

**MEMO**

**To:** Melanie Callahan  
**Through** Larry French, Robert Mace <sup>Sub</sup> CAT for  
**From:** Rima Petrossian <sup>RP</sup>  
**Date:** 8/8/2013  
**Re:** Management Plan Approval for McMullen Groundwater Conservation District

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Staff recommends that the McMullen Groundwater Conservation District management plan be approved as administratively complete.

McMullen Groundwater Conservation District management plan is due for the Executive Administrator's approval by Friday, September 13, 2013.

## Patricia Blanton

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**Subject:** 8/5-9 Robert Mace (state business/vacation); Comer Tuck in charge, 6-2343

**Start:** Mon 8/5/2013 12:00 AM  
**End:** Sat 8/10/2013 12:00 AM  
**Show Time As:** Free

**Recurrence:** (none)

**Meeting Status:** Meeting organizer

**Organizer:** Patricia Blanton

**Required Attendees:** Patricia Blanton; Robert Mace; Amanda Jenami; Angela Gutierrez; Barbara Luedecke; Ben Munguia; Brenda O'Neill; Brenner Brown; Carol Stewart; Dan Hardin; Dave Mitamura; Debbie Ramirez; Gayla Ray; Jeremy Mazur; Joyce Bourenane; Ken Petersen; Lana Dixon; Lisa Glenn; Mark Ellison; Melanie Callahan; Patsy Waters; Phyllis David; Rebecca Trevino; Rhonda Goike; Sandy Kaiser; Scot Foltz; Steve Rodriguez; WSC-All

**Optional Attendees:** Janie Hopkins; Junji Matsumoto; Sally Alderman; Lance Christian; Roberto Anaya; Ruben Solis; Shirley Wade; John Zhu; Juan Moran-Lopez; Robert Bradley; Matthew Wise; Larry French; Rima Petrossian; Katherine Thigpen; Holly Holmquist; William Kohlrenken; Yujuin Yang; John Sutton; Nelun Fernando; Jason Kemp; Cameron Turner; Carla Guthrie; Bryan Anderson; Mindy Conyers; Tyler McEwen; Cindy Ridgeway; Ethan Ham; Holly Vierk; David Thorkildsen; Blake Neffendorf; Sanjeev Kalaswad; Caimee Schoenbaechler; Doug Coker; Merry Klowner; Suzanne Pena

Robert Mace will be traveling on agency business August 5-7 and on vacation August 8-9, 2013. During his absence, Comer Tuck will be in charge of WSC and will be have delegation of signature authority.

Please route all signature items through me.

Thanks.  
Tricia

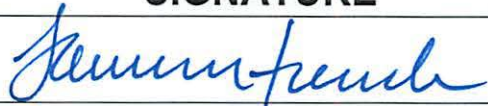


*Patricia Blanton*

Water Science and Conservation  
Texas Water Development Board  
P.O. Box 13231  
Austin, TX 78711-3231  
Office: 512-463-8043

**WATER SCIENCE & CONSERVATION**  
**Groundwater Resources**

Management Plan Approval for McMullen GCD

**DATE: August 8, 2013**

<b>ROUTED TO</b>	<b>DATE</b>	<b>SIGNATURE</b>
1. Larry French	8-8-13	
2. Robert Mace	8/9/13	
3. Melanie Callahan	8/9/13	

**COMMENTS: Please return to Gayla (936-0817)**

Thank you

**Texas Water Development Board  
Groundwater Conservation District Management  
Plan Review and Approval Tracking**

**Reviewers Recommending the Plan for Approval**

- 1) Stephen Allen Date 7-23-2013  
Stephen Allen, P.G., Geoscientist, Groundwater Technical Assistance
- 2) David Thorkildsen Date 7/23/2013  
David Thorkildsen, P.G., Geologist, Groundwater Technical Assistance
- 3) Sarah Backhouse Date 7/23/13  
Sarah Backhouse, Hydrologist, Groundwater Technical Assistance

**Recommended for Approval**

- 1) Rima Petrossian Date 8/8/2013  
Rima Petrossian, P.G., Manager, Groundwater Technical Assistance
- 2) Larry French Date 8-8-13  
Larry French, P.G., Director, Groundwater Resources Division
- 3) Robert E. Mace Date 8/9/13  
Robert E. Mace, Ph.D., P.G., Deputy Executive Administrator, Water Science & Conservation

**Approval**

The groundwater conservation district management plan document submitted by:

**McMullen Groundwater Conservation District**

for approval, as administratively complete under the requirements of 31 TAC Ch. 356, has been found by me, to be in fulfillment of said requirements.

Melanie Callahan Date 8/9/13  
Melanie Callahan, Executive Administrator, Texas Water Development Board

# Texas Water Development Board

## Groundwater Conservation District Management Plan Checklist, effective December 6, 2012

District name: McMullen GCD

Date plan received: 7-15-2013

Reviewing staff: Stephen Allen, DT, SB

Date plan reviewed: 7-23-2013

A management plan shall contain, unless explained as not applicable, the following elements, 31 TAC §356.52(a):

	Citation of rule	Citation of statute	Present in plan and administratively complete	Source of data	Evidence that best available data was used	Notes
Is a paper hard copy of the plan available?	31 TAC §356.53(a)(1)		Yes			
Is an electronic copy of the plan available?	31 TAC §356.53(a)(2)		Yes			
1. Is an estimate of the modeled available groundwater in the District based on the desired future condition established under Section 36.108 included?	31 TAC §356.52(a)(5)(A)	TWC §36.1071(e)(3)(A)	Yes	GR 10-012 MAG, GR 10-041 MAG, GR 10-047 MAG	Yes	p. 2
2. Is an estimate of the amount of groundwater being used within the District on an annual basis for at least the most recent five years included?	31 TAC §356.52(a)(5)(B); §356.10(2)	TWC §36.1071(e)(3)(B)	Yes	TWDB WUS	Yes	Appendix A
For sections 3-5 below, each district must use the groundwater availability modeling information provided by the TWDB in conjunction with available site-specific information provided by the district when developing the required estimates, 31 TAC §356.52(c):						
3. Is an estimate of the annual amount of recharge, from precipitation, if any, to the groundwater resources within the District included?	31 TAC §356.52(a)(5)(C)	TWC §36.1071(e)(3)(C)	Yes	GR12-011	Yes	Appendix A
4. For each aquifer in the district, is an estimate of the annual volume of water that discharges from the aquifer to springs and any surface water bodies, including lakes, streams and rivers, included?	31 TAC §356.52(a)(5)(D)	TWC §36.1071(e)(3)(D)	Yes	GR12-011	Yes	Appendix A
5. Is an estimate of the annual volume of flow						
a) into the District within each aquifer,			Yes	GR12-011	Yes	Appendix A
b) out of the District within each aquifer,	31 TAC §356.52(a)(5)(E)	TWC §36.1071(e)(3)(E)	Yes	GR12-011	Yes	Appendix A
c) and between aquifers in the District,			Yes	GR12-011	Yes	Appendix A
if a groundwater availability model is available, included?						
6. Is an estimate of the projected surface water supply within the District according to the most recently adopted state water plan included?	31 TAC §356.52(a)(5)(F)	TWC §36.1071(e)(3)(F)	Yes	2012 SWP	Yes	Appendix A
7. Is an estimate of the projected total demand for water within the District according to the most recently adopted state water plan included?	31 TAC §356.52(a)(5)(G)	TWC §36.1071(e)(3)(G)	Yes	2012 SWP	Yes	Appendix A
8. Did the District consider and include the water supply needs from the adopted state water plan?		TWC §36.1071(e)(4)	Yes	2012 SWP	Yes	Appendix A
9. Did the District consider and include the water management strategies from the adopted state water plan?		TWC §36.1071(e)(4)	Yes	2012 SWP	Yes	Appendix A
10. Did the district include details of how it will manage groundwater supplies in the district	31 TAC §356.52(a)(4)		Yes			p. 3
11. Are the actions, procedures, performance, and avoidance necessary to effectuate the management plan, including specifications and proposed rules, all specified in as much detail as possible, included in the plan?		TWC §36.1071(e)(2)	Yes			p. 3, link to rules
12. Was evidence that the plan was adopted, after notice and hearing, included? Evidence includes the posted agenda, meeting minutes, and copies of the notice printed in the newspaper(s) and/or copies of certified receipts from the county courthouse(s).	31 TAC §356.53(a)(3)	TWC §36.1071(a)	Yes			adopted July 10; notice posted June 27, 2013 and July 3, 2013
13. Was evidence that, following notice and hearing, the District coordinated in the development of its management plan with regional surface water management entities?	31 TAC §356.51	TWC §36.1071(a)	Yes			letters attached and emails attached
14. Has any available site-specific information been provided by the district to the executive administrator for review and comment before being used in the management plan when developing the estimates required in subsections 31 TAC §356.52(a)(5)(C),(D), and (E)?	31 TAC §356.52(c)	TWC §36.1071(h)	NA			

Mark an affirmative response with YES  
 Mark a negative response with NO  
 Mark a non-applicable checklist item with N/A

Management goals required to be addressed unless declared not applicable	Management goal (time-based and quantifiable) 31 TAC §356.51	Methodology for tracking progress 31TAC §356.52(a)(4)	Management objective(s) (specific and time-based statements of future outcomes) 31 TAC §356.52 (a)(2)	Performance standard(s) (measures used to evaluate the effectiveness of district activities) 31 TAC §356.52 (a)(3)	Notes
Providing the most efficient use of groundwater 31 TAC 356.52(a)(1)(A); TWC §36.1071(a)(1)	15) Yes	16) Yes, p. 2	17) Yes	18) Yes	p. 4
Controlling and preventing waste of groundwater 31 TAC 356.52(a)(1)(B); TWC §36.1071(a)(2)	19) Yes	20) Yes, p. 2	21) Yes	22) Yes	p. 4
Controlling and preventing subsidence 31 TAC 356.52(a)(1)(C); TWC §36.1071(a)(3)	23) NA	24) NA	25) NA	26) NA	p. 5
Addressing conjunctive surface water management issues 31 TAC 356.52(a)(1)(D); TWC §36.1071(a)(4)	27) NA	28) NA	29) NA	30) NA	p. 5
Addressing natural resource issues that impact the use and availability of groundwater and which are impacted by the use of groundwater 31 TAC 356.52(a)(1)(E); TWC §36.1071(a)(5)	31) Yes	32) Yes, p. 2	33) Yes	34) Yes	p. 5
Addressing drought conditions 31 TAC 356.52(a)(1)(F); TWC §36.1071(a)(6)	35) Yes	36) Yes, p. 2	37) Yes	38) Yes	p. 5
Addressing  a) conservation,  b) recharge enhancement,  c) rainwater harvesting,  d) precipitation enhancement, and  e) brush control  where appropriate and cost effective 31 TAC 356.52(a)(1)(G); TWC §36.1071(a)(7)	39)	40)	41)	42)	
	39a) Yes	40a) Yes, p. 2	41a) Yes	42a) Yes	p. 5
	39b) NA	40b) NA	41b) NA	42b) NA	p. 6
	39c) NA	40c) NA	41c) NA	42c) NA	p. 6
	39d) Yes	40d) Yes, p. 2	41d) Yes	42d) Yes	p. 6
	39e) NA	40e) NA	41e) NA	42e) NA	p. 6
Addressing the desired future conditions established under TWC §36.108. 31 TAC 356.52(a)(1)(H); TWC §36.1071(a)(8)	43) Yes	44) Yes, p. 2	45) Yes	46) Yes	p. 6-7
Does the plan identify the performance standards and management objectives for effecting the plan? 31 TAC §356.52(a)(2)&(3); TWC §36.1071(e)(1)			47) Yes	48) Yes	
Mark required elements that are present in the plan with YES Mark any required elements that are missing from the plan with NO Mark plan elements that have been indicated as not applicable to the district with N/A					

# Texas Water Development Board

## Groundwater Conservation District Management Plan Checklist, effective December 6, 2012

District name: **McMullen GCD**

Official review     Prereview

Reviewing staff: **David Thorkildsen**

Date plan received: **7/15/2013**

Date plan reviewed: **7/23/2013**

A management plan shall contain, unless explained as not applicable, the following elements, 31 TAC §356.52(a):

	Citation of rule	Citation of statute	Present in plan and administratively complete	Source of data	Evidence that best available data was used	Notes
Is a paper hard copy of the plan available?	31 TAC §356.53(a)(1)		Yes			
Is an electronic copy of the plan available?	31 TAC §356.53(a)(2)		Yes			
1. Is an estimate of the modeled available groundwater in the District based on the desired future condition established under Section 36.108 included?	31 TAC §356.52(a)(5)(A)	TWC §36.1071(e)(3)(A)	Yes	GAM Run 10-012 MAG, GAM Run 10-041 MAG, GAM Run 10-047 MAG	Yes	p. 2
2. Is an estimate of the amount of groundwater being used within the District on an annual basis for at least the most recent five years included?	31 TAC §356.52(a)(5)(B); §356.10(2)	TWC §36.1071(e)(3)(B)	Yes	TWDB WUS	Yes	p. 2, App. A

For sections 3-5 below, each district must use the groundwater availability modeling information provided by the TWDB in conjunction with available site-specific information provided by the district when developing the required estimates, 31 TAC §356.52(c):

3. Is an estimate of the annual amount of recharge, from precipitation, if any, to the groundwater resources within the District included?	31 TAC §356.52(a)(5)(C)	TWC §36.1071(e)(3)(C)	Yes	GAM Run 12-011	Yes	p. 2, App. A
4. For each aquifer in the district, is an estimate of the annual volume of water that discharges from the aquifer to springs and any surface water bodies, including lakes, streams and rivers, included?	31 TAC §356.52(a)(5)(D)	TWC §36.1071(e)(3)(D)	Yes	GAM Run 12-011	Yes	p. 2, App. A
5. Is an estimate of the annual volume of flow						
a) into the District within each aquifer,			Yes	GAM Run 12-011	Yes	p. 2, App. A
b) out of the District within each aquifer,	31 TAC §356.52(a)(5)(E)	TWC §36.1071(e)(3)(E)	Yes	GAM Run 12-011	Yes	p. 2, App. A
c) and between aquifers in the District,			Yes	GAM Run 12-011	Yes	p. 2, App. A
if a groundwater availability model is available, included?						
6. Is an estimate of the projected surface water supply within the District according to the most recently adopted state water plan included?	31 TAC §356.52(a)(5)(F)	TWC §36.1071(e)(3)(F)	Yes	2012 SWP	Yes	p. 2, App. A
7. Is an estimate of the projected total demand for water within the District according to the most recently adopted state water plan included?	31 TAC §356.52(a)(5)(G)	TWC §36.1071(e)(3)(G)	Yes	2012 SWP	Yes	p. 2, App. A
8. Did the District consider and include the water supply needs from the adopted state water plan?		TWC §36.1071(e)(4)	Yes	2012 SWP	Yes	p. 2, App. A
9. Did the District consider and include the water management strategies from the adopted state water plan?		TWC §36.1071(e)(4)	Yes	2012 SWP	Yes	p. 2, App. A
10. Did the district include details of how it will manage groundwater supplies in the district	31 TAC §356.52(a)(4)		Yes			p. 3
11. Are the actions, procedures, performance, and avoidance necessary to effectuate the management plan, including specifications and proposed rules, all specified in as much detail as possible, included in the plan?		TWC §36.1071(e)(2)	Yes			p. 3, link to rules on p. 2
12. Was evidence that the plan was adopted, after notice and hearing, included? Evidence includes the posted agenda, meeting minutes, and copies of the notice printed in the newspaper(s) and/or copies of certified receipts from the county courthouse(s).	31 TAC §356.53(a)(3)	TWC §36.1071(a)	Yes			p. Attached
13. Was evidence that, following notice and hearing, the District coordinated in the development of its management plan with regional surface water management entities?	31 TAC §356.51	TWC §36.1071(a)	Yes			p. Attached
14. Has any available site-specific information been provided by the district to the executive administrator for review and comment before being used in the management plan when developing the estimates required in subsections 31 TAC §356.52(a)(5)(C), (D), and (E)?	31 TAC §356.52(c)	TWC §36.1071(h)	NA			p.

Mark an affirmative response with YES

Mark a negative response with NO

Mark a non-applicable checklist item with N/A

Management goals required to be addressed unless declared not applicable	Management goal (time-based and quantifiable) 31 TAC §356.51	Methodology for tracking progress 31TAC §356.52(a)(4)	Management objective(s) (specific and time-based statements of future outcomes) 31 TAC §356.52 (a)(2)	Performance standard(s) (measures used to evaluate the effectiveness of district activities) 31 TAC §356.52 (a)(3)	Notes
Providing the most efficient use of groundwater 31 TAC 356.52(a)(1)(A); TWC §36.1071(a)(1)	15) Yes	16) p. 2 Yes	17) Yes	18) Yes	p. 4
Controlling and preventing waste of groundwater 31 TAC 356.52(a)(1)(B); TWC §36.1071(a)(2)	19) Yes	20) p. 2 Yes	21) Yes	22) Yes	p. 4
Controlling and preventing subsidence 31 TAC 356.52(a)(1)(C); TWC §36.1071(a)(3)	23) NA	24) NA	25) NA	26) NA	p. 5
Addressing conjunctive surface water management issues 31 TAC 356.52(a)(1)(D); TWC §36.1071(a)(4)	27) NA	28) NA	29) NA	30) NA	p. 5
Addressing natural resource issues that impact the use and availability of groundwater and which are impacted by the use of groundwater 31 TAC 356.52(a)(1)(E); TWC §36.1071(a)(5)	31) Yes	32) p. 2 Yes	33) Yes	34) Yes	p. 5
Addressing drought conditions 31 TAC 356.52(a)(1)(F); TWC §36.1071(a)(6)	35) Yes	36) p.2 Yes	37) Yes	38) Yes	p. 5
Addressing  a) conservation,  b) recharge enhancement,  c) rainwater harvesting,  d) precipitation enhancement, and  e) brush control  where appropriate and cost effective 31 TAC 356.52(a)(1)(G); TWC §36.1071(a)(7)	39)	40)	41)	42)	
	39a) Yes	40a) p. 2 Yes	41a) Yes	42a) Yes	p. 5
	39b) NA	40b) NA	41b) NA	42b) NA	p. 6
	39c) NA	40c) NA	41c) NA	42c) NA	p. 6
	39d) Yes	40d) p. 2 Yes	41d) Yes	42d) Yes	p. 6
	39e) NA	40e) NA	41e) NA	42e) NA	p. 6
Addressing the desired future conditions established under TWC §36.108. 31 TAC 356.52(a)(1)(H); TWC §36.1071(a)(8)	43) Yes	44) p. 2 Yes	45) Yes	46) Yes	p. 6-7
Does the plan identify the performance standards and management objectives for effecting the plan? 31 TAC §356.52(a)(2)&(3); TWC §36.1071(e)(1)			47) Yes	48) Yes	

Mark required elements that are present in the plan with YES  
Mark any required elements that are missing from the plan with NO  
Mark plan elements that have been indicated as not applicable to the district with N/A



# Texas Water Development Board

## Groundwater Conservation District Management Plan Checklist, effective December 6, 2012

District name: McMullen GCD

Official review     Prereview

Reviewing staff: Sarah Backhouse

Date plan received: 7/15/13

Date plan reviewed: 7/22/13

A management plan shall contain, unless explained as not applicable, the following elements, 31 TAC §356.52(a):

	Citation of rule	Citation of statute	Present in plan and administratively complete	Source of data	Evidence that best available data was used	Notes
Is a paper hard copy of the plan available?	31 TAC §356.53(a)(1)		Yes			Plan not paginated
Is an electronic copy of the plan available?	31 TAC §356.53(a)(2)		Yes			
1. Is an estimate of the modeled available groundwater in the District based on the desired future condition established under Section 36.108 included?	31 TAC §356.52(a)(5)(A)	TWC §36.1071(e)(3)(A)	Yes	GR 10-012 MAG, GR 10-041 MAG, GR 10-047 MAG	Yes	
2. Is an estimate of the <u>amount of groundwater being used</u> within the District on an annual basis for at least the <u>most recent five years</u> included?	31 TAC §356.52(a)(5)(B); §356.10(2)	TWC §36.1071(e)(3)(B)	Yes	TWDB WUS	Yes	Appendix A

For sections 3-5 below, each district must use the groundwater availability modeling information provided by the TWDB in conjunction with available site-specific information provided by the district when developing the required estimates, 31 TAC §356.52(c):

3. Is an estimate of the annual <u>amount of recharge, from precipitation</u> , if any, to the groundwater resources within the District included?	31 TAC §356.52(a)(5)(C)	TWC §36.1071(e)(3)(C)	Yes	GR 12-011	Yes	Appendix A
4. For each aquifer in the district, is an estimate of the annual volume of <u>water that discharges from the aquifer</u> to springs and any surface water bodies, including lakes, streams and rivers, included?	31 TAC §356.52(a)(5)(D)	TWC §36.1071(e)(3)(D)	Yes	GR 12-011	Yes	Appendix A
5. Is an estimate of the annual volume of flow						
a) <u>into the District</u> within each aquifer,			Yes	GR 12-011	Yes	Appendix A
b) <u>out of the District</u> within each aquifer,	31 TAC §356.52(a)(5)(E)	TWC §36.1071(e)(3)(E)	Yes	GR 12-011	Yes	Appendix A
c) and <u>between aquifers</u> in the District,			Yes	GR 12-011	Yes	Appendix A
if a groundwater availability model is available, included?						
6. Is an estimate of the <u>projected surface water supply</u> within the District according to the most recently adopted state water plan included?	31 TAC §356.52(a)(5)(F)	TWC §36.1071(e)(3)(F)	Yes	2012 SWP	Yes	Appendix A
7. Is an estimate of the <u>projected total demand for water</u> within the District according to the most recently adopted state water plan included?	31 TAC §356.52(a)(5)(G)	TWC §36.1071(e)(3)(G)	Yes	2012 SWP	Yes	Appendix A
8. Did the District consider and include the <u>water supply needs</u> from the adopted state water plan?		TWC §36.1071(e)(4)	Yes	2012 SWP	Yes	Appendix A
9. Did the District consider and include the <u>water management strategies</u> from the adopted state water plan?		TWC §36.1071(e)(4)	Yes	2012 SWP	Yes	Appendix A
10. Did the district include details of how it will manage groundwater supplies in the district	31 TAC §356.52(a)(4)		Yes			
11. Are the actions, procedures, performance, and avoidance necessary to effectuate the management plan, including <u>specifications</u> and <u>proposed rules</u> , all specified in as much detail as possible, included in the plan?		TWC §36.1071(e)(2)	Yes			Website provided for rules
12. Was <u>evidence</u> that the plan was adopted, <u>after notice and hearing</u> , included? Evidence includes the posted agenda, meeting minutes, and copies of the notice printed in the newspaper(s) and/or copies of certified receipts from the county courthouse(s).	31 TAC §356.53(a)(3)	TWC §36.1071(a)	Yes			Plan adopted 7/10/13. Notices provided
13. Was <u>evidence</u> that, following notice and hearing, the District coordinated in the development of its management plan with regional surface water management entities?	31 TAC §356.51	TWC §36.1071(a)	Yes			Plan shared 7/10/13
14. Has any available <u>site-specific information</u> been provided by the district to the executive administrator for review and comment before being used in the management plan when developing the <u>estimates</u> required in subsections 31 TAC §356.52(a)(5)(C),(D), and (E)?	31 TAC §356.52(c)	TWC §36.1071(h)	NA			

Mark an affirmative response with YES

Mark a negative response with NO

Mark a non-applicable checklist item with N/A

Management goals required to be addressed unless declared not applicable	Management goal (time-based and quantifiable) 31 TAC §356.51	Methodology for tracking progress 31TAC §356.52(a)(4)	Management objective(s) (specific and time-based statements of future outcomes) 31 TAC §356.52 (a)(2)	Performance standard(s) (measures used to evaluate the effectiveness of district activities) 31 TAC §356.52 (a)(3)	Notes
Providing the most efficient use of groundwater 31 TAC 356.52(a)(1)(A); TWC §36.1071(a)(1)	15) Yes	16) Yes	17) Yes	18) Yes	Plan not paginated
Controlling and preventing waste of groundwater 31 TAC 356.52(a)(1)(B); TWC §36.1071(a)(2)	19) Yes	20) Yes	21) Yes	22) Yes	
Controlling and preventing subsidence 31 TAC 356.52(a)(1)(C); TWC §36.1071(a)(3)	23) NA	24) NA	25) NA	26) NA	
Addressing conjunctive surface water management issues 31 TAC 356.52(a)(1)(D); TWC §36.1071(a)(4)	27) NA	28) NA	29) NA	30) NA	
Addressing natural resource issues that impact the use and availability of groundwater and which are impacted by the use of groundwater 31 TAC 356.52(a)(1)(E); TWC §36.1071(a)(5)	31) Yes	32) Yes	33) Yes	34) Yes	
Addressing drought conditions 31 TAC 356.52(a)(1)(F); TWC §36.1071(a)(6)	35) Yes	36) Yes	37) Yes	38) Yes	
Addressing  a) conservation,  b) recharge enhancement,  c) rainwater harvesting,  d) precipitation enhancement, and  e) brush control  where appropriate and cost effective 31 TAC 356.52(a)(1)(G); TWC §36.1071(a)(7)	39)	40)	41)	42)	
	39a) Yes	40a) Yes	41a) Yes	42a) Yes	
	39b) NA	40b) NA	41b) NA	42b) NA	
	39c) NA	40c) NA	41c) NA	42c) NA	
	39d) Yes	40d) Yes	41d) Yes	42d) Yes	
	39e) NA	40e) NA	41e) NA	42e) NA	
Addressing the desired future conditions established under TWC §36.108. 31 TAC 356.52(a)(1)(H); TWC §36.1071(a)(8)	43) Yes	44) Yes	45) Yes	46) Yes	
Does the plan identify the performance standards and management objectives for effecting the plan? 31 TAC §356.52(a)(2)&(3); TWC §36.1071(e)(1)			47) Yes	48) Yes	
Mark required elements that are present in the plan with YES Mark any required elements that are missing from the plan with NO Mark plan elements that have been indicated as not applicable to the district with N/A					

Melanie Callahan  
Executive Administrator  
Texas Water Development Board  
1700 N. Congress  
Austin, Texas 78711-3231  
July 10, 2013

RECEIVED

JUL 15 2013

TWDB

Dear Ms. Callahan,

The McMullen Groundwater Conservation District (MGCD) is pleased to submit to the Texas Water Development Board (TWDB) a copy of our Management Plan in accordance with chapter 36.1073 as mandated by Senate Bill 2 of the 77th Texas Legislature. The McMullen Groundwater Conservation District Management Plan (MGCD MP) was adopted by the MGCD Board of Directors at their quarterly meeting on July 10, 2013, by unanimous consent. In addition, a certified copy of the MGCD Board of Directors resolution adopting the plan is attached.

The MGCD, established in 2001, has historically had an excellent working relationship with the TWDB and it is our hope that we can count on your support as we implement the enclosed plan; it is the intent of our Board of Directors that we will begin implementation of this plan immediately to facilitate the success of our efforts.

The MGCD MP was developed during open meetings of the Board of Directors in accordance with all notice and hearing requirements. Documentation that notice and hearing requirements were followed is included in the packet.

During preparation of the MGCD Management Plan, (MGCD MP) all planning efforts were coordinated with the Nueces River Authority, as mandated by 36.1071 (a) and TAC 356.6(a)(4). Documentation of this coordinated effort, including the resolution acknowledging this coordination, is included in this packet for your review.


The District rules are available on our website: [www.mcmullengcd.org](http://www.mcmullengcd.org).

This plan is not in conflict with the approved regional water plan.

The MGCD MP will be in force for 10 years from the date of certification. If there is any other documentation we can provide to the TWDB that will ensure the prompt certification of the McMullen Groundwater Conservation District Management Plan, please do not hesitate to call my staff or me.

Sincerely,

  
Harold Jambers, Jr.  
President

  
Manager

**McMULLEN GROUNDWATER**

**CONSERVATION DISTRICT**

**DISTRICT MANAGEMENT**

**PLAN**

**MCMULLEN GROUNDWATER  
CONSERVATION DISTRICT  
MANAGEMENT PLAN  
Adopted July 10, 2013**

**District Mission**

The McMullen Groundwater Conservation District will strive to develop, promote, and implement water conservation, augmentation, and management strategies to protect water resources for the benefit of the citizens, economy, and environment of the district.

**Time Period for This Plan**

This plan becomes effective upon approval by the Texas Water Development Board and remains in effect until a revised plan is approved or July, 10, 2023, which ever is earlier. The planning period for the management plan is ten (10) years, but the plan must be updated and approved every five (5) years.

**Statement of Guiding Principles**

The district recognizes that the groundwater resources of the region are of vital importance. The preservation of this most valuable resource can be managed in a prudent and cost effective manner through regulation and permitting. This management document is intended as a tool to focus the thoughts and actions of those given the responsibility for the execution of district activities.

**General Description**

The District was created by the citizens of McMullen County through an election, January 2001. The current Board of Directors are Harold Jambers, Jr. - Chairman, J.E. Wheeler, Jr.- Vice-Chairman, David Longan – Secretary-Treasurer, Scott Dilworth, and Larry Miles, McMullen Groundwater Conservation District (MGCD) has the same aerial extent as that of McMullen County. The county has a vibrant economy dominated by agriculture and petroleum. The agriculture income is derived primarily from McMullen County is cattle production, wheat, corn, sorghum, and some sheep and goat ranching.

**Location and Extent**

McMullen County, consisting of 1,159 square miles, is located in South Texas. The county is bounded on the east by Live Oak County, on the north by Atascosa County, on the west by La Salle County, and on the south by Duval County. Tilden, which is centrally located in the county, is the county seat.

## Topography, Drainage and Groundwater Recharge

McMullen County is on the Gulf Coastal Plain in southern Texas. Most the 1,159 square miles of the county are devoted to farming and ranching, which provide the principal income for the 851 inhabitants. The production of oil is also an important industry.

The principal water-bearing formations underlying the county are the Carrizo sand, Oakville sandstone, Lagarto clay, and Goliad sand, Queen City, and the Sparta Aquifers.

Some livestock supplies were obtained from surface-water sources. Most of McMullen County is rolling to moderately hilly, although some areas are nearly flat. The altitude ranges from about 460 feet in the southwestern part of the county to about 90 feet near the south end of the county. The county is drained by the Nueces River and the Frio River.

Recharge could be enhanced by several methods: brush control, more precipitation, and more tanks to catch runoff from excessive precipitation.

### Surface Water Resources of McMullen County

Limited surface water rights are available within the county, mainly on the Nueces and Frio Rivers. The remaining surface water is impounded in stock tanks for livestock and domestic use.

The Desired Future Conditions for the aquifers in GMA 13 is an average drawdown of 30 feet and modeled available groundwater of 2,045 Ac/Ft. according to GAM run 10-012 MAG. The MAG for Yegua-Jackson is 179 Ac/Ft according to GAM run 10-041 MAG. The Desired Future Condition for the aquifers in GMA 16 is an average drawdown of 10 feet and a modeled available groundwater of 510 Ac/Ft. according to GAM run 10-047 MAG.

The District rules are available at our website: [www.mcmullengcd.org](http://www.mcmullengcd.org).

The groundwater management plan data is provided in Appendix A.

The McMullen Groundwater Conservation District Management Plan data is provided in Appendix A.

### Methodology for Tracking the District's Progress in Achieving Management Goals

The District manager will prepare and present an annual report to the District Board of Directors on District performance in regards to achieving management goals and objectives. The presentation of the report will occur during the last monthly District Board of directors meeting each fiscal year. The report will include the number of instances in which each of the activities specified in the District's management objectives was engaged in during the fiscal year. The District Board will maintain the report on file, for public inspection at the District's offices upon adoption. This methodology will apply to all management goals contained within this plan.



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## **Management of Groundwater Supplies**

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The District will manage the supply of groundwater within the District in order to conserve the resource while seeking to maintain the economic viability of all resource user groups, public and private. In consideration of the economic and cultural activities occurring within the District, the District will identify and engage in such activities and practices that, if implemented, would result in a reduction of groundwater use. A monitor well observation network shall be established and maintained in order to evaluate changing conditions of groundwater supplies (water in storage) within the District. The District will make a regular assessment of water supply and groundwater storage conditions and will report those conditions to the Board and to the public. The District will undertake, as necessary and cooperate with investigations of the groundwater resources within the District and will make the results of investigations available to the public upon adoption by the District Board.

The District has adopted rules to regulate groundwater withdrawals by means of well spacing and production limits. The District may deny a well construction permit or limit groundwater withdrawals in accordance with the guidelines stated in the rules of the District. In making a determination to deny a permit or limit groundwater withdrawals, the District will consider the public benefit against individual hardship after considering all appropriate testimony.

In pursuit of the Districts mission of protecting the resource, the District may require reduction of groundwater withdrawals to amounts, which will not cause harm to the aquifer. To achieve this purpose, the District may, at the District Boards discretion, amend or revoke any permits after notice and hearing. The determination to seek the amendment or revocation of a permit by the District will be based on aquifer conditions observed by the District. The District will enforce the terms and conditions of permits and the rules of the District by enjoining the permit holder in a court of competent jurisdiction as provided for in Texas Water Code (TWC) 36.102.

## **Actions, Procedures, Performance and Avoidance for Plan Implementation**

11

The District will implement the provisions of this plan and will utilize the provisions of this plan as a guidepost for determining the direction or priority for all District activities. All operations of the District, all agreements entered into by the District and any additional planning efforts in which the District may participate will be consistent with the provisions of this plan.

The District adopted rules relating to the permitting of wells and the production of groundwater and are on the website [www.mcmullengcd.org](http://www.mcmullengcd.org). The rules adopted by the District shall be pursuant to TWC Chapter 36 and the provisions of this plan. All rules will be adhered to and enforced. The promulgation and enforcement of the rules will be based on the best technical evidence available.

# McMULLEN GROUNDWATER CONSERVATION DISTRICT MANAGEMENT GOALS AND OBJECTIVES

## MISSION STATEMENT

The mission of the McMullen Groundwater Water Conservation District is to protect and assure a sufficient quantity and quality of groundwater for our constituents use.

We value:

- \*Collection and maintenance of data on water quantity and quality
- \*Efficient use of groundwater
- \*Conjunctive water management issues
- \*Development and enforcement of water district rules concerning conservation of ground water.

## Management Goals, Objectives, and Performance Standards

### Resource Goals

#### Goal 1.0: Providing the most efficient use of groundwater

##### Management Objective:

Each year the District will provide education materials concerning the efficient use of groundwater.

##### Performance standard:

Provide educational materials to at least one school annually.

#### Goal 2.0: Controlling and preventing waste of groundwater

##### Management Objective:

Measure water levels from the land surface on strategic wells on an annual basis and report waste to the District Board.

##### Performance standard:

- (a) Report to the District Board annually the number of water level measurements.
- (b) The District will investigate all reports of waste of groundwater within five working days. The number of reports of waste as well as the investigation findings will be reported to the District Board in the annual report.

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**Goal 3.0: Controlling and preventing subsidence**

The geologic framework of the District Area precludes any significant subsidence from occurring. This management goal is not applicable to the operations of the District.

**Goal 4.0: Conjunctive surface water management issues**

Except as provided in Chapter 36 of the Texas Water Code, the District has no jurisdiction over surface water. The District shall consider the effects of surface water resources as required by Section 36.113 and other state law. This goal is not applicable for the District.

**Goal 5.0: Natural Resource Issues**

**Management Objective:**

The District will cooperate with other interested parties and appropriate agencies to develop additional information on aquifer recharge.

**Performance Standard:**

A representative of the District will attend a meeting annually with interested parties and appropriate agencies.

**Goal 6.0: Drought Conditions**

**Management Objective:**

The District will monitor the Palmer Drought Severity Index (PDSI).

**Performance Standard:**

A report of the Palmer Drought Severity Index will be presented to the District board on an annual basis.

**Goal 7.0: Conservation**

**Management Objective:**

Each year the District will make available educational material to the public promoting conservation methods and concepts.

**Performance Objective:**

The District will make at least one educational brochure available per year through service organizations, and on a continuing basis at the District office.

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## Goal 8.0: Precipitation Enhancement

### Management Objective:

The District will participate in the South Texas Weather Modification Program.

### Performance Standard:

A district representative will attend a meeting of the South Texas Weather Modification Assn. annually.

## Goal 9.0: Recharge Enhancement

This goal is not applicable to the District because, at the current time, it is cost prohibitive.

## Goal 10.0: Rainwater Harvesting

This goal is not applicable to the District because, at the current time, it is cost prohibitive.

## Goal 11.0: Brush Control

This goal is not applicable to the District because, at the current time, it is cost prohibitive.

## Goal 12.0: Desired future condition of the groundwater resource

### Management Objective:

The District will review and calculate its permit and well registration totals in light of the Desired Future Conditions of the groundwater resources within the boundaries of the District to assess whether the District is on target to meet the Desired Future Conditions estimates submitted to the TWDB.

### Performance Standard:

The District's Annual Report will include a discussion of the District's permit and well registration totals and will evaluate the District's progress in achieving the Desired Future Conditions of the groundwater resources within the boundaries of the District and whether the District is on track to maintain the Desired Future Conditions estimates over the 50-year planning period.

39d  
41d  
42d

39b

39c

39e

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**Management Objective:**

The District will annually sample the water levels in at least three monitoring wells within the District and will determine the five-year water level averages based on the samples taken.

The District will compare the five-year water level averages to the corresponding five-year increment of its Desired Future Conditions in order to track its progress in achieving the Desired Future Conditions.

**Performance Standard:**

The District's Annual Report will include the water level samples taken each year for the purpose of measuring water levels to assess the District's progress towards achieving its Desired Future Conditions. Once the District has obtained water level samples for five consecutive years and is able to calculate water level averages over five-year periods thereafter, the District will include a discussion of its comparison of water level averages to the corresponding five-year increment of its Desired Future Conditions in order to track its progress in achieving its Desired Future Conditions.

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# Estimated Historical Water Use And 2012 State Water Plan Datasets:

McMullen Groundwater Conservation District

by Stephen Allen  
Texas Water Development Board  
Groundwater Resources Division  
Groundwater Technical Assistance Section  
stephen.allen@twdb.texas.gov  
(512) 463-7317  
October 15, 2012

## ***GROUNDWATER MANAGEMENT PLAN DATA:***

This package of water data reports (part 1 of a 2-part package of information) is being provided to groundwater conservation districts to help them meet the requirements for approval of their five-year groundwater management plan. Each report in the package addresses a specific numbered requirement in the Texas Water Development Board's groundwater management plan checklist. The checklist can be viewed and downloaded from this web address:

<http://www.twdb.texas.gov/groundwater/docs/GCD/GMPchecklist0911.pdf>

The five reports included in part 1 are:

1. Estimated Historical Water Use (checklist Item 2)  
*from the TWDB Historical Water Use Survey (WUS)*
2. Projected Surface Water Supplies (checklist Item 6)
3. Projected Water Demands (checklist Item 7)
4. Projected Water Supply Needs (checklist Item 8)
5. Projected Water Management Strategies (checklist Item 9)  
*reports 2-5 are from the 2012 State Water Plan (SWP)*

Part 2 of the 2-part package is the groundwater availability model (GAM) report. The District should have received, or will receive, this report from the Groundwater Availability Modeling Section. Questions about the GAM can be directed to Dr. Shirley Wade, shirley.wade@twdb.texas.gov, (512) 936-0883.

***DISCLAIMER:***

The data presented in this report represents the most updated Historical Water Use and 2012 State Water Planning data available as of 10/15/2012. Although it does not happen frequently, neither of these datasets are static and are subject to change pending the availability of more accurate data (Historical Water Use data) or an amendment to the 2012 State Water Plan (2012 State Water Planning data). District personnel must review these datasets and correct any discrepancies in order to ensure approval of their groundwater management plan.

The Historical Water Use dataset can be verified at this web address:

<http://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates/>

The 2012 State Water Planning dataset can be verified by contacting Wendy Barron (wendy.barron@twdb.texas.gov or 512-936-0886).

For additional questions regarding this data, please contact Stephen Allen (stephen.allen@twdb.texas.gov or 512-463-7317) or Rima Petrossian (rima.petrossian@twdb.texas.gov or 512-936-2420).

# Estimated Historical Water Use

## TWDB Historical Water Use Survey (WUS) Data

2

Groundwater and surface water use estimates are currently unavailable for 2005 and 2010. TWDB staff anticipates the calculation and posting of these estimates at a later date.

### MCMULLEN COUNTY

All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	100	0	0	0	9	925	1,034
	SW	0	0	0	0	0	103	103
1980	GW	88	0	0	0	446	90	624
	SW	0	0	0	0	0	808	808
1984	GW	138	0	0	0	664	52	854
	SW	0	0	0	0	0	475	475
1985	GW	142	0	0	0	229	42	413
	SW	0	0	0	0	0	384	384
1986	GW	131	0	0	0	0	44	175
	SW	0	0	0	0	0	399	399
1987	GW	149	0	0	93	266	46	554
	SW	0	0	0	7	0	414	421
1988	GW	155	0	0	116	268	49	588
	SW	0	0	0	9	0	448	457
1989	GW	116	0	0	0	239	49	404
	SW	0	0	0	0	0	442	442
1990	GW	109	0	0	0	239	48	396
	SW	0	0	0	0	0	436	436
1991	GW	166	0	0	0	391	49	606
	SW	12	0	0	0	0	444	456
1992	GW	178	0	0	0	399	32	609
	SW	269	0	0	0	0	292	561
1993	GW	178	0	0	0	390	29	597
	SW	284	0	0	0	0	261	545
1994	GW	205	0	0	0	390	47	642
	SW	214	0	0	0	0	427	641
1995	GW	255	0	0	0	390	46	691
	SW	136	0	0	0	0	412	548
1996	GW	195	0	0	0	390	71	656
	SW	0	0	0	0	0	639	639
1997	GW	408	0	0	0	399	51	858
	SW	0	0	0	0	0	458	458

## Estimated Historical Water Use TWDB Historical Water Use Survey (WUS) Data

Groundwater and surface water use estimates are currently unavailable for 2005 and 2010. TWDB staff anticipates the calculation and posting of these estimates at a later date.

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1998	GW	411	0	0	0	399	47	857
	SW	0	0	0	0	0	421	421
1999	GW	449	0	0	0	399	50	898
	SW	0	0	0	0	0	450	450
2000	GW	470	0	0	0	845	25	1,340
	SW	0	0	0	0	0	224	224
2001	GW	632	0	0	0	176	82	890
	SW	0	0	0	0	0	738	738
2002	GW	244	0	0	0	385	48	677
	SW	0	0	0	0	0	431	431
2003	GW	412	0	0	0	385	48	845
	SW	0	0	0	0	0	431	431
2004	GW	273	0	0	0	385	48	706
	SW	0	0	0	0	0	431	431
2006	GW	114	0	0	0	219	89	422
	SW	0	0	0	0	0	357	357
2007	GW	114	0	0	0	219	89	422
	SW	0	0	0	0	0	357	357
2008	GW	173	0	0	0	219	79	471
	SW	0	0	0	0	0	316	316
2009	GW	164	0	0	0	417	82	663
	SW	0	0	0	0	66	329	395
2010	GW	156	219	0	0	330	93	798
	SW	0	0	0	0	110	371	481

# Projected Surface Water Supplies TWDB 2012 State Water Plan Data



## MCMULLEN COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
N	CHOKE CANYON WS	NUECES	CORPUS CHRISTI- CHOKE CANYON LAKE/RESERVOIR SYSTEM	18	20	21	20	16	13
N	LIVESTOCK	NUECES	LIVESTOCK LOCAL SUPPLY	593	593	593	593	593	593
<b>Sum of Projected Surface Water Supplies (acre-feet/year)</b>				<b>611</b>	<b>613</b>	<b>614</b>	<b>613</b>	<b>609</b>	<b>606</b>



# Projected Water Demands

## TWDB 2012 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

All values are in acre-feet/year

### MCMULLEN COUNTY

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
N	COUNTY-OTHER	NUECES	143	146	138	129	123	117
N	MINING	NUECES	195	203	207	211	215	218
N	LIVESTOCK	NUECES	659	659	659	659	659	659
N	CHOKE CANYON WS	NUECES	43	44	42	39	37	35
<b>Sum of Projected Water Demands (acre-feet/year)</b>			<b>1,040</b>	<b>1,052</b>	<b>1,046</b>	<b>1,038</b>	<b>1,034</b>	<b>1,029</b>

# Projected Water Supply Needs TWDB 2012 State Water Plan Data



Negative values (in red) reflect a projected water supply need, positive values a surplus.

## **MCMULLEN COUNTY**

All values are in acre-feet/year

<b>RWPG</b>	<b>WUG</b>	<b>WUG Basin</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
N	CHOKE CANYON WS	NUECES	9	10	13	15	13	12
N	COUNTY-OTHER	NUECES	26	23	31	40	46	52
N	LIVESTOCK	NUECES	0	0	0	0	0	0
N	MINING	NUECES	0	0	0	0	0	0
<b>Sum of Projected Water Supply Needs (acre-feet/year)</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

# Projected Water Management Strategies

## TWDB 2012 State Water Plan Data

### **MCMULLEN COUNTY**

**WUG, Basin (RWPG)**

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
<b>COUNTY-OTHER, NUECES (N)</b>							
MUNICIPAL WATER CONSERVATION	CONSERVATION [MCMULLEN]	1	2	3	5	7	10
<b>Sum of Projected Water Management Strategies (acre-feet/year)</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>7</b>	<b>10</b>

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# GAM RUN 12-011: McMULLEN GROUNDWATER CONSERVATION DISTRICT MANAGEMENT PLAN

by William Kohlrenken  
Texas Water Development Board  
Groundwater Resources Division  
Groundwater Availability Modeling Section  
(512) 463-8279  
June 25, 2012



*Cynthia K. Ridgeway is the Manager of the Groundwater Availability Modeling Section and is responsible for oversight of work performed by William Kohlrenken under her direct supervision. The seal appearing on this document was authorized by Cynthia K. Ridgeway, P.G. 471 on June 25, 2012.*

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# **GAM RUN 12-011: McMULLEN GROUNDWATER CONSERVATION DISTRICT MANAGEMENT PLAN**

by William Kohlrenken  
Texas Water Development Board  
Groundwater Resources Division  
Groundwater Availability Modeling Section  
(512) 463-8279  
June 25, 2012

## ***EXECUTIVE SUMMARY:***

Texas State Water Code, Section 36.1071, Subsection (h), states that, in developing its groundwater management plan, a groundwater conservation district shall use groundwater availability modeling information provided by the executive administrator of the Texas Water Development Board (TWDB) in conjunction with any available site-specific information provided by the district for review and comment to the executive administrator. Information derived from groundwater availability models that shall be included in the groundwater management plan includes:

- the annual amount of recharge from precipitation to the groundwater resources within the district, if any;
- for each aquifer within the district, the annual volume of water that discharges from the aquifer to springs and any surface water bodies, including lakes, streams, and rivers; and
- the annual volume of flow into and out of the district within each aquifer and between aquifers in the district.

The purpose of this report is to provide Part 2 of a two-part package of information to McMullen Groundwater Conservation District for its groundwater management plan. The groundwater management plan for the McMullen Groundwater Conservation District is due for approval by the executive administrator of the TWDB before September 25, 2013.

This report discusses the method, assumptions, and results from GAM run 12-011 using the groundwater availability models for the central portion of the Gulf Coast Aquifer; the southern portion of the Queen City and Sparta aquifers, which includes the Carrizo-Wilcox Aquifer; and the Yegua Jackson Aquifer. Tables 1 through 5 summarize the groundwater availability model data required by the statute, and figures 1 through 5 show the area of each model from which the values in the respective tables

were extracted. This model run replaces the results of GAM Run 08-02. GAM Run 12-011 meets current standards set after the release of GAM Run 08-02 and includes model results for the Yegua-Jackson Aquifer. Slight differences in the results of the two model runs for the Gulf Coast, Queen City, Sparta, and Carrizo-Wilcox aquifers are due to differences in the methods of extracting the data from the models. If after review of the figures, the McMullen Groundwater Conservation District determines that the district boundaries used in the assessment do not reflect current conditions, please notify the Texas Water Development Board immediately.

### ***METHODS:***

Groundwater availability models for the central portion of the Gulf Coast Aquifer (1981 through 1999); the Queen City and Sparta aquifers, which includes the Carrizo-Wilcox Aquifer (1980 through 1999); and the Yegua Jackson Aquifer (1980 through 1997) were run for this analysis. Water budgets for each year of the transient model period were extracted and the average annual water budget values for recharge, surface water outflow, inflow to the district, outflow from the district, net inter-aquifer flow (upper), and net inter-aquifer flow (lower) for the portions of the aquifers located within the district are summarized in this report.

### ***PARAMETERS AND ASSUMPTIONS:***

#### ***Gulf Coast Aquifer***

- Version 1.01 of the groundwater availability model for the central section of the Gulf Coast Aquifer was used for this analysis. See Chowdhury and others (2004) and Waterstone and others (2003) for assumptions and limitations of the groundwater availability model.
- The model for the central section of the Gulf Coast Aquifer assumes partially penetrating wells in the Evangeline Aquifer due to a lack of data for aquifer properties in the lower section of the aquifer.
- This groundwater availability model includes four layers, which generally correspond to (from top to bottom):
  1. the Chicot Aquifer,
  2. the Evangeline Aquifer,
  3. the Burkeville Confining Unit, and

4. the Jasper Aquifer including parts of the Catahoula Formation.

- The mean absolute error (a measure of the difference between simulated and measured water levels) in the entire model for 1999 is 26 feet, which is 4.6 percent of the hydraulic head drop across the model area (Chowdhury and others, 2004).
- Processing Modflow for Windows (PMWIN) version 5.3 (Chiang and Kinzelbach, 2001) was used as the interface to process model output.

***Carrizo-Wilcox, Queen City, and Sparta Aquifers***

- Version 2.01 of the groundwater availability model for the southern part of the Carrizo-Wilcox, Queen City, and Sparta aquifers was used for this analysis. See Deeds and others (2003) and Kelley and others (2004) for assumptions and limitations of the groundwater availability model for the southern part of the Carrizo-Wilcox, Queen City, and Sparta aquifers.
- This groundwater availability model includes eight layers, which generally correspond to (from top to bottom):
  1. the Sparta Aquifer,
  2. the Weches Confining Unit,
  3. the Queen City Aquifer,
  4. the Reklaw Confining Unit,
  5. the Carrizo Aquifer,
  6. the Upper Wilcox Aquifer,
  7. the Middle Wilcox Aquifer, and
  8. the Lower Wilcox Aquifer.
- Of the eight layers listed above, individual water budgets for the district were determined for the Sparta Aquifer (Layer 1), the Queen City Aquifer (Layer 3), and the combined layers of the Carrizo-Wilcox Aquifer (Layers 5 through 8).
- The root mean square error (a measure of the difference between simulated and actual water levels during model calibration) in the groundwater



availability model is 23 feet for the Sparta Aquifer, 18 feet for the Queen City Aquifer, and 33 feet for the Carrizo-Wilcox Aquifer for the calibration period (1980 to 1990). The root mean square error is 19 feet for the Sparta Aquifer, 22 feet for the Queen City Aquifer, and 48 feet for the Carrizo-Wilcox Aquifer in the verification period (1991 to 1999) (Kelley and others, 2004). These root mean square errors are between seven and ten percent of the range of measured water levels (Kelley and others, 2004).

- Groundwater in the Carrizo-Wilcox, Queen City, and Sparta aquifers ranges from fresh to brackish in composition (Kelley and others, 2004). Groundwater with total dissolved solids concentrations of less than 1,000 milligrams per liter (mg/l) are considered fresh and total dissolved solids concentrations of 1,000 to 10,000 mg/l are considered brackish.

### ***Yegua Jackson Aquifer***

- Version 1.01 of the groundwater availability model for the Yegua Jackson Aquifer was used for this analysis. See Deeds and others (2010) for assumptions and limitations of the groundwater availability model.
- This groundwater availability model includes five layers, which generally correspond to (from top to bottom):
  1. the outcrop section of the Yegua Jackson Aquifer and younger overlying units,
  2. the upper portion of the Jackson Group,
  3. the lower portion of the Jackson Group,
  4. the upper portion of the Yegua Group, and
  5. the lower portion of the Yegua Group.
- An overall water budget for the district was determined for the Yegua Jackson Aquifer (Layer 1 through Layer 5 collectively for the portions that represent the Yegua Jackson Aquifer).
- As reported in Deeds and others (2010), the mean absolute errors (a measure of the difference between simulated and measured water levels during model calibration) for the Jackson Group (combined upper and lower Jackson units), Upper Yegua, and Lower Yegua portions of the Yegua Jackson Aquifer for the historical-calibration period of the model are 31.1,

23.9, and 24.5 feet, respectively. These represent 10.3, 5.7 and 6.3 percent of the hydraulic head drop across each model area, respectively.

## **RESULTS:**

A groundwater budget summarizes the amount of water entering and leaving the aquifer according to the groundwater availability model. Selected groundwater budget components listed below were extracted from the model results for the aquifers located within the district and averaged over the duration of the calibration and verification portion of the model runs in the district. The components of the modified budget shown in tables 1 through 5 include:

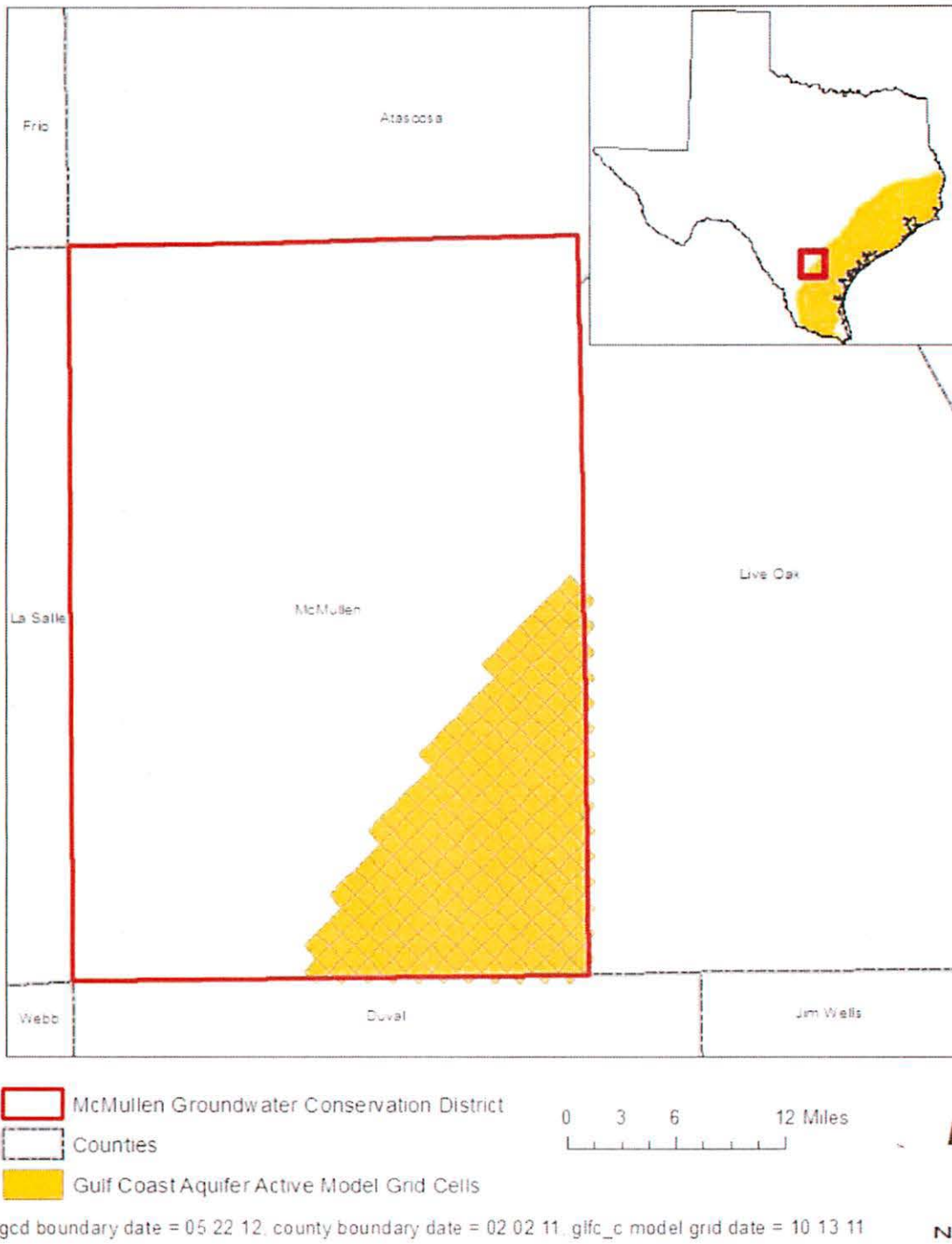
- Precipitation recharge—The areally distributed recharge sourced from precipitation falling on the outcrop areas of the aquifers (where the aquifer is exposed at land surface) within the district.
- Surface water outflow—The total water discharging from the aquifer (outflow) to surface water features such as streams, reservoirs, and drains (springs).
- Flow into and out of district—The lateral flow within the aquifer between the district and adjacent counties.
- Flow between aquifers—The vertical flow between aquifers or confining units. This flow is controlled by the relative water levels in each aquifer or confining unit and aquifer properties of each aquifer or confining unit that define the amount of leakage that occurs. “Inflow” to an aquifer from an overlying or underlying aquifer will always equal the “Outflow” from the other aquifer.

The information needed for the district’s management plan is summarized in tables 1 through 5. It is important to note that sub-regional water budgets are not exact. This is due to the size of the model cells and the approach used to extract data from the model. To avoid double accounting, a model cell that straddles a political boundary, such as district or county boundaries, is assigned to one side of the boundary based on the location of the centroid of the model cell. For example, if a cell contains two counties, the cell is assigned to the county where the centroid of the cell is located (see figures 1 through 5).

TABLE 1: SUMMARIZED INFORMATION FOR THE GULF COAST AQUIFER THAT IS NEEDED FOR MCMULLEN GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.

<i>Management Plan requirement</i>	<i>Aquifer or confining unit</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the district	Gulf Coast Aquifer	243
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Gulf Coast Aquifer	809
Estimated annual volume of flow into the district within each aquifer in the district	Gulf Coast Aquifer	242
Estimated annual volume of flow out of the district within each aquifer in the district	Gulf Coast Aquifer	594
Estimated net annual volume of flow between each aquifer in the district	Not Applicable	Not Applicable

3  
4  
5a  
5b  
5c

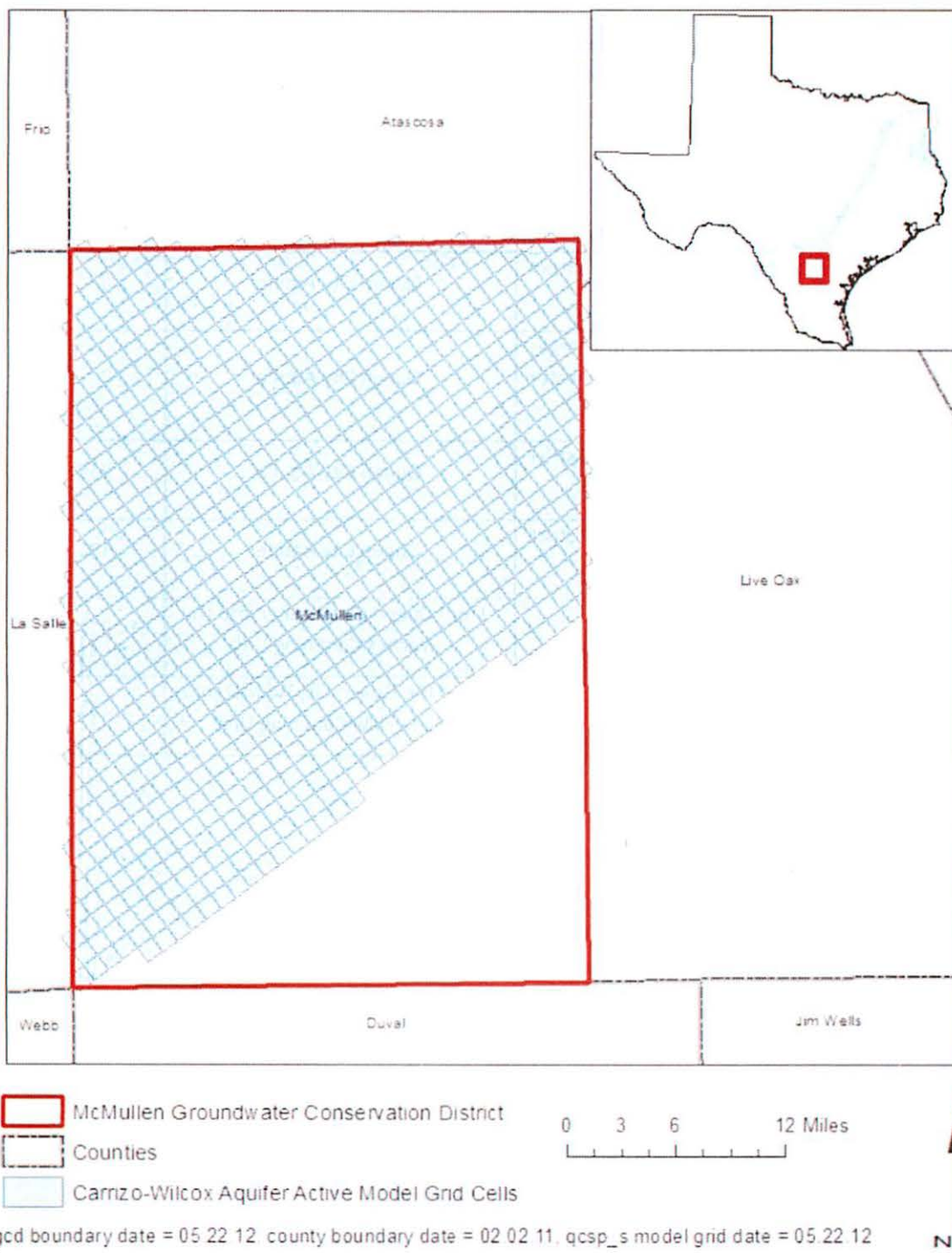


**FIGURE 1: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE CENTRAL PORTION OF THE GULF COAST AQUIFER FROM WHICH THE INFORMATION IN TABLE 1 WAS EXTRACTED (THE AQUIFER EXTENT WITHIN THE DISTRICT BOUNDARY).**

**TABLE 2: SUMMARIZED INFORMATION FOR THE CARRIZO-WILCOX AQUIFER THAT IS NEEDED FOR MCMULLEN GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.**

<i>Management Plan requirement</i>	<i>Aquifer or confining unit</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the district	Carrizo-Wilcox Aquifer	0
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Carrizo-Wilcox Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Carrizo-Wilcox Aquifer	3,833
Estimated annual volume of flow out of the district within each aquifer in the district	Carrizo-Wilcox Aquifer	3,089
Estimated net annual volume of flow between each aquifer in the district	From Reklaw Confining Unit into Carrizo-Wilcox Aquifer	688

3  
4  
5c  
5b  
5c



**FIGURE 2: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE SOUTHERN PORTION OF THE CARRIZO-WILCOX, QUEEN CITY, AND SPARTA AQUIFERS FROM WHICH THE INFORMATION IN TABLE 2 WAS EXTRACTED (THE AQUIFER EXTENT OF THE CARRIZO-WILCOX AQUIFER WITHIN THE DISTRICT BOUNDARY).**

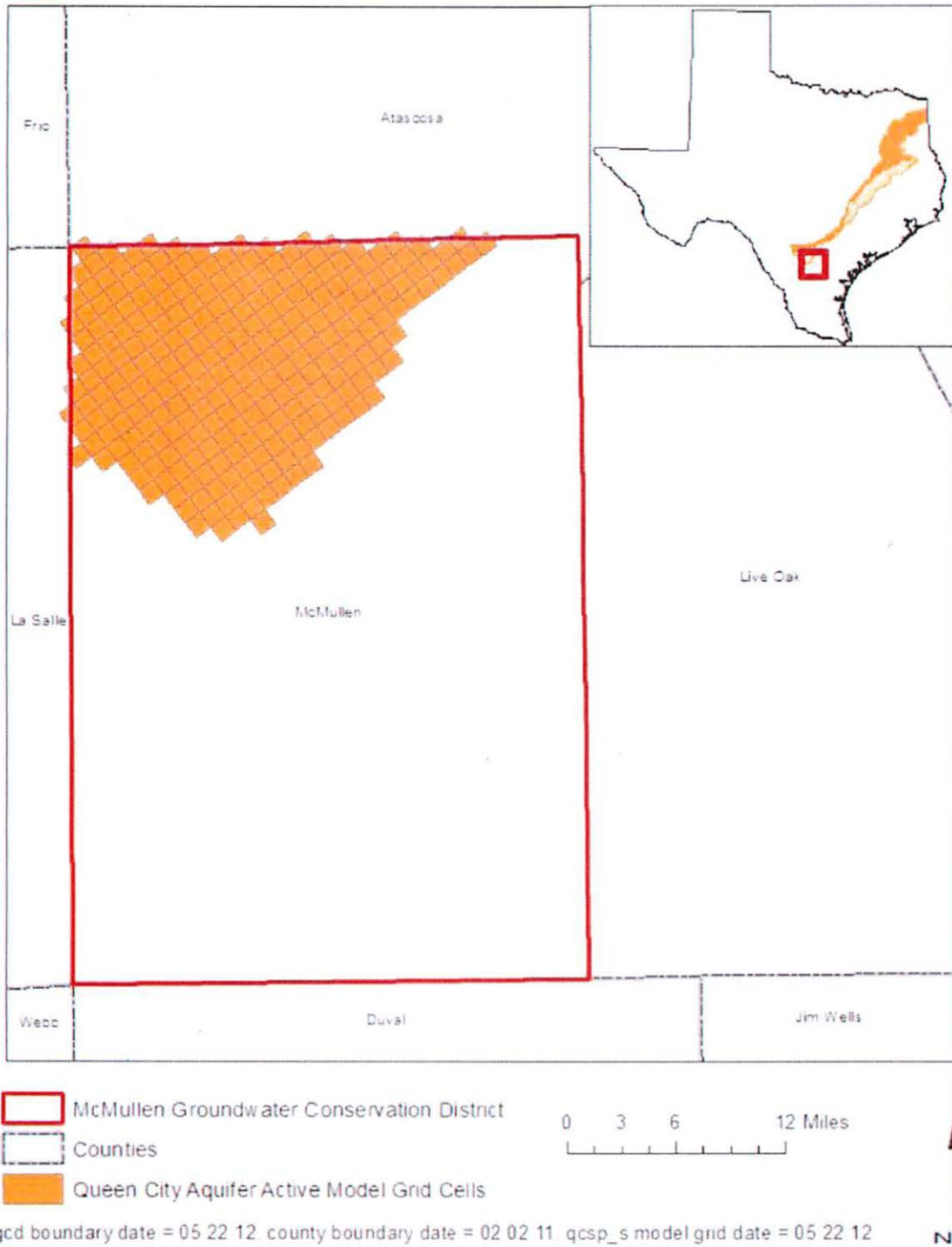
**TABLE 3: SUMMARIZED INFORMATION FOR THE QUEEN CITY AQUIFER THAT IS NEEDED FOR MCMULLEN GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.**

<i>Management Plan requirement</i>	<i>Aquifer or confining unit</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the district	Queen City Aquifer	0
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Queen City Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Queen City Aquifer	719
Estimated annual volume of flow out of the district within each aquifer in the district	Queen City Aquifer	191
Estimated net annual volume of flow between each aquifer in the district	From Queen City Aquifer into the Weches Confining Unit	917
	From the Queen City Aquifer into the Reklaw Confining Unit	135

3

4

5c  
5b  
5c



**FIGURE 3: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE SOUTHERN PORTION OF THE CARRIZO-WILCOX, QUEEN CITY, AND SPARTA AQUIFERS FROM WHICH THE INFORMATION IN TABLE 3 WAS EXTRACTED (THE AQUIFER EXTENT OF THE QUEEN CITY AQUIFER WITHIN THE DISTRICT BOUNDARY).**



**TABLE 4: SUMMARIZED INFORMATION FOR THE SPARTA AQUIFER THAT IS NEEDED FOR MCMULLEN GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.**

<i>Management Plan requirement</i>	<i>Aquifer</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the district	Sparta Aquifer	0
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Sparta Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Sparta Aquifer	246
Estimated annual volume of flow out of the district within each aquifer in the district	Sparta Aquifer	268
Estimated net annual volume of flow between each aquifer in the district	From overlying units into the Sparta Aquifer	107
	From Weches Confining Unit into the Sparta Aquifer	101

3  
4

sa  
sb  
sc



**FIGURE 4: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE SOUTHERN PORTION OF THE CARRIZO-WILCOX, QUEEN CITY, AND SPARTA AQUIFERS FROM WHICH THE INFORMATION IN TABLE 4 WAS EXTRACTED (THE AQUIFER EXTENT OF THE SPARTA AQUIFER WITHIN THE DISTRICT BOUNDARY).**

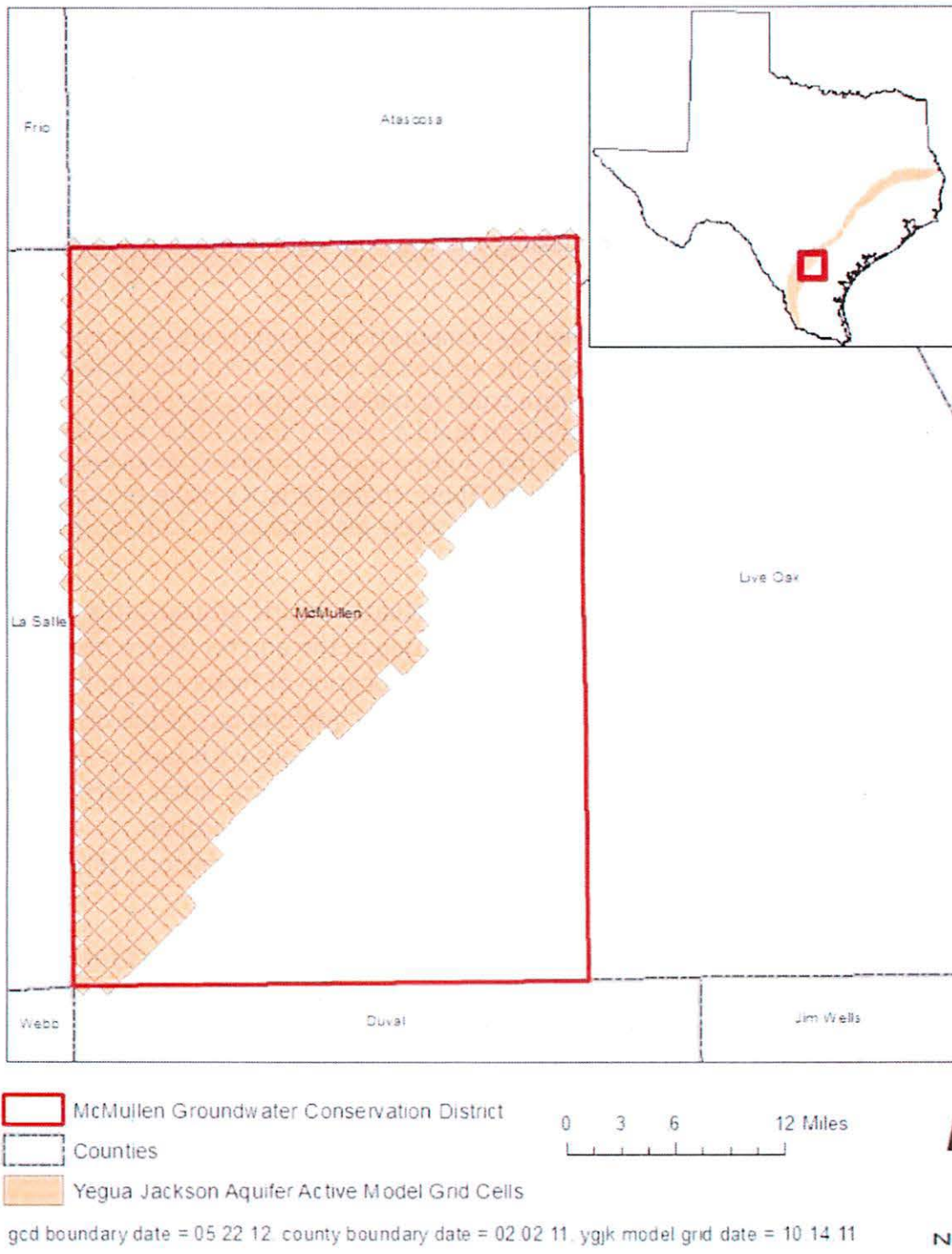
TABLE 5: SUMMARIZED INFORMATION FOR THE YEGUA JACKSON AQUIFER THAT IS NEEDED FOR MCMULLEN GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.

<i>Management Plan requirement</i>	<i>Aquifer or confining unit</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the district	Yegua Jackson Aquifer	7,034
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Yegua Jackson Aquifer	13,081
Estimated annual volume of flow into the district within each aquifer in the district	Yegua Jackson Aquifer	6,762
Estimated annual volume of flow out of the district within each aquifer in the district	Yegua Jackson Aquifer	4,577
Estimated net annual volume of flow between each aquifer in the district	From the Catahoula Formation into the Yegua Jackson Aquifer	243

3

4

5a  
5b  
5c



**FIGURE 5: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE YEGUA JACKSON AQUIFER FROM WHICH THE INFORMATION IN TABLE 5 WAS EXTRACTED (THE AQUIFER EXTENT WITHIN THE DISTRICT BOUNDARY).**

## ***LIMITATIONS***

The groundwater model(s) used in completing this analysis is the best available scientific tool that can be used to meet the stated objective(s). To the extent that this analysis will be used for planning purposes and/or regulatory purposes related to pumping in the past and into the future, it is important to recognize the assumptions and limitations associated with the use of the results. In reviewing the use of models in environmental regulatory decision making, the National Research Council (2007) noted:

**“Models will always be constrained by computational limitations, assumptions, and knowledge gaps. They can best be viewed as tools to help inform decisions rather than as machines to generate truth or make decisions. Scientific advances will never make it possible to build a perfect model that accounts for every aspect of reality or to prove that a given model is correct in all respects for a particular regulatory application. These characteristics make evaluation of a regulatory model more complex than solely a comparison of measurement data with model results.”**

A key aspect of using the groundwater model to evaluate historic groundwater flow conditions includes the assumptions about the location in the aquifer where historic pumping was placed. Understanding the amount and location of historic pumping is as important as evaluating the volume of groundwater flow into and out of the district, between aquifers within the district (as applicable), interactions with surface water (as applicable), recharge to the aquifer system (as applicable), and other metrics that describe the impacts of that pumping. In addition, assumptions regarding precipitation, recharge, and streamflow are specific to a particular historic time period.

Because the application of the groundwater model was designed to address regional scale questions, the results are most effective on a regional scale. The TWDB makes no warranties or representations relating to the actual conditions of any aquifer at a particular location or at a particular time.

It is important for groundwater conservation districts to monitor groundwater pumping and overall conditions of the aquifer. Because of the limitations of the groundwater model and the assumptions in this analysis, it is important that the groundwater conservation districts work with the TWDB to refine this analysis in the future given the reality of how the aquifer responds to the actual amount and location of pumping now and in the future. Historic precipitation patterns also need to be placed in context as future climatic conditions, such as dry and wet year precipitation patterns, may differ and affect groundwater flow conditions.

## **REFERENCES:**

- Chiang, W., and Kinzelbach, W., 2001, Groundwater Modeling with PMWIN, 346 p
- Chowdhury, Ali. H., Wade, S., Mace, R.E., and Ridgeway, C., 2004, Groundwater Availability Model of the Central Gulf Coast Aquifer System: Numerical Simulations through 1999- Model Report, 114 p.,  
[http://www.twdb.texas.gov/groundwater/models/gam/glfc\\_c/TWDB\\_Recalibration\\_Report.pdf](http://www.twdb.texas.gov/groundwater/models/gam/glfc_c/TWDB_Recalibration_Report.pdf).
- Deeds, N., Kelley, V., Fryar, D., Jones, T., Whallon, A.J., and Dean, K.E., 2003, Groundwater Availability Model for the Southern Carrizo-Wilcox Aquifer: Contract report to the Texas Water Development Board, 452 p.,  
[http://www.twdb.texas.gov/groundwater/models/gam/czwx\\_s/CZWX\\_S\\_Full\\_Report.pdf](http://www.twdb.texas.gov/groundwater/models/gam/czwx_s/CZWX_S_Full_Report.pdf).
- Deeds, N.E., Yan, T., Singh, A., Jones, T.L., Kelley, V.A., Knox, P.R., Young, S.C., 2010, Groundwater availability model for the Yegua-Jackson Aquifer: Final report prepared for the Texas Water Development Board by INTERA, Inc., 582 p.,  
[http://www.twdb.texas.gov/groundwater/models/gam/ygjk/YGJK\\_Model\\_Report.pdf](http://www.twdb.texas.gov/groundwater/models/gam/ygjk/YGJK_Model_Report.pdf).
- Kelley, V.A., Deeds, N.E., Fryar, D.G., and Nicot, J.P., 2004, Groundwater availability models for the Queen City and Sparta aquifers: Contract report to the Texas Water Development Board, 867 p.,  
[http://www.twdb.texas.gov/groundwater/models/gam/qcsp/QCSP\\_Model\\_Report.pdf](http://www.twdb.texas.gov/groundwater/models/gam/qcsp/QCSP_Model_Report.pdf).
- National Research Council, 2007, Models in Environmental Regulatory Decision Making Committee on Models in the Regulatory Decision Process, National Academies Press, Washington D.C., 287 p.
- Tu, K., 2008, GAM Run 08-02: Texas Water Development Board, GAM Run 08-02 Report, 7 p., <http://www.twdb.texas.gov/groundwater/docs/GAMruns/GR08-02.pdf>.
- Waterstone Environmental Hydrology and Engineering Inc. and Parsons, 2003, Groundwater availability of the Central Gulf Coast Aquifer: Numerical Simulations to 2050, Central Gulf Coast, Texas Contract report to the Texas Water Development Board, 157 p.

McMullen Groundwater Conservation District  
REGULAR MEETING JULY 10, 2013  
9:04 A.M.

12

H. JAMBERS DECLARED A QUORUM AND CALLED THE MEETING TO ORDER AT 9:04 AM.

MEMBERS PRESENT: S. DILWORTH, DAVID LONGAN, H. JAMBERS, J. WHEELER

GUEST PRESENT: LONNIE STEWART, JUDGE TEAL

PUBLIC COMMENTS: H. JAMBERS OPENED THE PUBLIC HEARING CONCERNING THE DISTRICT MANAGEMENT PLAN. NO COMMENTS WERE RECEIVED SO H. JAMBERS CLOSED THE PUBLIC HEARING. NO OTHER COMMENTS WERE RECEIVED BY THE PUBLIC.

J. WHEELER MOVED TO APPROVE THE MINUTES OF THE PREVIOUS MEETING AS PRESENTED. S. DILWORTH SECONDED. MOTION CARRIED UNANIMOUSLY.

FINANCIAL REPORT: CHECKING ACCOUNT \$93,500.94

D. LONGAN MOVED TO ACCEPT THE FINANCIAL REPORT UNTIL AUDITED. S. DILWORTH SECONDED. MOTION CARRIED UNANIMOUSLY.

J. WHEELER MOVED TO PAY THE EXPENSES PRESENTED. S. DILWORTH SECONDED. MOTION CARRIED UNANIMOUSLY.

THE BOARD DISCUSSED THE 2012 AUDIT PERFORMED BY JOHN LUBY. D. LONGAN MOVED TO APPROVE THE 2012 AUDIT AS CORRECTED. S. DILWORTH SECONDED. MOTION CARRIED UNANIMOUSLY.

THE BOARD REVIEWED THE DRAFT DISTRICT MANAGEMENT PLAN AND RESOLUTION. S. DILWORTH MOVED TO APPROVE THE DISTRICT MANAGEMENT PLAN AND RESOLUTION. J. WHEELER SECONDED. MOTION CARRIED UNANIMOUSLY. (COPY ATTACHED)

STEWART UPDATED THE BOARD ON GMA 13 AND 16.

STEWART UPDATED THE BOARD ON LEGISLATIVE SESSION.

THE BOARD DISCUSSED THE PROPOSED 2014 BUDGET. S. DILWORTH MOVED TO APPROVE THE PROPOSED 2014 BUDGET SUBJECT TO PUBLIC HEARING. D. LONGAN SECONDED. MOTION CARRIED UNANIMOUSLY. (COPY ATTACHED)

THE BOARD DISCUSSED THE PROPOSED TAX RATE FOR 2013. J. WHEELER MOVED TO APPROVE A DRAFT TAX RATE OF \$0.005 PER \$100 VALUATION. D. LONGAN SECONDED. MOTION CARRIED UNANIMOUSLY.

J. WHEELER MOVED TO ADJOURN AT 9:40AM. S. DILWORTH SECONDED. MOTION CARRIED UNANIMOUSLY.

---

HAROLD JAMBERS JR.-PRES.

---

DAVID LONGAN- SECRETARY

McMullen Groundwater Conservation District

PO Box 232

Tilden, TX 78072

13

July 10, 2013

TPWD Choke Canyon State Park - Calliham

4200 Smith School Road

Austin, Texas 78744-3218

Dear Sirs: The McMullen GCD has approved a revised management plan today. The approved plan is available on our website which is [www.mcmullengcd.org](http://www.mcmullengcd.org) under the management plan tab.

Thanks and if you have further questions, please call Lonnie Stewart at 361-449-7017.

Sincerely yours,



Lonnie Stewart

Manager



McMullen Groundwater Conservation District

PO Box 232

Tilden, TX 78072

July 10, 2013

McMullen County WCID #2

HC 71 Box 199

Three Rivers, Texas 78071-9401

Dear Sirs: The McMullen GCD has approved a revised management plan today. The approved plan is available on our website which is [www.mcmullengcd.org](http://www.mcmullengcd.org) under the management plan tab.

Thanks and if you have further questions, please call Lonnie Stewart at 361-449-7017.

Sincerely yours,



Lonnie Stewart

Manager

13

McMullen Groundwater Conservation District

PO Box 232

Tilden, TX 78072

July 10, 2013

McMullen County WCID #1

PO Box 4

Tilden, Texas 78072

Dear Sirs: The McMullen GCD has approved a revised management plan today. The approved plan is available on our website which is [www.mcmullengcd.org](http://www.mcmullengcd.org) under the management plan tab.

Thanks and if you have further questions, please call Lonnie Stewart at 361-449-7017.

Sincerely yours,



Lonnie Stewart

Manager

13

**Subject:** Approved DMP

**From:** Lonnie Stewart (louwcd@yahoo.com)

**To:** wggwcd.swtrea@sbcglobal.net; vhilderbran@stx.rr.com; russell.labus@evergreenuwcd.org; rillgner@edwardsaquifer.org; daniel.meyer@pccd.org; davidcaldwellmcgcd@sbcglobal.net; gcuwcd@gvec.net; jhalliburton@pccd.org; melissa.gonzalez@evergreenuwcd.org; ronnaumann@sbcglobal.net;

**Cc:** louwcd@yahoo.com;

**Date:** Wednesday, July 10, 2013 3:48 PM

Group, I am attaching the Approved District Management plan that the McMullen GCD board approved today. Also, it is available on our website <http://www.mcmullengcd.org/>. Let me know if you need further information.

*Thanks,*  
*Lonnie Stewart*  
LOUWCD: 361-449-1151  
BGCD: 361-358-2244  
Mobile Phone: 361-449-7017

**Subject:** Approved DMP

**From:** Lonnie Stewart (louwcd@yahoo.com)

**To:** rguerra@co.starr.tx.us; mcmullengcd@yahoo.com; mcraggie77@aol.com; Gustavogo@cctexas.com; general\_manager@kenedygcd.com; durasnillo28@hotmail.com; duvalgwdmng@gmail.com; louwcd@yahoo.com; fsaenz641@hotmail.com; wsb3@aol.com; trynefarm@aol.com; gtanner@mestenainc.com; BrentC@cctexas.com;

**Date:** Wednesday, July 10, 2013 3:50 PM

Group, I am attaching the Approved District Management plan that the McMullen GCD board approved today. Also, it is available on our website <http://www.mcmullengcd.org/>. Let me know if you need further information.

*Thanks,*

*Lonnie Stewart*

LOUWCD: 361-449-1151

BGCD: 361-358-2244

Mobile Phone: 361-449-7017

**Subject:** Approved DMP

**From:** Lonnie Stewart (louwcd@yahoo.com)

**To:** wsb3@aol.com; cserrato@stwa.org; cmims@nueces-ra.org; rfreund@nueces-ra.org; louwcd@yahoo.com;

**Date:** Wednesday, July 10, 2013 3:52 PM

Group, I am attaching the Approved District Management plan that the McMullen GCD board approved today. Also, it is available on our website <http://www.mcmullengcd.org/>. Let me know if you need further information.

*Thanks,*

*Lonnie Stewart*

LOUWCD: 361-449-1151

BGCD: 361-358-2244

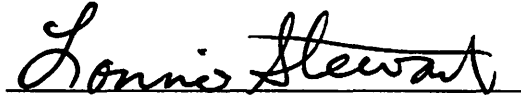
Mobile Phone: 361-449-7017

13

**McMULLEN  
GROUNDWATER CONSERVATION  
DISTRICT**

**NOTICE OF MEETING**

Notice is hereby given that a Regular Meeting of the Board of Directors of the McMullen Groundwater Conservation District (BGCD) will be held on **WEDNESDAY, JULY 10, 2013 at 9:00 a.m.** at the McMullen Commissioner Court office.



Lonnie Stewart - Manager

**Agenda**

12

1. Declaration of Quorum and Call to Order
2. Public Comments/ Public Hearing on Management Plan

**Consider and /or Action On:**

3. Minutes of previous meeting
4. Financial report
5. Expenses
6. Approve the 2012 audit, if available
7. District Management Plan
8. GMA 13 and 16 update
9. Legislative update
10. Proposed 2014 Budget
11. Proposed 2013 Tax Rate
12. Directors discussion
13. Adjourn

THE STATE OF TEXAS  
COUNTY OF McMULLEN

Received in duplicate originals, this the 27th day of July, 2013, and published according to laws by posting a duplicate original hereof on a bulletin board convenient to the public of the McMullen County Courthouse 72 hours prior to scheduled meeting.

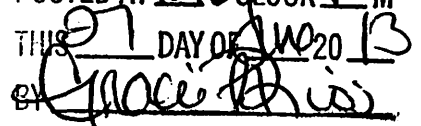
McMULLEN COUNTY

\_\_\_\_\_  
COUNTY CLERK



Deputy

POST OFFICE Box 232 \* Tilden, TX 78072  
361-449-7017

POSTED AT 12:30 O'CLOCK P.M.  
THIS 27 DAY OF JULY 2013  
BY 

**Subject:** FW: McMullen Draft DMP

**From:** Mike Mahoney (mjmahoney@karnesec.net)

**To:** billhutch@texasgw.com; daniel.meyer@pccd.org; davidcaldwellmcd@sbcglobal.net; wgcd.swtrea@sbcglobal.net; gcuwcd@gvec.net; jhalliburton@pccd.org; jaytroell@yahoo.com; jesparza@edwardsaquifer.org; louwcd@yahoo.com; melissa.gonzalez@evergreenuwcd.org; rilgner@edwardsaquifer.org; ronnaumann@sbcglobal.net; russell.labus@evergreenuwcd.org; vhilderbran@stx.rr.com;

**Date:** Monday, July 1, 2013 3:10 PM

FYI:

-mjm

Mike Mahoney

PO Box 102

Pleasanton, TX 78064

Cell 830.570.4156

**From:** Lonnie Stewart [mailto:louwcd@yahoo.com]

**Sent:** Monday, July 01, 2013 1:23 PM

**To:** Con; Scott Bledsoe; Carola Serrato

**Cc:** Luis Pena; Felix Saenz; Andy Garza; Brent Clayton; Charles Ring; Armando Vela; Mike Mahoney; louwcd

**Subject:** McMullen Draf DMP

Group, I am attaching the draft district management plan for McMullen GCD. The public hearing is scheduled for Wednesday, July 10, at 9:00 AM in the McMullen County Commissioners Court room.

Please provide any comments to the draft to me or at the public hearing.

Thanks,

PS: Mike can you forward to GMA 13 members, Please and cc me.

*Thanks,*

*Lonnie Stewart*

LOUWCD: 361-449-1151

BGCD: 361-358-2244

Mobile Phone: 361-449-7017



13

**Subject:** McMullen Draf DMP

**From:** Lonnie Stewart (louwcd@yahoo.com)

**To:** cmims@nueces-ra.org; wsb3@aol.com; cserrato@stwa.org;

**Cc:** duvalgwdmng@gmail.com; fsaenz641@hotmail.com; general\_manager@kenedygcd.com; BrentC@cctexas.com; mcraggie77@aol.com; durasnillo28@hotmail.com; mjmahoney@karnesec.net; louwcd@yahoo.com;

**Date:** Monday, July 1, 2013 1:23 PM

Group, I am attaching the draft district management plan for McMullen GCD. The public hearing is scheduled for Wednesday, July 10, at 9:00 AM in the McMullen County Commissioners Court room.

Please provide any comments to the draft to me or at the public hearing.

Thanks,

PS: Mike can you forward to GMA 13 members, Please and cc me.

*Thanks,*

*Lonnie Stewart*

LOUWCD: 361-449-1151

BGCD: 361-358-2244

Mobile Phone: 361-449-7017

7/3/13

McMullen GCS

revise dist  
mgt plan  
meeting

12

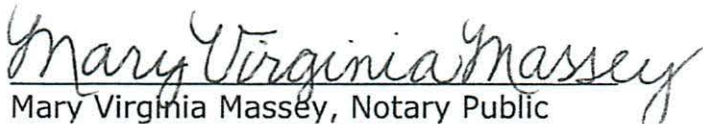
### PUBLISHER'S AFFIDAVIT

THE STATE OF TEXAS  
COUNTY OF BEE

Before me, the undersigned authority, on this day personally appeared George G. Latcham, known to me, who, by me duly sworn, on his oath deposes and says that he is the Publisher of The Progress, a newspaper of general circulation in McMullen County. A copy of the within and foregoing attached notice was published in said newspaper on the following date(s): July 3, 2013.

  
George G. Latcham, Publisher

Sworn to and subscribed before me by George G. Latcham, this the 3rd day of July 2013 A.D. to certify which witness my hand and official seal.

  
Mary Virginia Massey, Notary Public  
in and for the State of Texas



12

**McMULLEN GROUNDWATER  
CONSERVATION DISTRICT**

**NOTICE OF PUBLIC MEETING**

Notice is hereby given that a **Public Hearing concerning the revision of the District Management Plan** by the Board of Directors of the McMullen Groundwater Conservation District (MGCD) will be held on **Wednesday, July 10, 2013 at 9:00 AM** at the McMullen County Commissioners Court room. Copies of the Draft Management Plan are available at the McMullen County Judge's office, on the website [www.mcmullengcd.org](http://www.mcmullengcd.org), emailing Lonnie Stewart at [louwcd@yahoo.com](mailto:louwcd@yahoo.com), or calling Lonnie Stewart at 361-449-7017.

WO7/3

**Resolution 07/10/2013**

Whereas, the McMullen Groundwater Conservation District has held the appropriate public hearings, and;

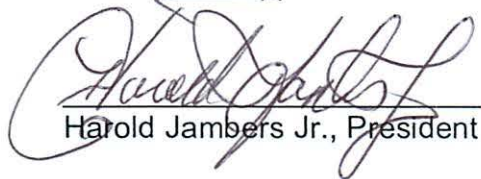
Whereas, the District has presented the management plan to the county officials and the Nueces River Authority;


Whereas, the District has followed the rules set forth by the by the statutes in Chapter 36 of the Texas Water Code and the TWDB.

Now, Therefore be it Resolved, that the McMullen Groundwater Conservation District has approved the District management plan.

In favor 4 Against 0 Not Present 1

Passed and Approved the 10<sup>th</sup> day of July, 2013.

  
Harold Jambers Jr., President

Attest by :   
David Longan, Secretary