will provide relevant maps and materials at the meeting and will present the results of their initial data analysis regarding the County's growth. We also hope to begin discussions of the various alternatives for regional water and wastewater facilities to meet the future needs within the study area.

The tentative discussion agenda is provided below.

1. Brief summary of study objectives.
2. Review of identified growth trends and development processes in the study area.
3. Discussion of alternative development scenarios and associated assumptions and selection of the preferred development scenario.
4. Review of water supply options, including Region L strategies.
5. Review of wastewater system alternatives and discussion of stream water quality issues.

Please do not hesitate to contact me with any questions. We appreciate your participation and look forward to your input on this important study for our region.

Sincerely,

Debbie Magin,
Director of Water Quality Services

cc. Mike Schultz, GBRA Director
    AECOM
    Kathleen Ligon, TWDB

Main Office: 933 East Court Street – Seguin, Texas 78155
Directions

From San Antonio, take IH-10 West about 30 miles to the first Boerne exit (#542) - Highway 87 North.

Follow 87 North into downtown Boerne. It becomes Main Street, which is also called Hauptstrasse. Turn right at Highway 46 East, also marked as River Road. The road parallels Cibolo Creek.

Continue on Highway 46 East for about one mile and turn right onto City Park Road. (If you reach the Kendall County Fairgrounds you have gone too far.)

Take City Park Road almost to the end and turn right into the Cibolo Nature Center.

Cibolo Nature Center
140 City Park Road
Boerne, TX 78006
Ph.: 830-249-4616

Cibolo Nature Center Hours:

Monday - Friday: 9 am to 5 pm
Saturday 9 am to 1 pm
Sunday Visitor Center Closed

Trails daily 8 am to dark
AGENDA

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study Kickoff Meeting
Monday, January 11, 2010
Boerne Convention and Community Center
820 Adler Road, Boerne, TX 78006
10:30 a.m.

I. Welcome and Introductions - GBRA

II. Project Overview – AECOM
   A. Project Objective
   B. Project Organization
   C. Scope of Work – Major Tasks
   D. Information Needs
   E. Population Projections
   F. Project Timeline
   G. Project Milestones

III. Q&A

IV. Public Comments – limit 3 minutes per person
KENDALL COUNTY & CITY OF FAIR OAKS RANCH
WATER & WASTEWATER PLANNING STUDY
PROJECT KICK-OFF MEETING

BOERNE CONVENTION & COMMUNITY CENTER
JANUARY 11, 2010

David Packhill, AECOM
Matt Moses

Melissa Bryant, SARA mbryant@sara-tx.org
Charles Lerea, SARA clerea@sara-tx.org
Bryan Woods, Cuyler Engineering Inc., 830-755-8454
Bryan.Woods@cuylerengineering.com, 9120 Old Dietz, Elkton, TX, 78015

Mitch Vougeois, CCGCD manager@ccgced.org
Jason Nelson, AECOM

Dwayne Rathburn, SAWS, P.O. Box 2449, S.A. 78298 drathburn@saws.org
Mike Moon, Boerne mmoon@ci.boerne.tx.us

Jan Bass

Daig Welch, GBR, dwelsch@gbra.org
Tony Bennett, AECOM
Bill Thaman, AECOM
Reem Zouw, AECOM

Don Emmons, Fair Oaks Ranch Public Works Director

Kathleen Ligon, TNRIS, Kathleen.ligon@tpwd.state.tx.us
Bill West, GBR, General Manager, bwes@gbra.org
Lynn Bumgardner, TCEQ, lynn.bumgardner@tceq.texas.gov
Lynn Linsky, TCEQ, l lyn.s@tceq.state.tx.us

Jac King, AECOM
Michael Schultze, GBR, Director mschultze@thetrustcompany.com

Ryan Bane, Waterway Planning Coordinator - City of Boerne
P.O. Box 1677 - 402 E. Blanco - Boerne, TX 78006
830-248-1538 work rbass@ci.boerne.tx.us
1326 Fax
AGENDA

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study Kickoff Meeting
Monday, January 11, 2010
Boerne Convention and Community Center
820 Adler Road, Boerne, TX 78006
10:30 a.m.

I. Welcome and Introductions – GBRA

Bill West from GBRA started the meeting by welcoming everyone and requested Michael Scholz to provide introductory comments.

Michael Scholz read from a text containing remarks about development of Boerne. Michael spoke about the growth and development in the county and its need for water resources and wastewater planning. He wished the project well and turned the audience over to Bill Thaman from AECOM.

II. Project Overview – AECOM

A. Project Objective
B. Project Organization
C. Scope of Work – Major Tasks
D. Information Needs
E. Population Projections
F. Project Timeline
G. Project Milestones

Bill Thaman (Project Manager, AECOM) presented on the project objective, overview, needs, timeline and milestone. Tony Bennett talked about Water Quality.

III. Q&A and Public Comments

Comment: Mike Mann, City of Boerne: They are located in the San Antonio River Basin. Looking forward to cooperate on this project.

Q: Melissa Bryant, SARA: Is there a specific format or deadline which the required information should be submitted in?
A: Bill T: Information received by the end of the month will be appreciated. Water utility survey to be sent out within a week.

Q: Bill West: How will the stakeholders communicate with each other?
A: Bill T. A stakeholder committee will be formed with one person from each stakeholder. Debbie: GBRA will contact prospective stakeholders.

Q: Bill West: How do include someone from Comfort? Perhaps we can have someone from the Real State Council.  
A: Micah: Comfort does not have any specific group for Real State Council. Debbie will contact Keith Marquah at WCID#1 to make sure he receives the information and possibly join the stakeholder committee.

Q: Michael Scholz: What do we know about Diamond K?  
A: Micah: Located off Sisterdale Road. They have 10 to 50 acre lots. Development has been slow in general. Cow Creek GCDs operation has been slow lately, they have been receiving approximately 3 permit applications/month.

Comment: Mike Mann, City of Boerne: They have an ordinance including quantity of water but not quality.

Q: What was the scope of the Watershed Protection Plan?  
A: (Ryan Bass): The current steering committee has 8 to 10 people. They are holding a public meeting soon.
Advisory Committee Meeting- March 23, 2010

Guadalupe Blanco River Authority
Regional Water/Wastewater Planning
for Kendall County and Fair Oaks Ranch, Texas

Meeting Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Time</th>
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<tbody>
<tr>
<td>Welcome and introductions.</td>
<td>1:30 p.m.</td>
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<tr>
<td>Meeting objectives and protocols.</td>
<td>1:40</td>
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<tr>
<td>Project background and summary of planning study objectives.</td>
<td>1:50</td>
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<tr>
<td>Population projections - selection of preferred projection for the study area.</td>
<td>2:00</td>
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<td>Geographic distribution of current population and anticipated future growth.</td>
<td>2:20</td>
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<tr>
<td>Water supply and demand projections, and Region L strategies.</td>
<td>2:50</td>
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<tr>
<td>Wastewater systems and future alternatives.</td>
<td>3:15</td>
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<tr>
<td>Selection of next meeting date and other business.</td>
<td>3:25</td>
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<tr>
<td>Adjourn.</td>
<td>3:30 p.m.</td>
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Meeting Notes

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study
First Advisory Group Meeting
Monday, March 23, 2010
Cibolo Nature Center
1:30 p.m.

I. Welcome and Introductions – GBRA

Michael Scholz from GBRA started the meeting by welcoming everyone and then turned the meeting over to David Parkhill from AECOM.

II. Project Overview – AECOM

David P. asked everyone to introduce themselves and briefly discussed ground rules. David P. then proceeded with a presentation on project overview, and various growth scenarios which AECOM had developed for this meeting. Water demand, supply options, and wastewater options were discussed briefly but were not covered in detail at this meeting.

III. Key Meeting Outcomes:

Key discussions from this meeting was on growth scenarios which are listed below:
- Identified preferred population projection
- Four developments zones instead of three – new development zone for Western Kendall County including Comfort
- Modified development zones
- Identification of areas of low probable growth
- Identification of some conservation easements
- Discussion about growth rates in different zones – Northern Kendall County and Western Kendall County grows at a slower pace than the other areas.
Advisory Committee Meeting- May 27, 2010

Guadalupe Blanco River Authority
Regional Water/Wastewater Planning
for Kendall County and Fair Oaks Ranch, Texas

Meeting Agenda

**Topic**

1:30 p.m. Welcome and introductions.
- Welcome and introductions (5 min)
- Meeting objectives and protocols (5 min)

1:40 Growth Scenario.
- Findings from first advisory group meeting (5 min).
- Development zones (5 min).
- Geographic distribution of population and anticipated future growth (10 min).

2:00 Water Supply Planning.
- Water demand and water use factors (10 min).
- Available water supply and shortage (10 min).
- Water supply strategy options (10 min).

2:30 Wastewater Planning.
- Wastewater loadings, wastewater systems –existing conditions (10 min).
- Wastewater collection systems alternatives (10 min).
- Wastewater treatment systems alternatives (10 min).

3:00 Discussion of future work.
- Water Quality.

3:15 Selection of next meeting date and other business.

3:30 p.m. Adjourn.
KENDALL COUNTY ADVISORY COMMITTEE MEETING
CIBOLO NATURE CENTER
5/27/2010

Melissa Bryant
Mike Mann
Joe Gragg
Bob Holland
David Parkman

Ron Zani
Tony Bennett
Michael Voulgaris
Kevin Burke
Ken Boss
Kathleen Ligon
Two B
Ron Emmons
Missy Magin
Jason McIvor
David Wolfsch
Ari Sedlacek
Meeting Notes
Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study
Second Advisory Group Meeting

Cibolo Nature Center

Thursday May 27, 2010
1:30 p.m.

I. Welcome and Introductions – GBRA

David Welsch from GBRA started the meeting by welcoming and thanking everyone for their time and useful feedback. David W. then turned the audience over to David Parkhill from AECOM.

II. Project Overview – AECOM

David P. provided updates on the project status, discussed revised development zones and population distribution based on outcomes from first advisory group meeting, and presented the estimated water demand, water supply and strategy options, and existing wastewater facilities in Kendall County.

III. Key Meeting Notes:

Key items of discussion and notes from this meeting are listed below:

Water Supply Options:
1. The water supply availability of the Trinity Aquifer will be re-allocated based on total surface area in each development zone.
2. Water of Canyon Lake may be made available to Kendall County if some needs in lower basin are met by other sources/ water supply project.
3. David Welsch: If San Marcos is supplied by other sources, supply from Canyon can be available to Kendall County. Water from Gonzales may be available within the next 10 years.
4. Education, brush management, rain-water harvesting are mentioned as water supply strategies.

Wastewater Planning:
5. Debbie Magin inquired about the percentage of aerobic versus conventional OSSFs in Kendall County. Micah V. mentioned that people only use aerobic if they need to. Rick T. responded approximately 20% of the systems are aerobic. Conventional systems cost half as much compared to the cost of aerobic.
6. Debbie M. mentioned impact of the aerobic would be significantly more compared to septic tank/drainfields if they were to fail and inquired about the maintenance of OSSF systems

..
7. Rick T. mentioned 98% are maintained through maintenance contracts. Currently homeowners can maintain without training after two years. However, they are looking into changing regulations where home owners will be required to receive training and will need to provide quarterly reports.

8. Debbie M. asked who will provide the training. Rick T. responded training is generally provided by manufactures.

9. Debbie mentioned GBRA provides an 8 hour training course and they would like to provide it for Kendall County area. Rick T. indicated that this will be beneficial for homeowners.
AGENDA

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study Midpoint Meeting
Thursday, July 01, 2010
Boerne Convention and Community Center
820 Adler Road, Boerne, TX 78006
5:30 p.m.

I. Welcome and Introductions - GBRA

II. Project Update – AECOM
   A. Project Overview
   B. Growth Scenario
   C. Water Supply Planning
   D. Wastewater Planning
   E. Water Quality
   F. Project Milestones

III. Public Comments – limit 3 minutes per person

IV. Q&A
Meeting Notes

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study Midpoint Public Meeting
Thursday, July 01, 2010
Boerne Convention and Community Center
820 Adler Road, Boerne, TX 78006
5:30 p.m.

I. Attendees
Fred Bartell, John Kight, Mark Anderson, Ron Emmons, David Messey (TWDB), Grady Jolley, Mike Shultz (GBRA), Debbie Magin (GBRA), Liz Sedlacek (GBRA), Jason Nelson (AECOM), Reem Zoun (AECOM), David Parkhill (AECOM).

II. Project Update – AECOM
A. Project Overview
B. Growth Scenario
C. Water Supply Planning
D. Wastewater Planning
E. Water Quality
F. Project Milestones

David Parkhill (AECOM) welcomed everyone and presented a PowerPoint presentation on the project status and interim results.

III. Q&A and Public Comments

After discussion of population:
Comment: Grady Jolley: City of Boerne annexation.

Comment: John Kight: Boerne will not have enough water in case growth is more than projected.
Response: David P requested to hold his thought and mentioned that this will be discussed later.

Comment: John Kight: They developed GPCD numbers in the Cow Creek GCD from scratch and there were not a lot of data available for it.
After shortage slide:
Comment: John Kight: Water in WCID #1 has radium problem. Even if water will be available, it will not be potable.
Response: David P.: A company capable of removing radium, namely WRS, is working with WCID#1.

Comment: Fred B. asked David P. about the feasibility of brackish desalination.
Response: David P.: It is a promising but currently undesirable alternative. Disposal of saline brine is challenging.
Comment: Fred mentioned re-circulating Guadalupe River Water project.
Response: David mentioned that the best new source of water in the County may be GBRA.

Comment: Jason N. What will be the effect of The Edwards Aquifer Recovery Implementation Program (EARIP) process, perhaps GBRA will have comment on this?
Response: Mike Shultz (GBRA): GBRA will keep up to date with the development of EARIP process.

Comment: John K. suggested seawater desalination since that will be new water.

Comment: John K. mentioned exploration water as water need that was possibly not accounted for.

Comment: John K. acknowledged limitation on information about water availability in the County until GMA9 comes up with DFC and resulting MAG. He also mentioned SAWS water may be coming to Kendall County.

David P. thanked everyone for attending the meeting and providing useful feedback.

Meeting adjourned at 6:30 p.m.
Advisory Committee Meeting Agenda

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study

Kendall County Economic Development Corporation Office
1221 S. Main St. in Boerne.

Thursday July 22, 2010
1:30 p.m.

**Topic**

1:30 p.m. Welcome and introductions.

1:35 Meeting objectives.

1:40 Summary of outcomes from latest advisory group and public meetings:

- Revised availability
- Water supply strategy options

2:00 Costing for wastewater treatment systems alternatives.

2:20 Water quality modeling – Guadalupe River.

2:40 Water quality modeling – Cibolo Creek.

3:00 Project timeline.

3:10 p.m. Adjourn.
<table>
<thead>
<tr>
<th>Name</th>
<th>Entity</th>
<th>Email Address</th>
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<tbody>
<tr>
<td>John Right</td>
<td>CGGCD</td>
<td><a href="mailto:dmRight@BeeCreek.net">dmRight@BeeCreek.net</a></td>
</tr>
<tr>
<td>Jon Barton</td>
<td>GBRA</td>
<td><a href="mailto:dmagin@gbra.org">dmagin@gbra.org</a></td>
</tr>
<tr>
<td>Kathleen Uryan</td>
<td>GBRA</td>
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</tr>
<tr>
<td>David Parkhill</td>
<td>AECOM</td>
<td><a href="mailto:david.parkhill@aecom.com">david.parkhill@aecom.com</a></td>
</tr>
<tr>
<td>Tony Bennett</td>
<td>AECOM</td>
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<td>Reem Zon</td>
<td>AECOM</td>
<td><a href="mailto:reem.zon@aecom.com">reem.zon@aecom.com</a></td>
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<tr>
<td>Grady B. Jolley</td>
<td>Nandyfirm</td>
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</tr>
<tr>
<td>Melissa Bryant</td>
<td>SARA</td>
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</tr>
<tr>
<td>Ron Emmons</td>
<td>Fair Oaks Ranch</td>
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</tr>
<tr>
<td>Liz Sendlacek</td>
<td>GBRA</td>
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</tr>
<tr>
<td>Mike Mann</td>
<td>City of Boerne</td>
<td><a href="mailto:mkmann@ci.boerne.tx.us">mkmann@ci.boerne.tx.us</a></td>
</tr>
</tbody>
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Meeting Notes

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study
Final Advisory Group Meeting

Kendall County Economic Development Corporation Office
1221 S. Main St. in Boerne

Thursday July 22, 2010
1:30 p.m.

I. Welcome and Introductions – GBRA
Debbie Magin from GBRA started the meeting by welcoming and thanking everyone for their time and useful feedback. Debbie M. turned the meeting over to David Parkhill from AECOM.

II. Project Overview – AECOM
David P. provided update on the project status and briefly discussed supply and strategy options. There was discussion on the public meeting on July 01 2010. David then turned the presentation over to Tony Bennett. Tony made a presentation on costing of wastewater options and water quality modeling.

III. Key Meeting Outcomes:
Key discussion items outcomes from this meeting are listed below:

Wastewater Options:
1. Costing of pipeline will be added to Boerne/ Fair Oaks Ranch wastewater treatment plant option.
2. Mike Mann will send to AECOM the engineer’s estimate for the Boerne 2nd wastewater treatment plant.

Water Quality:
3. Average annual rainfall in Kendall County: 32 inches/yr and 35 inches/yr were recommended at the meeting instead of 40 inches/yr used by AECOM for computing runoff for non-point pollutant loadings.
4. Increases in point and non-point pollutant loadings will be presented as a percentage of total loadings.
5. Preventative measures to reduce non-point pollution will be mentioned in the report.
AGENDA

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study
Final Public Meeting

Tuesday, September 14, 2010
Boerne Convention and Community Center
820 Adler Road, Boerne, TX 78006
5:30 p.m.

I. Welcome and Introductions - GBRA

II. Project Findings - AECOM
   A. Project Overview
   B. Key Findings
   C. Key Conclusions and Recommendations
   D. Project Milestones

III. Public Comments – limit 3 minutes per person

IV. Q&A
# Kendall County and the City of Fair Oaks Ranch
## Regional Water and Wastewater Planning Study

### Final Public Meeting

Boerne Convention and Community Center  
320 Adler Road, Boerne, TX 78006  
Tuesday, September 14, 2010  
5:30 p.m.

### Sign In Sheet

<table>
<thead>
<tr>
<th>Name</th>
<th>Entity</th>
<th>Email Address</th>
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<tbody>
<tr>
<td>David Welsch</td>
<td>GBRA</td>
<td><a href="mailto:dwelsch@gbra.org">dwelsch@gbra.org</a></td>
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<tr>
<td>David Parkhill</td>
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<td>Rig Sedlacek</td>
<td>GBRA</td>
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<td>Ray Bass</td>
<td>City of Boerne</td>
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</tr>
<tr>
<td>Tony Bennett</td>
<td>AECOM</td>
<td><a href="mailto:anthony.bennett@aecom.com">anthony.bennett@aecom.com</a></td>
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<td>CGGCID</td>
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<td>Fair Oaks Ranch</td>
<td><a href="mailto:ron.emmens@fairoaksranch.org">ron.emmens@fairoaksranch.org</a></td>
</tr>
<tr>
<td>Bradley Taylor</td>
<td>The Nealley Firm</td>
<td><a href="mailto:bjtaylor@nealleyfirm.com">bjtaylor@nealleyfirm.com</a></td>
</tr>
<tr>
<td>Mark Tensol</td>
<td>GBRA</td>
<td><a href="mailto:mark.tensol@gbra.org">mark.tensol@gbra.org</a></td>
</tr>
<tr>
<td>Kathleen Liger</td>
<td>TWRS</td>
<td><a href="mailto:k.liger@twrs.org">k.liger@twrs.org</a></td>
</tr>
<tr>
<td>Joe Gause</td>
<td>SAWS</td>
<td><a href="mailto:jgause@saows.org">jgause@saows.org</a></td>
</tr>
<tr>
<td>Michael Schultze</td>
<td>GBRA</td>
<td><a href="mailto:m.schultze@gbra.org">m.schultze@gbra.org</a></td>
</tr>
<tr>
<td>Reem Zaun</td>
<td>AECOM</td>
<td><a href="mailto:reem.zaun@gbra.org">reem.zaun@gbra.org</a></td>
</tr>
<tr>
<td>Debbie Magin</td>
<td>GBRA</td>
<td><a href="mailto:debbie.magin@gbra.org">debbie.magin@gbra.org</a></td>
</tr>
<tr>
<td>Name</td>
<td>Entity</td>
<td>Email Address</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>---------------</td>
</tr>
<tr>
<td>Jason Nelson</td>
<td>AECom</td>
<td></td>
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<tr>
<td>Jaime Runke</td>
<td>AECom</td>
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<td>20.</td>
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<td>21.</td>
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<td>26.</td>
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</tbody>
</table>
Meeting Notes

Kendall County and the City of Fair Oaks Ranch
Regional Water and Wastewater Planning Study
Final Public Meeting

Tuesday, September 14, 2010
Boerne Convention and Community Center
820 Adler Road, Boerne, TX 78006
5:30 p.m.

I. Attendees
Sign-in sheet attached.

II. Project Update – AECOM
A. Project Overview
B. Key Findings
C. Key Conclusions and Recommendations
D. Project Milestones

David Parkhill (AECOM) welcomed everyone and presented a PowerPoint presentation on the conclusions and recommendations of the project.

III. Q&A and Public Comments

Question: Steve Clouse: What is the timing for completion of the report?
Response: November 1, 2010

Question: Mark Mason: For the water supply sources, is Canyon Reservoir reached the maximum amount?
Response (David Welsch, GBRA): The raw water reservations have currently reached the maximum amount, but some contracts will expire in the future with that water potentially being available to others; and additional water may become available if new water supply sources are found to provide water to other current Canyon Reservoir customers.

Question: Mark Mason: Is the Western Canyon Project entirely funded by subscribers of that water? Future projects similar funding?
Response (David W.): It is funded by revenue bonds that are then paid for by the water customers. Yes, future projects would likely have similar funding mechanisms.
Question: Dub Smothers: What groundwater studies were looked at? Dr. Hammond with the UTSA Center for Water Research has done numerous related studies. Were those looked at? Rima Petrossian at TWDB has done numerous studies as well. Do you know her?
Response: A bibliography of the data collected is provided in the report. The advisory group provided additional information on local studies that were helpful. The TWDB groundwater studies, including Rima’s, were reviewed as well.

Question: Steve Clouse: Is conservation included in the water shortage? How is the shortage determined – drought of record?
Response (David P.): Small amounts of conservation are included in the gallon per capita per day (GPCD) numbers used to calculate the water demands. These include plumbing code savings and similar items that do not require customer usage changes. The shortage is determined on the demand side by using GPCD numbers determined from water use during a dry year, but not necessarily a drought year.

Question: Dub Smothers: You have mentioned a number of things that the County should do or implement. How do you plan to ensure the County does these things?
Response (David P.): The items mentioned are suggestions, not requirements, so there is no way to ensure they happen. The hope is that this study has caused officials in area to start talking to each other about water and wastewater and to start thinking about taking advantage of opportunities that may come along in the future. A seminar on OSSF maintenance for homeowners has already been organized by GBRA, Kendall County, and others, and has already filled up. There will likely be another one next spring or summer since there is a waiting list of approximately 50 people.

Mike Schultz with GBRA thanked everyone for attending the meeting and providing useful feedback.

Meeting adjourned at 6:30 p.m.
Transmittal

Date 06/09/2010
To Fred Bartel, John Kight
From David Parkhill, Jaime Burke
Copy Debbie Magin, David Welsch, Micah Voulgaris, Advisory Group members
Project reference Kendall County Water and Wastewater Planning Project
Transmitted via Mail, email

As per our discussion at the advisory committee meeting on May 27th, the availability of the Trinity Aquifer has been re-allocated based on total surface area in each development zone. Attached is a map of the development zones and a document showing the revised supply/shortage forecast in each zone using the 6,336 ac-ft/yr total availability allocated based on surface area. This revision creates predicted shortages for the zones with higher growth and creates a large surplus in the Northern zone where growth is limited. If the higher availability of 9,189 ac-ft/yr is used with this same approach, the shortages are eliminated for all areas except the Western Kendall County zone.

This information will be presented at the upcoming June 17th public meeting. Should you have any questions, please feel free to contact David Parkhill at 512 457 7774 or Jaime Burke at 512 457 7798. We will also be happy to hold a conference call and discuss any comments/questions if needed.
Using 6,336 ac-ft/yr as the availability of the Trinity Aquifer for the County, the total availability was divided into an available amount per Zone, based on the proportional areal size of each Zone. The I-10 Corridor Zone was broken down further by area into the Boerne Service Area, the City of Fair Oaks Ranch, and the Non-City portion.

### Northern Kendall County Zone

<table>
<thead>
<tr>
<th>Zone</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Demands (Ac-Ft/Yr)</td>
<td>786</td>
<td>814</td>
<td>914</td>
<td>999</td>
</tr>
<tr>
<td>Water Supplies (Ac-Ft/Yr)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edwards-Trinity Aquifer</td>
<td>77</td>
<td>77</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Trinity Aquifer*</td>
<td>2,851</td>
<td>2,851</td>
<td>2,851</td>
<td>2,851</td>
</tr>
<tr>
<td>Miscellaneous Surface Water</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Total Water Supplies (Ac-Ft/Yr)</td>
<td>3,023</td>
<td>3,023</td>
<td>3,023</td>
<td>3,023</td>
</tr>
<tr>
<td>Water Shortage (Ac-Ft/Yr)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Water Surplus (Ac-Ft/Yr)</td>
<td>2,237</td>
<td>2,209</td>
<td>2,109</td>
<td>2,024</td>
</tr>
</tbody>
</table>

* The amount shown as available from the Trinity Aquifer is the proportional amount by area of the suggested minimum total available aquifer volume for Kendall County (6,336 ac-ft/yr).

### Western Kendall County Zone

<table>
<thead>
<tr>
<th>Zone</th>
<th>2010</th>
<th>2020</th>
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<tbody>
<tr>
<td>Water Demands (Ac-Ft/Yr)</td>
<td>622</td>
<td>710</td>
<td>812</td>
<td>930</td>
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<tr>
<td>Water Supplies (Ac-Ft/Yr)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trinity Aquifer*</td>
<td>570</td>
<td>570</td>
<td>570</td>
<td>570</td>
</tr>
<tr>
<td>Other Surface Water</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total Water Supplies (Ac-Ft/Yr)</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
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<tr>
<td>Water Shortage (Ac-Ft/Yr)</td>
<td>-22</td>
<td>-110</td>
<td>-212</td>
<td>-330</td>
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<tr>
<td>Water Surplus (Ac-Ft/Yr)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* The amount shown as available from the Trinity Aquifer is the proportional amount by area of the suggested minimum total available aquifer volume for Kendall County (6,336 ac-ft/yr).

### Central Kendall County Zone

<table>
<thead>
<tr>
<th>Zone</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Demands (Ac-Ft/Yr)</td>
<td>1,829</td>
<td>2,632</td>
<td>3,159</td>
<td>4,025</td>
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<tr>
<td>Water Supplies (Ac-Ft/Yr)</td>
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<td></td>
</tr>
<tr>
<td>Trinity Aquifer*</td>
<td>1,635</td>
<td>1,635</td>
<td>1,635</td>
<td>1,635</td>
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<tr>
<td>Canyon Lake Reservoir**</td>
<td>230</td>
<td>800</td>
<td>1,225</td>
<td>1,650</td>
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<tr>
<td>Other Surface Water</td>
<td>77</td>
<td>77</td>
<td>77</td>
<td>77</td>
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<td>Total Water Supplies (Ac-Ft/Yr)</td>
<td>1,942</td>
<td>2,512</td>
<td>2,937</td>
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<td>0</td>
<td>-120</td>
<td>-222</td>
<td>-663</td>
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<td>Water Surplus (Ac-Ft/Yr)</td>
<td>113</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</table>

* The amount shown as available from the Trinity Aquifer is the proportional amount by area of the suggested minimum total available aquifer volume for Kendall County (6,336 ac-ft/yr).

** Amount shown is primarily the anticipated annual commitment total for Cordillera Ranch.
### City of Boerne Service Area

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
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<tbody>
<tr>
<td>Water Demands (Ac-Ft/Yr)</td>
<td>2,100</td>
<td>3,129</td>
<td>4,588</td>
<td>4,802</td>
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<tr>
<td>Water Supplies (Ac-Ft/Yr)</td>
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<tr>
<td>Trinity Aquifer*</td>
<td>307</td>
<td>307</td>
<td>307</td>
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<tr>
<td>Canyon Lake Reservoir**</td>
<td>975</td>
<td>1,989</td>
<td>3,448</td>
<td>3,611</td>
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<tr>
<td>Boerne City Lake</td>
<td>833</td>
<td>833</td>
<td>833</td>
<td>833</td>
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<tr>
<td>Total Water Supplies (Ac-Ft/Yr)</td>
<td>2,115</td>
<td>3,129</td>
<td>4,588</td>
<td>4,751</td>
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<td>Water Shortage (Ac-Ft/Yr)</td>
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<td>Water Surplus (Ac-Ft/Yr)</td>
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</table>

* The amount shown as available from the Trinity Aquifer is the proportional amount by area of the suggested minimum total available aquifer volume for Kendall County (6,336 ac-ft/yr).

** Amount shown is the anticipated annual commitment for the City of Boerne service area (including Esperanza).

### City of Fair Oaks Ranch

<table>
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<tr>
<th></th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Demands (Ac-Ft/Yr)</td>
<td>1,505</td>
<td>1,809</td>
<td>2,111</td>
<td>2,354</td>
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<tr>
<td>Water Supplies (Ac-Ft/Yr)</td>
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<tr>
<td>Trinity Aquifer*</td>
<td>543</td>
<td>543</td>
<td>543</td>
<td>543</td>
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<tr>
<td>Canyon Lake Reservoir**</td>
<td>962</td>
<td>1,266</td>
<td>1,568</td>
<td>1,850</td>
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<tr>
<td>Total Water Supplies (Ac-Ft/Yr)</td>
<td>1,505</td>
<td>1,809</td>
<td>2,111</td>
<td>2,393</td>
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<tr>
<td>Water Shortage (Ac-Ft/Yr)</td>
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<tr>
<td>Water Surplus (Ac-Ft/Yr)</td>
<td>0</td>
<td>0</td>
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<td>39</td>
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* The amount shown as available from the Trinity Aquifer is the proportional amount by area of the suggested minimum total available aquifer volume for Kendall County (6,336 ac-ft/yr). plus 500 ac-ft/yr from the wells in Bexar and Comal Counties.

** Amount shown is anticipated annual commitment for the City of Fair Oaks Ranch.

### Non-City Portion of I-10 Corridor Zone

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<tbody>
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<td>1,801</td>
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<td>2,820</td>
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<td>Water Supplies (Ac-Ft/Yr)</td>
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<td></td>
</tr>
<tr>
<td>Trinity Aquifer*</td>
<td>930</td>
<td>930</td>
<td>930</td>
<td>930</td>
</tr>
<tr>
<td>Canyon Lake Reservoir**</td>
<td>425</td>
<td>835</td>
<td>1,300</td>
<td>1,500</td>
</tr>
<tr>
<td>Other Surface Water</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Total Water Supplies (Ac-Ft/Yr)</td>
<td>1,395</td>
<td>1,805</td>
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<td>Water Shortage (Ac-Ft/Yr)</td>
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<td>0</td>
<td>-350</td>
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<tr>
<td>Water Surplus (Ac-Ft/Yr)</td>
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<td>4</td>
<td>97</td>
<td>0</td>
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</table>

* The amount shown as available from the Trinity Aquifer is the proportional amount by area of the suggested minimum total available aquifer volume for Kendall County (6,336 ac-ft/yr).

** Amount shown is the anticipated annual commitment for Lerin Hills and Kendall County Utility Company/Tapatio.
### I-10 Corridor Zone (All)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
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</thead>
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<td>Water Demands (Ac-ft/Yr)</td>
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<td>Water Supplies (Ac-ft/Yr)</td>
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<td></td>
</tr>
<tr>
<td>Trinity Aquifer*</td>
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<td>1,780</td>
<td>1,780</td>
<td>1,780</td>
</tr>
<tr>
<td>Canyon Lake Reservoir**</td>
<td>2,362</td>
<td>4,090</td>
<td>6,316</td>
<td>6,961</td>
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<td>Boerne City Lake</td>
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<td>833</td>
<td>833</td>
<td>833</td>
</tr>
<tr>
<td>Other Surface Water</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Total Water Supplies (Ac-ft/Yr)</td>
<td>5,015</td>
<td>6,743</td>
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<td>Water Shortage (Ac-ft/Yr)</td>
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<td>0</td>
<td>-362</td>
</tr>
<tr>
<td>Water Surplus (Ac-ft/Yr)</td>
<td>127</td>
<td>4</td>
<td>97</td>
<td>0</td>
</tr>
</tbody>
</table>

* Trinity Aquifer amount equals 1,280 ac-ft available by area in Kendall County plus an assumed 500 ac-ft from Fair Oaks Ranch wells outside of Kendall County. (Entire Fair Oaks Ranch water demand included)

** Amount shown is the anticipated annual commitment for the Boerne Service Area, the City of Fair Oaks Ranch, Lerin Hills, and Kendall County Utility Company/Tapatio.