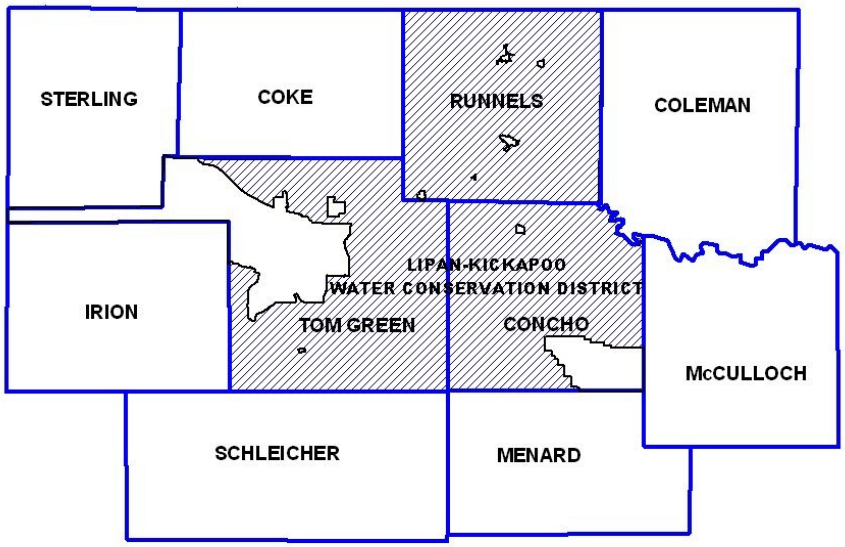
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT



MANAGEMENT PLAN

2013-2018

Adopted May 15, 2013

APPROVED BY TEXAS WATER DEVELOPMENT BOARD
JUNE 24, 2013

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LIPAN-KICKAPOO WATER CONSERVATION DISTRICT

MANAGEMENT PLAN — 2013-2018

The Lipan-Kickapoo Water Conservation District (the "District") was created by the 70th Texas Legislature under the authority of Section 59, Article XVI, of the Texas Constitution, and in accordance with Chapter 51 and 52 of the Texas Water Code ("Water Code") as recorded in Section 4, Chapter 439, Acts of the 70th Legislature, Regular Session, 1987. In 1995, by Acts of the 74th Legislature, Chapter 52 of the Water Code was repealed and replaced with Chapter 36 of the Water Code effective September 1, 1995. In 2009, by Acts of the 81st Legislature, the enabling legislation for the District was recodified in Texas Special District Local Laws Code Ann. ch. 8805 Lipan-Kickapoo Water Conservation District.

The District is a governmental agency and a body politic and corporate. The District was created "to provide for the conservation, preservation, protection, recharge, and prevention of waste and pollution of the district's groundwater and surface water" consistent with the objectives set forth in Section 59, Article XVI, of the Texas Constitution, and Chapter 36, Water Code. The District is composed of the territory described by Section 4, Chapter 439, Acts of the 70th Legislature, Regular Session, 1987, and as that territory has been modified under Chapter 36, Water Code, or other law.

DISTRICT MISSION

The mission of the Lipan-Kickapoo Water Conservation District is to develop, promote and implement water conservation and management strategies to:

a) conserve, preserve, and protect the groundwater supplies of the District,
b) protect and enhance recharge,
c) prevent waste and pollution, and
d) to effect the efficient, beneficial and wise use of water for the benefit of the citizens and economy of the District.

The District seeks to protect the groundwater quality and quantity within the District, pursuant to the powers and duties granted under Chapter 36, Subchapter D of the Texas Water Code. Any action taken by the District shall only be after full consideration and respect has been afforded to the individual property rights of all citizens of the District.

TIME PERIOD FOR THIS PLAN

This plan becomes effective upon adoption by the Board of Directors and approval by the Texas Water Development Board executive administrator. The plan remains in effect for five years after TWDB approval, or until such time as a revised or amended plan is approved.

STATEMENT OF GUIDING PRINCIPLES

The District recognizes that its groundwater resources are of utmost importance to the economy and environment, first to the residents of the District and then to the region. Also recognized is

the importance of understanding the aquifers and aquifer characteristics for proper management of these resources. In addition, the integrity and ownership of groundwater play an important role in the management of this precious resource. One of the primary goals of the District is to preserve the integrity of the groundwater in the district from all potential contamination sources. This is accomplished as the District sets objectives to provide for the conservation, preservation, protection, recharge, prevention of waste and pollution, and efficient use of water including:

- Acquiring, understanding and beneficially employing scientific data on the District's aquifers and their hydrogeologic qualities and identifying the extent and location of water supplies within the District, for the purpose of developing sound management procedures;
- Protecting the private property rights of landowners by ensuring that landowners continue to have an adequate groundwater supply underlying their land;
- Promulgating rules for permitting and regulation of spacing, production, reporting, and transportation of groundwater resources in the District to protect the quantity and quality of the resource;
- Declaring temporary moratoriums on the drilling of wells and limiting the production of wells during times of drought;
- Educating the public and managing for the conservation and beneficial use of the water and to prevent pollution of groundwater resources;
- Cooperating and coordinating with other groundwater conservation districts with which the District shares aquifer resources.

Guidance to achieve these objectives comes from the locally elected board members who understand the local conditions and who try to manage the groundwater resources for the benefit of all the citizens of the district and region.

GENERAL DESCRIPTION OF THE DISTRICT

History

The primary concern of the residents of this area of the State regarding groundwater is the potential contamination of the groundwater from leaking oil and gas wells. For this reason, the residents introduced legislation in the 70th Regular Legislative Session (1987) for creation of the District. In November 1987, the residents confirmed the district and also voted to fund the district operations through local property taxes. It became an active district on November 1, 1988. On January 2, 1989, the district adopted a 10-year Management Plan and in February 1989 adopted Rules and By-Laws which became effective March 6, 1989. In May 2001, in response to a petition submitted to the District to annex territory located outside the District in Runnels, Concho, and Tom Green counties, an election was held and the residents in this territory voted to join the District and to help fund the District through local property taxes.

The District is governed by a seven member locally elected Board of Directors - two members from Concho County and two members from Runnels County are elected in one election, and two members from Tom Green County and one member-at-large from the District as a whole are elected in another. Elections are held every two years. By having a local board of directors, the District is very responsive to voters' approval or disapproval of the local management of their groundwater and/or the services provided by the District.

Location and Extent

The Lipan-Kickapoo WCD has an areal extent of approximately 2,262,464 acres or 3,535 square miles and is located in the center of the State of Texas. The USGS geographic center of Texas monument is located within the District and is approximately 13 miles southeast of Vancourt, Texas where the District office is located.

The District's economy is based primarily on agriculture with some oil and gas production. The agricultural income is derived primarily from cotton, grain sorghum, wheat, corn, alfalfa as well as sheep, goats, and beef cattle production. Income is also obtained from cattle and sheep feedlots and dairies. Recreational hunting leases also contribute to the income of the area.

The boundaries of the water district generally include: All of Tom Green, Runnels, and Concho counties not currently within the boundaries of the Hickory Underground Water Conservation District. The cities/towns of Winters, Ballinger, Rowena, Miles, Paint Rock, San Angelo, Christoval, Grape Creek, the Red Creek Municipal Utility District, and the area northwest of San Angelo north of the Middle Concho River and south and west of US Highway 87 north to the Coke County line are excluded from the district (Fig. 1). Most of the towns and cities within these counties were excluded because they get their water supply from surface water that belongs to and is regulated by the state. Therefore, there are no major municipalities within the District boundaries.

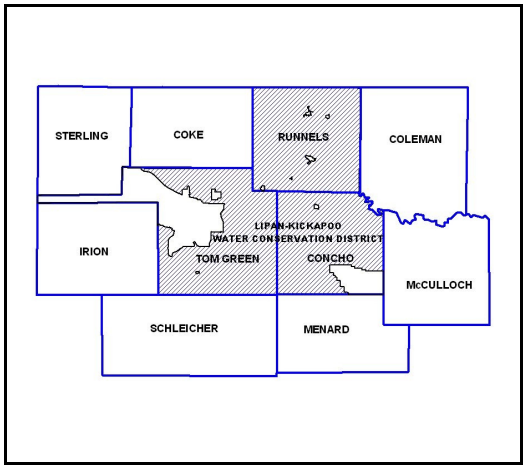

Figure 1. Location of the Lipan-Kickapoo Water Conservation District showing excluded areas.

Tom Green County

The largest single land use in the county is agriculture with a total of 923,509 acres of which 227,958 acres is crop or farm land and the balance of 695,551 acres is range land.[1] The crop land is located primarily in the center of the county over the Lipan aquifer while the range land is located on the north, west, and south portions of the county over the Edwards-Trinity aquifer. Irrigation covers approximately 33,738 acres of the county's crop land.[2] Pivot irrigation systems have been the primary method of applying irrigation water, but in the last few years a considerable number of drip irrigation systems have been installed replacing other methods of irrigation.

Concho County

The largest single land use in the county is agriculture with a total of 551,371 acres of which 105,973 acres is crop or farm land and the balance of 445,398 acres is range land.[3] The crop land

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[1] U.S. Department of Agriculture, National Agricultural Statistics Service - 2007 Census of Agriculture, Table 8.
http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/Texas/

[2] Ibid. Table 10.

[3] Ibid. Table 8.

is located primarily in the west central portion of the county over the Lipan aquifer while the range land is located on the north, east, and south portions of the county over the Edwards-Trinity and Hickory aquifers. Irrigation covers approximately 4,486 acres of the county's crop land.[4] The principle method of irrigation is through pivot irrigation systems with some drip irrigation.

Runnels County

The largest single land use in the county is agriculture with a total of 656,204 acres of which 264,780 acres is crop or farm land and the balance of 391,424 acres is range land.[5] The crop land is located primarily in the west central and southwestern portion of the county over the Lipan aquifer while the range land is located on the north and east portions of the county. Irrigation covers approximately 3,484 acres of the county's crop land.[6] The principle methods of irrigation are furrow irrigation, pivot irrigation, and drip irrigation.

Overall land use in the District is for agricultural purposes of which approximately 598,711 acres are crop or farm land and 1,532,373 acres are range land.[7] The crop land is located primarily in the central portion of the District over the Lipan aquifer while the range land is located along the boundaries of the District over the Edwards-Trinity and Hickory aquifers. Irrigation covers approximately 41,708 acres of the District's crop land.[8] The principle method of irrigation has been furrow irrigation. However, within the last 10 years there has been a large scale change to more highly efficient pivot and drip irrigation. Drip irrigation is now being installed to replace both furrow irrigation and pivot irrigation.

Topography and Drainage

The District lies within the Colorado River Basin with much of the area known as the Concho Valley of Texas. Two major rivers, the Colorado-with its headwaters beginning on the South Plains and the Concho-with its headwaters located in the counties to the north, west, and south of Tom Green county, traverse the District and converge at the O.H. Ivie Reservoir on the Concho-Runnels-Coleman County lines. There are numerous creeks which are tributaries of these two rivers. Drainage is generally in an eastward direction. Springs flowing from the Edwards-Trinity aquifer form the headwaters of the South Concho river, Lipan Creek, and the Kickapoo Creek. Topographically, the District consists of the Lipan Flats in the center of the District southeast of the city of San Angelo to rolling plains in the remainder of the District in Concho, Runnels, and Tom Green Counties.

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[4] U.S. Department of Agriculture, National Agricultural Statistics Service - 2007 Census of Agriculture. Table 10.
http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/Texas/

[5] Ibid. Table 8.

[6] Ibid. Table 10.

[7] Ibid. Table 8.

[8] Ibid. Table 10.

REGIONAL COOPERATION AND COORDINATION

West Texas Regional Groundwater Alliance

The District is a member of the West Texas Regional Groundwater Alliance (WTRGA). This regional alliance consists of seventeen (17) locally created and locally funded districts that encompass approximately eighteen (18.2) million acres or twenty eight thousand three hundred sixty eight (28,368) square miles of West Texas (Fig 2). To put this in perspective, this area is larger than many individual states including Rhode Island (1,045 sq mi), Delaware (1,954 sq mi), Puerto Rico (3,425 sq mi), Connecticut (4,845 sq mi), Hawaii (6,423 sq mi), New Jersey (7,417 sq mi), Massachusetts (7,840 sq mi), New Hampshire (8,968 sq mi), Vermont (9,250 sq mi), Maryland (9,774 sq mi), and West Virginia (24, 230 sq mi). This West Texas region is as diverse as the State of Texas. Due to the diversity of this region, each member district provides it's own unique programs to best serve its constituents.

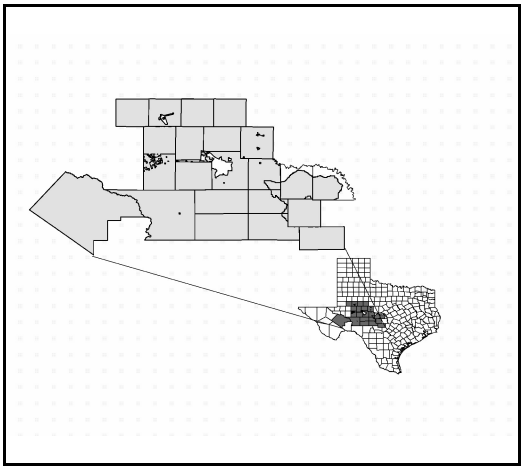

Figure 2. Territory in the West Texas Regional Alliance.

In May of 1988, four (4) groundwater districts; Coke County UWCD, Glasscock County UWCD, Irion County WCD, and Sterling County UWCD adopted the original Cooperative Agreement. As new districts were created, they too adopted the Cooperative Agreement. In the fall of 1996, the original Cooperative Agreement was redrafted and the West Texas Regional Groundwater Alliance was created. The current member districts and the year they joined the Alliance are:

Coke County UWCD	(1988)	Crockett County GCD	(1992)	Glasscock GCD	(1988)
Hickory UWCD # 1	(1997)	Hill Country UWCD	(2005)	Irion County WCD	(1988)
Kimble GCD	(2004)	Lipan-Kickapoo WCD	(1989)	Lone Wolf GCD	(2002)
Menard County UWD	(2000)	Middle Pecos GCD	(2005)	Permian Basin UWCD	(2006)
Plateau UWC & SD	(1991)	Santa Rita UWCD	(1990)	Sterling County UWCD	(1988)
Sutton County UWCD	(1991)	Wes-Tex GCD	(2005)		

This Alliance was created for local districts to coordinate and implement common objectives to facilitate the conservation, preservation, and beneficial use of water and related resources in this region of the State, to exchange information among the districts, and to educate the public about regional water issues. Local districts monitor the water-related activities that include but are not limited to farming, ranching, oil & gas production, and municipal water use. The Alliance coordinates management activities of the member districts primarily through exchange of information and policy discussions.

PURPOSE OF MANAGEMENT PLAN

The 75th Texas Legislature in 1997 enacted Senate Bill 1 ("SB 1") to establish a comprehensive statewide water planning process. In particular, SB 1 contained provisions that required groundwater conservation districts to prepare management plans to identify the water supply resources and water demands that will shape the decisions of each district. SB 1 designed the management plans to include management goals for each district to manage and conserve the groundwater resources within their boundaries. In 2001, the Texas Legislature enacted Senate Bill 2 ("SB 2") to build on the planning requirements of SB 1 and to further clarify the actions necessary for districts to manage and conserve the groundwater resources of the state of Texas.

The Texas Legislature enacted significant changes to the management of groundwater resources in Texas with the passage of House Bill 1763 (HB 1763) in 2005. HB 1763 created a long-term planning process in which groundwater conservation districts (GCDs) in each Groundwater Management Area (GMA) are required to meet and determine the Desired Future Conditions (DFCs) for the groundwater resources within their boundaries by September 1, 2010. In addition, HB 1763 required GCDs, to share management plans with the other GCDs in the GMA for review by the other GCDs.

The Lipan-Kickapoo Water Conservation District's management plan satisfies the requirements of SB 1, SB 2, HB 1763, the statutory requirements of Chapter 36 of the Texas Water Code, and the administrative requirements of the Texas Water Development Board's (TWDB) rules.

GROUNDWATER RESOURCES [9]

Lipan Aquifer - Report 345, "Aquifers of Texas"
http://www.twdb.state.tx.us/publications/reports/numbered_reports/doc/R345/Report345.asp

The Lipan aquifer is located in the Lipan Flats of eastern Tom Green, western Concho, and southern Runnels counties. In 1995, the TWDB in Report 345, "Aquifers of Texas", defined the Lipan Aquifer and its boundaries. The aquifer was located primarily in Tom Green County with parts of the aquifer located in Runnels and Concho Counties.

Then in 2011, the TWDB in Report 380, "Aquifers of Texas", http://www.twdb.state.tx.us/publications/reports/numbered_reports/index.asp, expanded the boundaries of the Lipan Aquifer to include all of the alluvium along the rivers and creeks. Water from the aquifer is principally used for irrigation, with limited amounts used for rural domestic and livestock needs. The typical irrigation practice in the area is to pump water held in storage in the aquifer during the growing season with the expectation of recharge of the aquifer during the winter months.

[9] All estimates of groundwater availability, usage, supplies, recharge, storage, and future demands are from data supplied by the Texas Water Development Board, unless otherwise noted. Data sources include Region F-2012 State Water Plan.

Edwards-Trinity (Plateau) Aquifer - Report 380, "Aquifers of Texas"

The Edwards-Trinity (Plateau) aquifer is a major aquifer, but only a minor source of groundwater in the southern part of Concho county and the northern and southern parts of Tom Green county. Since there is very limited amounts of groundwater available from this aquifer within the District, it is used primarily for livestock and domestic needs. It has been declared irrelevant for planning purposes within the boundaries of the District by GMA 7.

Hickory Aquifer - Report 380, "Aquifers of Texas"

Underlying the Edwards-Trinity (Plateau) aquifer in the southeastern part of Concho county is a down-dip portion of the Hickory aquifer. Water in the Hickory in Concho county and within the boundaries of the Lipan-Kickapoo WCD is known to be very saline. The water quality varies and the extent of radioactivity within the Hickory aquifer within the District, which is known to exist in other parts of the aquifer, is not yet known. This aquifer has been declared irrelevant for planning purposes within the boundaries of the District by GMA 7.

TECHNICAL DISTRICT INFORMATION REQUIRED BY TEXAS ADMINISTRATIVE CODE

ESTIMATE OF MODELED AVAILABLE GROUNDWATER IN DISTRICT BASED ON DESIRED FUTURE CONDITIONS

Estimate of Modeled Available Groundwater in District Based on Desired Future Conditions
Texas Water Code § 36.001 defines modeled available groundwater as "the amount of water that the executive administrator determines may be produced on an average annual basis to achieve a desired future condition established under Section 36.108."

The joint planning process set forth in Texas Water Code § 36.108 must be collectively conducted by all groundwater conservation districts within the same GMA. The District is a member of GMA 7. GMA 7 adopted DFCs for the Lipan Aquifer on July 29, 2010, and declared the Hickory and Edwards Trinity Aquifers as not relevant for planning purposes in the Lipan-Kickapoo Water Conservation District. The adopted DFCs were then forwarded to the TWDB for development of the MAG calculations. The submital package for the DFCs can be found here:

http://www.twdb.state.tx.us/groundwater/management_areas/DFC.asp

A summary of the desired future conditions and the modeled available groundwater are summarized below.

On July 29, 2010, upon completion of the first cycle of joint planning among districts in Groundwater Management Area 7 mandated by Section 36.108 of the Texas Water Code, GMA 7 adopted the following Desired Future Conditions for aquifers of the Lipan-Kickapoo WCD:

1) Lipan Aquifer. Within the boundaries of the Lipan-Kickapoo WCD in Concho, Runnels, and Tom Green Counties: continue to use 100% of all available groundwater annually with annual fluctuations of water levels and zero (0) net draw down in water levels over the next 50 years.

2) Edwards-Trinity (Plateau) Aquifer. Not relevant for joint planning purposes within the boundaries of the Lipan-Kickapoo WCD.

3) Hickory Aquifer. Not relevant for joint planning purposes within the boundaries of the Lipan-Kickapoo WCD.

Table 1. Estimated minimum, average, and maximum modeled available groundwater for the Lipan Aquifer summarized by groundwater conservation district (GCD) in Groundwater Management Area 7. Results are in acre-feet per year. WCD refers to Water Conservation District.

Groundwater Conservation District	**Modeled Available Groundwater**		
	Minimum	**Average**	**Maximum**
Lipan-Kickapoo WCD	31,587	41,265	52,003
Total (districts where aquifer is relevant)	31,587	41,265	52,003

NOTE: These modeled available groundwater values are obtained from Table 3, GAM Run 10-062 MAG Report - November 18, 2011.

Modeled Available Groundwater in the District.

Please refer to Appendix A, page 7.

Amount of Groundwater Being Used within the District on an Annual Basis

Please refer to Appendix B, page 3.

Annual Amount of Recharge From Precipitation to the Groundwater Resources within the District

Please refer to Appendix C, page 6.

Annual Volume of Water that Discharges from the Aquifer to Springs and Surface Water Bodies

Please refer to Appendix C, page 6.

Estimate of the Annual Volume of Flow into the District, out of the District, and Between Aquifers in the District

Please refer to Appendix C, page 6.

Projected Surface Water Supply within the District

Please refer to Appendix B, page 6.

Projected Total Demand for Water within the District

Please refer to Appendix B, page 9.

Water Supply Needs

Please refer to Appendix B, page 11.

Water Management Strategies

Please refer to Appendix B, page 13.

Methodology to Track District Progress in Achieving Management Goals

An annual report ("Annual Report") will be created by the general manager and staff of the District and provided to the members of the Board of the District. The Annual Report will cover the District's performance in regards to achieving the management goals and objectives for the previous fiscal year. The report will include the number of instances each activity was engaged in during the year.

The Annual Report will be delivered to the Board at the first board meeting held following the completion of the District's fiscal year. A copy of the Annual Report will be kept on file and will be available for public inspection at the District office.

ACTIONS, PROCEDURES, PERFORMANCE, AND AVOIDANCE FOR DISTRICT IMPLEMENTATION OF MANAGEMENT PLAN

The District will implement the provisions of this plan and will utilize the provisions of this plan as a guide for determining the direction and/or priority for District activities. All operations of the District will be consistent with the provisions of this plan.

The District adopted its first set of rules in 1989 and amended the rules in 2000, 2006, 2007 and may amend the rules as necessary. Rules adopted or amended by the District shall be pursuant to TWC Chapter 36 and the provisions of this plan to insure the best management of the groundwater within the District. The development and enforcement of the rules of the District has been and will continue to be based on the best scientific and technical evidence available to the District. The rules are available at: http://lipan-kickapoo.org/rules.html

These rules are used by the District in the exercise of the powers conferred on the District by law and in the accomplishment of the purposes of the law creating the District. These rules may be used as guides in the exercise of discretion, where discretion is vested. However, under no circumstances and in no particular case will they or any part therein, be construed as a limitation or restriction upon the District to exercise powers, duties and jurisdiction conferred by law.

These rules create no rights or privileges in any person or water well, and shall not be construed to bind the Board in any manner in its promulgation of the District Management Plan, or amendments to these rules.

The District shall treat all citizens with equality. For good cause, the District, in its discretion, and after notice and hearing, if required, may grant an exception to the District rules. In doing so, the Board shall consider the potential for adverse effects on adjacent owners and aquifer conditions. The exercise of said discretion by the Board shall not be construed as limiting the power of the Board.

The District maintains a website http://www.lipan-kickapoo.org/ that is updated weekly. This site contains information on: District activities, forms, rules, hearing procedures, board meetings and hearings agendas, District programs, Chapter 36-Texas Water Code, Texas Water Well Drillers and Pump Installers Rules, Rules-Quick Reference Chart for the member districts of the West Texas Regional Groundwater Alliance (WTRGA) and other pertinent information.

The District has encouraged and will continue to encourage public cooperation and coordination in the implementation of the management plan for the District, as it is amended. All operations and activities of the District have been and will be performed in a manner that best encourages cooperation with the appropriate state, regional or local water entity. The meetings of the Board of the District are noticed and conducted at all times in accordance with the Texas Open Meetings Law. The District also makes available for public inspection all official documents, reports, records and minutes of the District pursuant with the Texas Public Information Act and will continue to do so in the future.

COORDINATION WITH SURFACE WATER ENTITIES

Only the Tom Green County Water Control and Improvement District #1, a federally owned surface water irrigation district, is located within the boundaries of the LKWCD. However, several reservoirs are located either in the District, partially in the District, or adjacent to it. Therefore, in the spirit of cooperation, this management plan has been forwarded for comment to all surface water entities who hold water rights in these reservoirs.

GOALS, MANAGEMENT OBJECTIVES AND PERFORMANCE STANDARDS

Goal
1.0 Providing the Most Efficient Use of Groundwater.
Gather groundwater data both to improve the understanding of the aquifers and their hydrogeologic properties and to quantify this resource for prudent planning and efficient use. (36.1071(a)(1))

Management Objective

1.1 Each year measure, record, and accumulate an historic record of static water levels in 20 monitor wells.

Performance Standards

1.1a - District will maintain a water level monitoring network and annually measure the water levels in the monitor well network.

1.1b - Annual report to Board of Directors listing the number of wells measured in the water level monitoring network.

Goal
2.0 Controlling and Preventing Waste of Groundwater.
Minimize potential contamination of the groundwater by monitoring the drilling and completion of wells. (36.1071(a)(2))

Management Objective

2.1 Each year, register all new water wells drilled in the District.

Performance Standards

2.1a - District will maintain files including information on the drilling and completion of all new wells drilled within the District.

2.1b - Annual report to the Board of Directors on the number of new wells registered during the year.

Goal
3.0 Conjunctive Surface Water Management Issues. (36.1071(a)(4))

Management Objective

3.1 Each year, monitor rainfall events on the watersheds within the District that will impact surface water runoff and groundwater recharge.

Performance Standards

3.1a - District will maintain a voluntary rainfall monitoring network to monitor rainfall events. Rainfall event data will be filed with the District and used to monitor surface water runoff and groundwater recharge within the District.

3.1b - Annual report to Board of Directors listing the total number of rain gauges in the rainfall monitoring network.

Goal
4.0 Drought Conditions. (36.1071(a)(6))

Management Objective

4.1 Each year the District will monitor the Texas Palmer Drought Severity Index. http://www.twdb.state.tx.us/apps/droughtinfo/default.aspx

Performance Standards

4.1a - District staff will monitor the Texas Palmer Drought Severity Index and maintain a link to the index on the District website for public access. Additional drought information will be available to the public at the District office.

4.1b - Annual report to Board of Directors listing the number of times drought information was provided to the public.

Goal
5.0(a) Conservation. (36.1071(a)(7))

Management Objective

5.1(a) Each year provide and distribute water conservation literature to District residents to promote the efficient use of water.

Performance Standards

5.1(a)1 - Water conservation information will be available to the District residents at the District office.

5.1(a)2 - Annual report to the Board of Directors listing the number of times water conservation information was distributed to area residents.

Goal
6.0 Desired Future Conditions (DFC's) of the Aquifers.
Monitor water level data to determine the viability and effectiveness of district rules in attaining the DFCs of the relevant aquifers within the District. (36.1071(a)(8))

Management Objective

6.1 Each year measure, record, and accumulate an historic record of static water levels in 5 strategically located indicator wells.

Performance Standards

6.1a - District will maintain 5 strategically located water level indicator wells and annually measure the water levels in these indicator wells to determine the effectiveness of the district rules in attaining the DFCs in relevant aquifers.

6.1b - Annual report to Board of Directors stating the effectiveness of the District rules in attaining the DFCs - Currently Effective or Not Effective and if not effective then recommend a change or changes to district rules to improve effectiveness.

MANAGEMENT GOALS DETERMINED NOT-APPLICABLE

Goal **Controlling and Preventing Subsidence.** (36.1071(a)(3))
Not appropriate or cost effective. The rigid geologic framework of the region precludes significant subsidence from occurring. This management goal is not applicable to the operations of the District.

Goal **Natural Resource Issues.** (36.1071(a)(5))
Not appropriate or cost effective. The District has no documented occurrence of endangered or threatened species dependent upon groundwater. Other issues related to resources—air, water, soil, etc. supplied by nature that are useful to life are likewise not documented. The natural resources of the oil and gas industry are regulated by the Railroad Commission on Texas, and are exempt by Chapter 36.117(e). Therefore, this management goal is not applicable to the operations of the District.

Goal **5.0(b) Brush Control.** (36.1071(a)(7))
Not appropriate or cost effective. Brush control projects are carried out and funded through the Upper Colorado River Authority and the NRCS. The projects are being used to replenish surface water supplies through the increased flow of springs in the creeks and rivers. This management goal is not applicable to the operations of the District.

Goal **5.0(c) Recharge Enhancement.** (36.1071(a)(7))
Not appropriate or cost effective. Research project "Evaluation of Groundwater Availability, Recharge, and Monitoring System Design" [10] completed for the District by LBG-Guyton on January 12, 2005 indicates that water is not available for recharge to the aquifers in the District. This management goal is not applicable to the operations of the District.

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[10] Evaluation of Groundwater Availability, Recharge, and Monitoring System Design, LBG-Guyton Associates, Prepared for the Lipan-Kickapoo Water Conservation District, January 12, 2005.

Goal 5.0(d) Rainwater Harvesting. (36.1071(a)(7))

Not appropriate or cost effective. Due to the limited amount of rainfall in the District, it is not cost effective to do large scale rainwater harvesting. This management goal is not applicable to the operations of the District.

Goal 5.0(e) Precipitation Enhancement. (36.1071(a)(7))

Not appropriate or cost effective. Due to the limited amount of rainfall in the District and the fact that some areas of the counties including the cities are not part of the District, it would not be cost effective to participate in a weather modification program. This management goal is not applicable to the operations of the District.

APPENDIX A

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GAM Run 10-062 MAG Version 2

by Mr. Wade Oliver

Updated to version 2 by Shirley Wade to reflect refined modeled available groundwater estimates

Texas Water Development Board
Groundwater Availability Modeling Section
(512) 936-0883
June 29, 2012

Cynthia K. Ridgeway, the Manager of the Groundwater Availability Modeling Section, is responsible for oversight of work performed by employees under her direct supervision. The seal appearing on this document was authorized by Cynthia K. Ridgeway, P.G. 471 on June 29, 2012.

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EXECUTIVE SUMMARY:

The modeled available groundwater for the Lipan Aquifer as a result of the desired future condition adopted by the districts of Groundwater Management Area 7 is, on average, approximately 41,000 acre-feet per year. We have divided the modeled available groundwater by county, regional water planning area, and river basin (Table 1) for use in the regional water planning process. We have also summarized the modeled available groundwater by county (Table 2) and groundwater conservation district (Table 3). The results presented in this report are based on Groundwater Availability Model (GAM) Run 10-002, which the districts of Groundwater Management Area 7 considered when developing the desired future condition for the Lipan Aquifer. The original version of the GAM Run 10-062 MAG report included estimates of modeled available groundwater which were considered non-relevant by the groundwater conservation districts within Groundwater Management Area 7. This report only includes estimates of modeled available groundwater within the Lipan-Kickapoo Water Conservation District.

REQUESTOR:

Mr. Allan Lange of Lipan-Kickapoo Water Conservation District on behalf of Groundwater Management Area 7

DESCRIPTION OF REQUEST:

In a letter dated August 13, 2010, Mr. Allan Lange provided the Texas Water Development Board (TWDB) with the desired future condition of the Lipan Aquifer adopted by the members of Groundwater Management Area 7. The desired future condition for the Lipan Aquifer, as presented in Resolution # 07-29-10-4 and adopted July 29, 2010 by the groundwater conservation districts within Groundwater Management Area 7, is shown below:

1) *within the boundaries of the Lipan-Kickapoo* [Water Conservation District] *in Concho, Runnels, and Tom Green Counties: continue to use 100% of all available groundwater annually with annual fluctuations of water levels and zero (0) net draw down in water levels over the next 50 years; and*
2) *the Lipan aquifer is not relevant for joint planning purposes outside the boundaries of Lipan-Kickapoo* [Water Conservation District].

In response to receiving the adopted desired future condition, the TWDB has estimated the modeled available groundwater for the Lipan Aquifer in Groundwater Management Area 7.

METHODS:

Groundwater Management Area 7 contains the Lipan Aquifer, a minor aquifer as defined in the 2007 State Water Plan (TWDB, 2007). The location of the Lipan Aquifer and the groundwater availability model cells that represent the aquifer, are shown in Figure 1.

The TWDB previously completed a model simulation that meets the above desired future condition. This is documented in Groundwater Availability Model (GAM) Run 10-002

(Hutchison, 2010). As described in Hutchison (2010), historical annual pumping from the Lipan Aquifer has been based largely on the water levels in the aquifer at the beginning of the irrigation season. Each year, pumping depletes the aquifer to the point that it is no longer economical to continue. Thus, when water levels are high, higher pumping can occur than when water levels are lower. After the irrigation season, water-levels recover as the aquifer is recharged from precipitation, inflow from the neighboring Edwards-Trinity (Plateau) Aquifer, and interaction with surface water. The amount of water available for pumping, therefore, varies depending on the amount of winter recharge.

Because of this, the simulations in GAM Run 10-002 used to evaluate the pumping required to meet the desired future condition were set up to determine the average and range of pumping that would occur under a variety of recharge conditions. The results below show the minimum and maximum pumping for any single year, as well as the average pumping among all years of the simulations.

PARAMETERS AND ASSUMPTIONS:

The parameters and assumptions for the model run using the groundwater availability model for the Lipan Aquifer are described below:

- The results presented here are based on GAM Run 10-002 (Hutchison, 2010). See Hutchison (2010) for a full description of the methods, assumptions, and results of the groundwater availability model run.

- Version 1.01 of the groundwater availability model for the Lipan Aquifer was used for all simulations. See Beach and others (2004) for assumptions and limitations of the groundwater availability model.

- The model includes one layer representing the Quaternary Leona Formation, the underlying Permian Formations, and the Edwards-Trinity (Plateau) Aquifer to the west, south, and north. It should be noted that extent of the Lipan Aquifer in the model pre-dates the updated footprint noted in the 2007 State Water Plan and does not include all of the aquifer as it is currently delineated.

- The mean error (a measure of the difference between simulated and measured water levels during model calibration) in the groundwater availability model is 4.7 feet for the calibration period (1980-1989) and 1.8 feet for the verification period (1990-1999, Beach and others, 2004).

Modeled Available Groundwater and Permitting

As defined in Chapter 36 of the Texas Water Code, "modeled available groundwater" is the estimated average amount of water that may be produced annually to achieve a desired future condition. Groundwater conservation districts are required to consider modeled available groundwater, along with several other factors, when issuing permits in order to manage groundwater production to achieve the desired future condition(s). The other factors districts must consider include annual precipitation and production patterns, the estimated amount of

pumping exempt from permitting, existing permits, and a reasonable estimate of actual groundwater production under existing permits. The estimated amount of pumping exempt from permitting, which the TWDB is required to develop after soliciting input from applicable groundwater conservation districts, will be provided in a separate report.

RESULTS:

The modeled available groundwater for the Lipan Aquifer in Groundwater Management Area 7 as a result of the desired future condition is, on average, approximately 41,000 acre-feet per year. We have divided this pumping by county, regional water planning area, and river basin for each decade between 2010 and 2060 for use in the regional water planning process (Table 1). Notice that the Lipan Aquifer is located entirely within Region F Regional Water Planning Area and the Colorado River Basin.

We have also summarized the minimum, average, and maximum modeled available groundwater by county and groundwater conservation district (Tables 2 and 3, respectively) based on the seasonal considerations explained earlier.

LIMITATIONS:

The groundwater model used in developing estimates of modeled available groundwater is the best available scientific tool that can be used to estimate the pumping that will achieve the desired future conditions. Although the groundwater model used in this analysis is the best available scientific tool for this purpose, it, like all models, has limitations. 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 develop estimates of modeled available groundwater is the need to make assumptions about the location in the aquifer where future pumping will occur. As actual pumping changes in the future, it will be necessary to evaluate the amount of that pumping as well as its location in the context of the assumptions associated with this analysis. Evaluating the amount and location of future pumping is as important as evaluating the changes in groundwater levels, spring flows, and other metrics that describe the condition of the groundwater resources in the area that relate to the adopted desired future condition(s).

Given these limitations, users of this information are cautioned that the modeled available groundwater numbers should not be considered a definitive, permanent description of the amount of groundwater that can be pumped to meet the adopted desired future condition. 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 future groundwater pumping as well as whether or not they are achieving their desired future conditions. Because of the limitations of the model and the assumptions in this analysis, it is important that the groundwater conservation districts work with the TWDB to refine the modeled available groundwater numbers given the reality of how the aquifer responds to the actual amount and location of pumping now and in the future.

REFERENCES:

Beach, J.A., Burton, S. and Kolarik, B., 2004, Groundwater availability model for the Lipan Aquifer in Texas: contract report to the Texas Water Development Board.

Hutchison, W.R., 2010, GAM Run 10-002: Texas Water Development Board, GAM Run 10-002 Report, 8 p.

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.

Texas Water Development Board, 2007, Water for Texas – 2007—Volumes I-III; Texas Water Development Board Document No. GP-8-1, 392 p.

Table 1. Modeled available groundwater in acre-feet for the Lipan Aquifer in Groundwater Management Area 7 by county, regional water planning area, and river basin. Pumping volumes are included for only portions of the counties included in the Lipan-Kickapoo Groundwater Conservation District. Note this table reflects the results assuming average pumping and climatic conditions. For drier climatic conditions, please see Table 2 (Minimum Modeled Available Groundwater).

County	Regional Water Planning Area	Basin	Year					
			2010	2020	2030	2040	2050	2060
Concho	F	Colorado	1,834	1,834	1,834	1,834	1,834	1,834
Runnels	F	Colorado	15	15	15	15	15	15
Tom Green	F	Colorado	39,361	39,361	39,361	39,361	39,361	39,361
Total			**41,209**	**41,209**	**41,209**	**41,209**	**41,209**	**41,209**

Table 2. Estimated minimum, average, and maximum modeled available groundwater for the Lipan Aquifer summarized by county in Groundwater Management Area 7. Results are in acre-feet per year. Pumping volumes are included for only portions of the counties included in the Lipan-Kickapoo Groundwater Conservation District.

County	Modeled Available Groundwater		
	Minimum	Average	Maximum
Concho	1,403	1,834	2,311
Runnels	11	15	19
Tom Green	30,131	39,361	49,602
Total	**31,545**	**41,209**	**51,932**

Table 3. Estimated minimum, average, and maximum modeled available groundwater for the Lipan Aquifer summarized by groundwater conservation district (GCD) in Groundwater Management Area 7. Results are in acre-feet per year. WCD refers to Water Conservation District.

Groundwater Conservation District	Modeled Available Groundwater		
	Minimum	Average	Maximum
Lipan-Kickapoo WCD	31,545	41,209	51,932

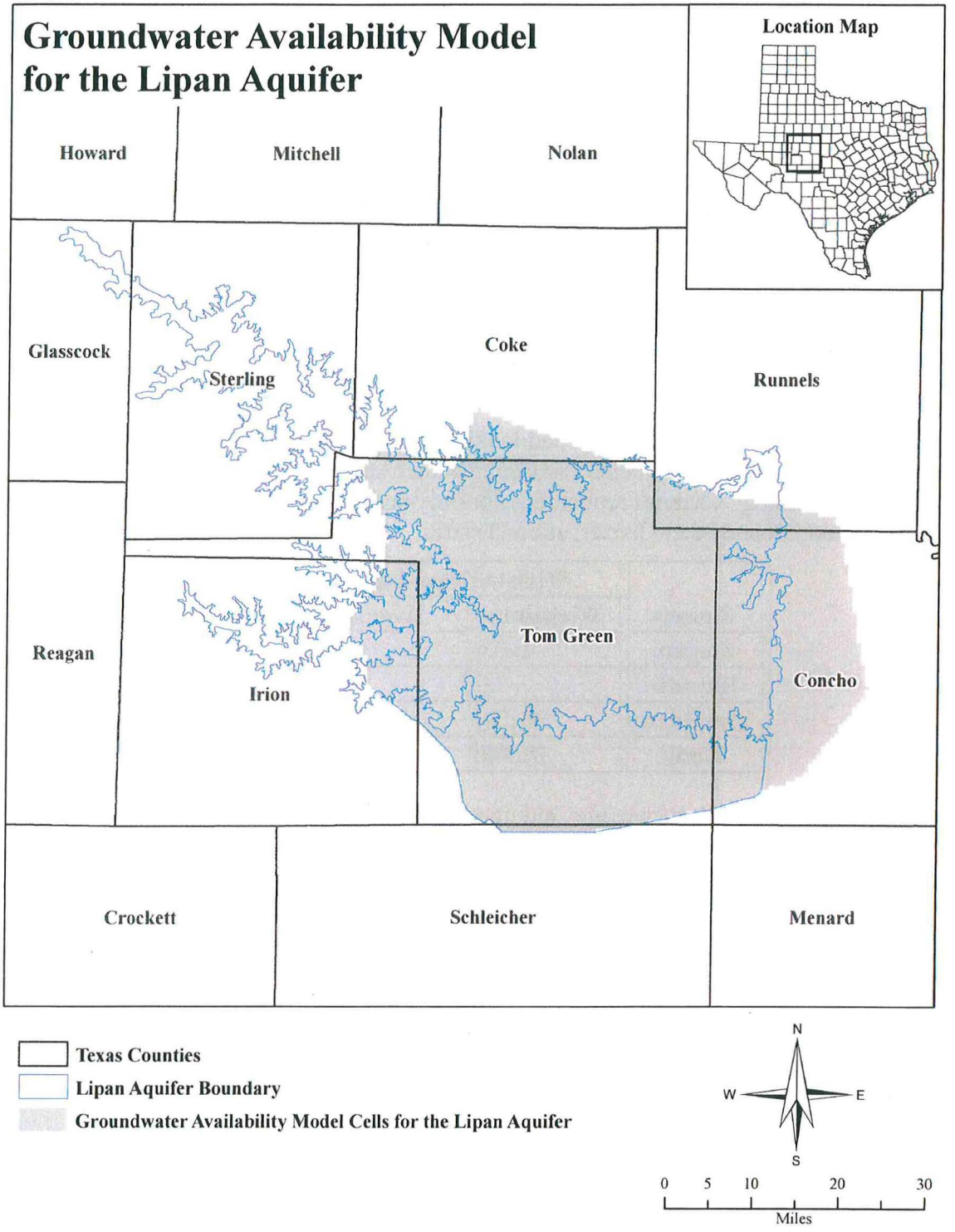

Figure 1. Map showing the areas covered by the groundwater availability model for the Lipan Aquifer.

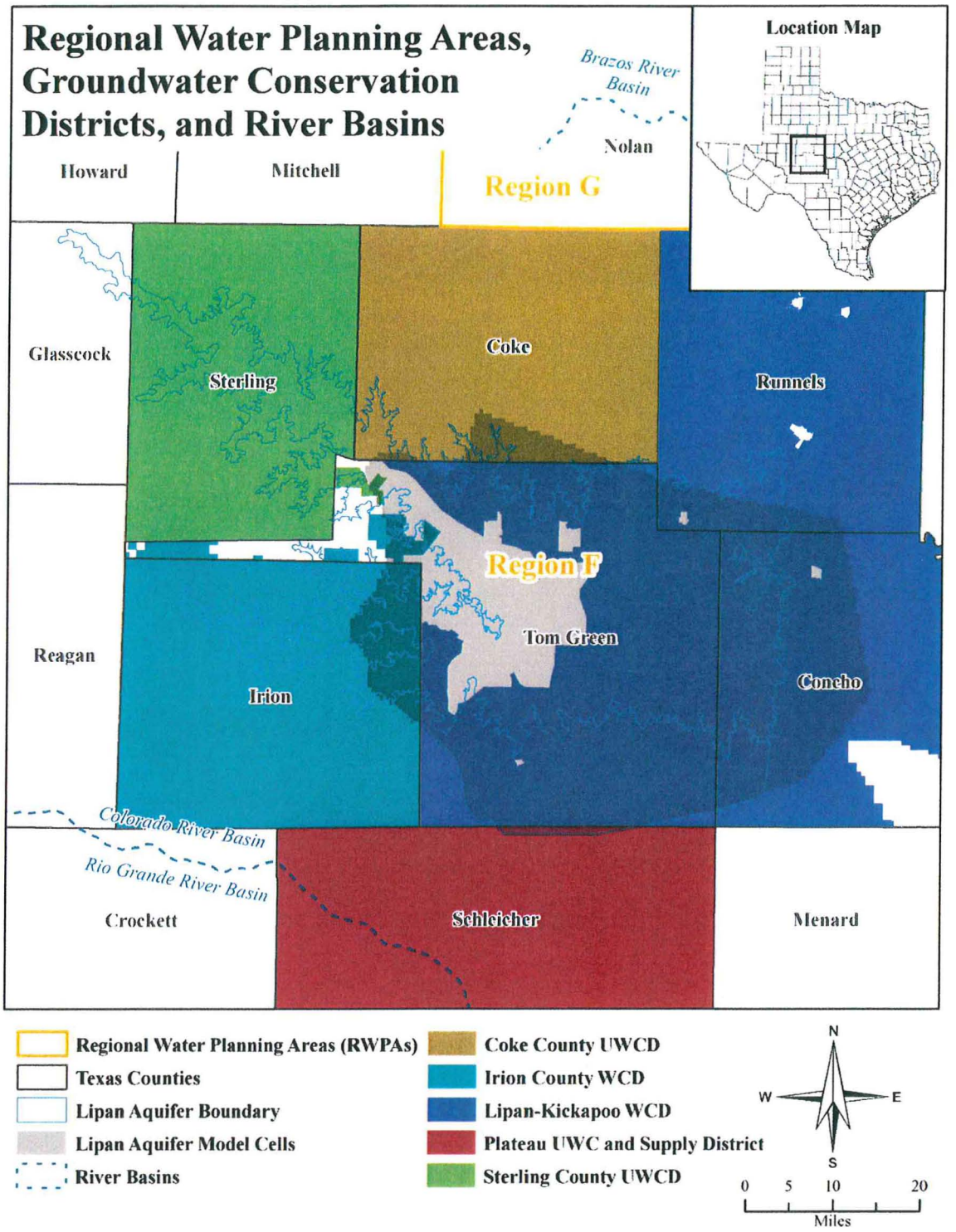

Figure 2. Map showing regional water planning areas (RWPAs), groundwater conservation districts (GCDs), counties, and river basins in the vicinity of the Lipan Aquifer in Groundwater Management Area 7.

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APPENDIX B

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Estimated Historical Groundwater Use And 2012 State Water Plan Datasets:

Lipan-Kickapoo Water Conservation District

by Stephen Allen
Texas Water Development Board
Groundwater Resources Division
Groundwater Technical Assistance Section
stephen.allen@twdb.texas.gov
(512) 463-7317
November 7, 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.state.tx.us/groundwater/docs/GCD/GMPchecklist0113.pdf

The five reports included in part 1 are:

1. Estimated Historical Groundwater Use (checklist Item 2)

   fromtheTWDBHistorical WaterUseSurvey (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)

   reports2-5arefromthe2012StateWaterPlan(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 Groundwater Use and 2012 State Water Planning data available as of 02/08/2013. 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 Survey 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).

The values presented in the data tables of this report are county-based. In cases where groundwater conservation districts cover only a portion of one or more counties the data values are modified with an apportioning multiplier to create new values that more accurately represent district conditions. The multiplier used as part of the following formula is a land area ratio:(data value * (land area of district in county / land area of county)).For two of the four State Water Plan tables (Projected Surface Water Supplies and Projected Water Demands) only the county-wide water user group (WUG) data values (county other, manufacturing, steam electric power, irrigation, mining and livestock) are modified using the multiplier. WUG values for municipalities, water supply corporations, and utility districts are not apportioned;instead, their full values are retained when they are located within the district, and eliminated when they are located outside (we ask each district to identify these locations).

The two other SWP tables (Projected Water Supply Needs and Projected Water Management Strategies) are not apportioned because district-specific values are not statutorily required.Each district needs only “consider” the county values in those tables.

In the Historical Groundwater Use table every category of water use (including municipal) is apportioned. Staff determined that breaking down the annual municipal values into individual WUGs was too complex.

TWDB recognizes that the apportioning formula used is not perfect but it is the best available process with respect to time and staffing constraints.If a district believes it has data that is more accurate it has the option of including those data in the plan with an explanation of how the data were derived. Apportioning percentages are listed above each applicable table.

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 Groundwater Use
TWDB Historical Water Use Survey (WUS) Data

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

CONCHO COUNTY *88.40% (multiplier)* All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	328	0	0	229	2	1,019	1,578
1980	GW	421	0	0	354	0	636	1,411
1984	GW	386	0	0	1,612	0	408	2,406
1985	GW	370	0	0	2,730	0	398	3,498
1986	GW	362	0	0	2,180	0	402	2,944
1987	GW	369	0	0	2,770	0	457	3,596
1988	GW	409	0	0	2,357	0	368	3,134
1989	GW	421	0	0	2,662	0	359	3,442
1990	GW	582	0	0	1,939	0	385	2,906
1991	GW	492	0	0	2,473	0	403	3,368
1992	GW	638	0	0	2,452	0	565	3,655
1993	GW	606	0	0	5,140	0	606	6,352
1994	GW	646	0	0	3,236	0	460	4,342
1995	GW	575	0	0	4,453	0	481	5,509
1996	GW	566	0	0	3,321	0	418	4,305
1997	GW	604	0	0	1,200	0	469	2,273
1998	GW	613	0	0	2,964	0	452	4,029
1999	GW	654	0	0	4,159	0	450	5,263
2000	GW	559	0	0	2,129	0	383	3,071
2001	GW	511	0	0	1,739	0	376	2,626
2002	GW	538	0	0	3,067	0	385	3,990
2003	GW	537	0	0	1,322	0	309	2,168
2004	GW	532	0	0	1,606	0	319	2,457
2006	GW	507	0	0	6,747	0	254	7,508
2007	GW	391	0	0	4,523	0	309	5,223
2008	GW	387	0	0	8,543	0	216	9,146
2009	GW	393	0	0	1,063	66	215	1,737
2010	GW	347	0	0	5,701	94	197	6,339

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

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

RUNNELS COUNTY *99.29% (multiplier)* All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	517	0	0	1,177	227	392	2,313
1980	GW	348	0	0	1,489	0	176	2,013
1984	GW	337	0	0	1,039	24	95	1,495
1985	GW	304	0	0	2,273	24	112	2,713
1986	GW	229	0	0	1,787	25	115	2,156
1987	GW	300	0	0	1,647	20	108	2,075
1988	GW	244	0	0	2,199	21	109	2,573
1989	GW	225	0	0	1,608	20	109	1,962
1990	GW	210	0	0	1,511	20	112	1,853
1991	GW	222	0	0	4,228	41	115	4,606
1992	GW	228	0	0	2,075	41	142	2,486
1993	GW	236	0	0	1,970	41	156	2,403
1994	GW	213	0	0	1,462	41	130	1,846
1995	GW	257	0	0	1,804	41	145	2,247
1996	GW	272	0	0	2,883	41	197	3,393
1997	GW	284	0	0	2,222	41	149	2,696
1998	GW	273	0	0	1,954	41	88	2,356
1999	GW	189	0	0	1,479	41	107	1,816
2000	GW	354	0	0	477	41	93	965
2001	GW	419	0	0	814	41	95	1,369
2002	GW	280	0	0	1,809	41	97	2,227
2003	GW	362	0	0	1,486	41	77	1,966
2004	GW	216	0	0	1,466	41	80	1,803
2006	GW	128	0	0	2,644	0	404	3,176
2007	GW	128	0	0	1,354	0	385	1,867
2008	GW	213	0	0	2,528	0	437	3,178
2009	GW	316	0	0	1,970	60	424	2,770
2010	GW	168	0	0	2,158	66	448	2,840

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

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

TOM GREEN COUNTY *70.35% (multiplier)* All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	596	77	0	6,481	151	284	7,589
1980	GW	617	34	0	9,849	6	235	10,741
1984	GW	1,152	14	0	21,911	197	97	23,371
1985	GW	983	15	0	17,255	56	84	18,393
1986	GW	1,108	11	0	15,477	53	91	16,740
1987	GW	1,016	8	0	11,727	45	80	12,876
1988	GW	1,120	7	1	21,071	49	72	22,320
1989	GW	1,342	8	1	22,451	46	70	23,918
1990	GW	1,202	8	0	18,535	46	80	19,871
1991	GW	1,233	18	0	14,523	52	82	15,908
1992	GW	1,200	17	0	8,878	52	125	10,272
1993	GW	1,273	10	0	49,078	52	127	50,540
1994	GW	1,424	135	0	45,096	52	130	46,837
1995	GW	1,312	87	0	56,651	52	131	58,233
1996	GW	1,508	1	0	24,619	106	155	26,389
1997	GW	1,368	1	0	51,646	106	127	53,248
1998	GW	1,363	2	0	28,210	42	104	29,721
1999	GW	1,383	2	0	16,148	42	123	17,698
2000	GW	1,294	0	0	14,437	42	133	15,906
2001	GW	986	5	0	18,823	42	122	19,978
2002	GW	816	4	0	20,064	42	139	21,065
2003	GW	907	1	0	18,215	42	119	19,284
2004	GW	1,218	4	0	17,134	42	101	18,499
2006	GW	1,467	234	0	23,276	0	950	25,927
2007	GW	1,512	310	0	48,392	0	635	50,849
2008	GW	1,026	584	0	60,368	0	871	62,849
2009	GW	1,975	314	0	46,914	335	788	50,326
2010	GW	2,821	292	0	26,620	348	811	30,892

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

CONCHO COUNTY

88.40% (multiplier)

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
F	COUNTY-OTHER	COLORADO	CONCHO RIVER RUN -OF-RIVER CITY OF PAINT ROCK	31	31	31	31	31	31
F	IRRIGATION	COLORADO	CONCHO RIVER COMBINED RUN-OF-RIVER IRRIGATION	202	202	202	202	202	202
F	LIVESTOCK	COLORADO	LIVESTOCK LOCAL SUPPLY	109	109	109	109	109	109
F	MILLERSVIEW-DOOLE WSC	COLORADO	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM	46	43	62	56	0	0
	Sum of Projected Surface Water Supplies (acre-feet/year)			**388**	**385**	**404**	**398**	**342**	**342**

RUNNELS COUNTY

99.29% (multiplier)

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
F	BALLINGER	COLORADO	BALLINGER/MOONEN LAKE/RESERVOIR						
F	BALLINGER	COLORADO	OH IVIE LAKE/RESERVOIR NON-SYSTEM PORTION						
F	COLEMAN COUNTY WSC	COLORADO	BROWNWOOD LAKE/RESERVOIR						
F	COLEMAN COUNTY WSC	COLORADO	COLEMAN LAKE/RESERVOIR						
F	COUNTY-OTHER	COLORADO	BALLINGER/MOONEN LAKE/RESERVOIR	0	0	0	0	0	0
F	COUNTY-OTHER	COLORADO	WINTERS LAKE/RESERVOIR	0	0	0	0	0	0
F	IRRIGATION	COLORADO	COLORADO RIVER COMBINED RUN-OF-RIVER IRRIGATION	766	766	766	766	766	766
F	LIVESTOCK	COLORADO	LIVESTOCK LOCAL SUPPLY	1,140	1,140	1,140	1,140	1,140	1,140
F	MANUFACTURING	COLORADO	BALLINGER/MOONEN LAKE/RESERVOIR	0	0	0	0	0	0
F	MANUFACTURING	COLORADO	WINTERS LAKE/RESERVOIR	0	0	0	0	0	0

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
F	MILES	COLORADO	OC FISHER LAKE/RESERVOIR SAN ANGELO SYSTEM						
F	MILLERSVIEW-DOOLE WSC	COLORADO	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM	35	31	47	43	0	0
F	WINTERS	COLORADO	WINTERS LAKE/RESERVOIR						
	Sum of Projected Surface Water Supplies (acre-feet/year)			**1,941**	**1,937**	**1,953**	**1,949**	**1,906**	**1,906**

TOM GREEN COUNTY

70.35% (multiplier)

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
F	COUNTY-OTHER	COLORADO	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
F	COUNTY-OTHER	COLORADO	OC FISHER LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
F	COUNTY-OTHER	COLORADO	TWIN BUTTES LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
F	IRRIGATION	COLORADO	CONCHO RIVER COMBINED RUN-OF-RIVER IRRIGATION	1,978	1,978	1,978	1,978	1,978	1,978
F	IRRIGATION	COLORADO	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
F	IRRIGATION	COLORADO	TWIN BUTTES LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
F	LIVESTOCK	COLORADO	LIVESTOCK LOCAL SUPPLY	1,157	1,157	1,157	1,157	1,157	1,157
F	MANUFACTURING	COLORADO	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
F	MANUFACTURING	COLORADO	OC FISHER LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
F	MANUFACTURING	COLORADO	TWIN BUTTES LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
F	MILLERSVIEW-DOOLE WSC	COLORADO	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM	87	88	145	150	0	0
F	SAN ANGELO	COLORADO	CONCHO RIVER COMBINED RUN-OF-RIVER CITY OF SAN ANGELO						
F	SAN ANGELO	COLORADO	EV SPENCE LAKE/RESERVOIR NON-SYSTEM PORTION						
F	SAN ANGELO	COLORADO	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM						
F	SAN ANGELO	COLORADO	OC FISHER LAKE/RESERVOIR SAN ANGELO SYSTEM						
F	SAN ANGELO	COLORADO	OH IVIE LAKE/RESERVOIR NON-SYSTEM PORTION						
F	SAN ANGELO	COLORADO	TWIN BUTTES LAKE/RESERVOIR SAN ANGELO SYSTEM						
F	STEAM ELECTRIC POWER	COLORADO	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM	0	0	0	0	0	0
	Sum of Projected Surface Water Supplies (acre-feet/year)			**3,222**	**3,223**	**3,280**	**3,285**	**3,135**	**3,135**

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.

CONCHO COUNTY

88.40% (multiplier) All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	EDEN	COLORADO						
F	COUNTY-OTHER	COLORADO	166	171	169	167	166	166
F	LIVESTOCK	COLORADO	685	685	685	685	685	685
F	IRRIGATION	COLORADO	3,799	3,784	3,768	3,753	3,738	3,724
F	MILLERSVIEW-DOOLE WSC	COLORADO	126	127	124	119	118	118
	Sum of Projected Water Demands (acre-feet/year)		**4,776**	**4,767**	**4,746**	**4,724**	**4,707**	**4,693**

RUNNELS COUNTY

99.29% (multiplier) All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	MILLERSVIEW-DOOLE WSC	COLORADO	94	93	93	91	92	93
F	IRRIGATION	COLORADO	4,300	4,286	4,267	4,249	4,230	4,211
F	LIVESTOCK	COLORADO	1,519	1,519	1,519	1,519	1,519	1,519
F	MILES	COLORADO						
F	WINTERS	COLORADO						
F	MANUFACTURING	COLORADO	63	70	75	81	86	93
F	MINING	COLORADO	44	45	45	45	45	45
F	COLEMAN COUNTY WSC	COLORADO						
F	BALLINGER	COLORADO						
F	COUNTY-OTHER	COLORADO	357	293	244	192	155	128
	Sum of Projected Water Demands (acre-feet/year)		**6,377**	**6,306**	**6,243**	**6,177**	**6,127**	**6,089**

TOM GREEN COUNTY

70.35% (multiplier) All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	SAN ANGELO	COLORADO						
F	MINING	COLORADO	51	56	60	63	67	70
F	MANUFACTURING	COLORADO	1,566	1,757	1,925	2,090	2,234	2,409
F	STEAM ELECTRIC POWER	COLORADO	382	547	639	752	889	1,057
F	COUNTY-OTHER	COLORADO	1,239	1,198	1,149	1,093	1,038	991
F	LIVESTOCK	COLORADO	1,392	1,392	1,392	1,392	1,392	1,392

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.

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	CONCHO RURAL WSC	COLORADO						
F	IRRIGATION	COLORADO	73,601	73,419	73,239	73,060	72,878	72,698
F	MILLERSVIEW-DOOLE WSC	COLORADO	238	263	291	319	359	408
	Sum of Projected Water Demands (acre-feet/year)		**78,469**	**78,632**	**78,695**	**78,769**	**78,857**	**79,025**

Projected Water Supply Needs
TWDB 2012 State Water Plan Data

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

CONCHO COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	COUNTY-OTHER	COLORADO	31	28	30	32	33	33
F	EDEN	COLORADO	95	224	227	234	237	237
F	IRRIGATION	COLORADO	968	985	1,003	1,020	1,036	1,052
F	LIVESTOCK	COLORADO	0	0	0	0	0	0
F	MILLERSVIEW-DOOLE WSC	COLORADO	-4	-8	14	13	-42	-42
	Sum of Projected Water Supply Needs (acre-feet/year)		**-4**	**-8**	**0**	**0**	**-42**	**-42**

RUNNELS COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	BALLINGER	COLORADO	-660	-754	-684	-764	-1,178	-1,237
F	COLEMAN COUNTY WSC	COLORADO	0	0	0	0	0	0
F	COUNTY-OTHER	COLORADO	-330	-266	-217	-165	-125	-77
F	IRRIGATION	COLORADO	-1,358	-1,344	-1,325	-1,306	-1,287	-1,268
F	LIVESTOCK	COLORADO	0	0	0	0	0	0
F	MANUFACTURING	COLORADO	-63	-70	-76	-82	-87	-94
F	MILES	COLORADO	-140	-153	-163	-173	-183	-193
F	MILLERSVIEW-DOOLE WSC	COLORADO	-3	-6	10	8	-36	-37
F	MINING	COLORADO	0	0	0	0	0	0
F	WINTERS	COLORADO	-552	-561	-566	-571	-575	-591
	Sum of Projected Water Supply Needs (acre-feet/year)		**-3,106**	**-3,154**	**-3,031**	**-3,061**	**-3,471**	**-3,497**

TOM GREEN COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	CONCHO RURAL WSC	COLORADO	408	230	113	55	12	0
F	COUNTY-OTHER	COLORADO	-41	17	87	167	244	312
F	IRRIGATION	COLORADO	-47,090	-46,831	-46,576	-46,321	-46,062	-45,807
F	LIVESTOCK	COLORADO	0	0	0	0	0	0
F	MANUFACTURING	COLORADO	-2,226	-2,498	-2,737	-2,971	-3,175	-3,425
F	MILLERSVIEW-DOOLE WSC	COLORADO	93	69	98	75	-115	-164

Projected Water Supply Needs
TWDB 2012 State Water Plan Data

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

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
F	MINING	COLORADO	77	70	65	60	55	51
F	SAN ANGELO	COLORADO	-9,184	-10,025	-10,564	-10,798	-11,184	-11,469
F	STEAM ELECTRIC POWER	COLORADO	-543	-777	-909	-1,069	-1,264	-1,502
	Sum of Projected Water Supply Needs (acre-feet/year)		**-59,084**	**-60,131**	**-60,786**	**-61,159**	**-61,800**	**-62,367**

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

CONCHO COUNTY

WUG,Basin (RWPG)

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
COUNTY-OTHER, COLORADO (F)							
SUBORDINATION	OC FISHER LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	25	25	25	25	25	25
EDEN,COLORADO (F)							
ADVANCED TREATMENT	HICKORY AQUIFER [CONCHO]	0	0	0	0	0	0
REPLACEMENT WELL	HICKORY AQUIFER [CONCHO]	0	0	0	0	0	0
IRRIGATION,COLORADO (F)							
IRRIGATION CONSERVATION	CONSERVATION [CONCHO]	0	748	1,496	1,496	1,496	1,496
MILLERSVIEW-DOOLE WSC, COLORADO (F)							
NEW/RENEW WATER SUPPLY	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	0	0	0	0	74	74
SUBORDINATION	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	34	42	1	7	0	0
Sum of Projected Water Management Strategies (acre-feet/year)		**59**	**815**	**1,522**	**1,528**	**1,595**	**1,595**

RUNNELS COUNTY

WUG,Basin (RWPG)

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
BALLINGER,COLORADO (F)							
MUNICIPAL CONSERVATION	CONSERVATION [RUNNELS]	33	88	107	119	131	144
NEW/RENEW WATER SUPPLY	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	0	0	0	0	491	508
SUBORDINATION	BALLINGER/MOONEN LAKE/RESERVOIR [RESERVOIR]	917	930	920	910	900	890

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
WUG,Basin (RWPG)							
SUBORDINATION	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	141	169	68	115	0	0
COLEMAN COUNTY WSC, COLORADO (F)							
SUBORDINATION	COLEMAN LAKE/RESERVOIR [RESERVOIR]	18	30	39	48	56	66
COUNTY-OTHER, COLORADO (F)							
NEW/RENEW WATER SUPPLY	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	0	0	0	0	94	77
SUBORDINATION	BALLINGER/MOONEN LAKE/RESERVOIR [RESERVOIR]	23	0	0	0	0	0
SUBORDINATION	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	193	177	148	116	0	0
SUBORDINATION	WINTERS LAKE/RESERVOIR [RESERVOIR]	114	89	69	49	31	0
MANUFACTURING, COLORADO (F)							
NEW/RENEW WATER SUPPLY	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	0	0	0	0	13	15
SUBORDINATION	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	9	10	11	12	0	0
SUBORDINATION	WINTERS LAKE/RESERVOIR [RESERVOIR]	54	60	65	70	74	79
MILES, COLORADO (F)							
SUBORDINATION	OC FISHER LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	200	200	200	200	200	200
MILLERSVIEW-DOOLE WSC, COLORADO (F)							
NEW/RENEW WATER SUPPLY	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	0	0	0	0	58	58
SUBORDINATION	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	25	31	0	6	0	0

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG,Basin (RWPG)

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
WINTERS, COLORADO (F)							
MUNICIPAL CONSERVATION	CONSERVATION [RUNNELS]	21	55	63	67	71	76
REUSE	DIRECT REUSE [RUNNELS]	0	0	0	110	110	110
SUBORDINATION	WINTERS LAKE/RESERVOIR [RESERVOIR]	552	561	566	571	575	591
Sum of Projected Water Management Strategies (acre-feet/year)		**2,300**	**2,400**	**2,256**	**2,393**	**2,804**	**2,814**

TOM GREEN COUNTY

WUG,Basin (RWPG)

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
COUNTY-OTHER, COLORADO (F)							
SUBORDINATION	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	250	250	250	250	250	250
IRRIGATION,COLORADO (F)							
IRRIGATION CONSERVATION	CONSERVATION [TOM GREEN]	0	5,774	11,548	11,548	11,548	11,548
SUBORDINATION	TWIN BUTTES LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	3,377	3,273	3,170	3,066	2,693	2,860
MANUFACTURING, COLORADO (F)							
SUBORDINATION	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	2,226	2,498	2,737	2,971	3,175	3,425
MILLERSVIEW-DOOLE WSC, COLORADO (F)							
NEW/RENEW WATER SUPPLY	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	0	0	0	0	225	225
SUBORDINATION	COLORADO RIVER MWD LAKE/RESERVOIR SYSTEM [RESERVOIR]	64	87	1	19	0	0

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG,Basin (RWPG)

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
SAN ANGELO,COLORADO (F)							
BRUSH CONTROL	CONCHO RIVER COMBINED RUN-OF-RIVER CITY OF SAN ANGELO [TOM GREEN]	8,362	8,362	8,362	8,362	8,362	8,362
DESALINATION	OTHER AQUIFER [TOM GREEN]	0	0	0	5,600	5,600	5,600
DEVELOP HICKORY AQUIFER SUPPLIES	HICKORY AQUIFER [MCCULLOCH]	0	6,700	10,000	12,000	12,000	12,000
MUNICIPAL CONSERVATION	CONSERVATION [TOM GREEN]	701	1,705	2,009	2,127	2,255	2,371
REHABILITATION OF PIPELINE	EV SPENCE LAKE/RESERVOIR NON-SYSTEM PORTION [RESERVOIR]	0	0	2,281	2,267	2,254	2,240
SUBORDINATION	EV SPENCE LAKE/RESERVOIR NON-SYSTEM PORTION [RESERVOIR]	0	0	0	0	0	0
SUBORDINATION	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	5,436	5,078	4,752	4,431	4,141	3,804
SUBORDINATION	OC FISHER LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	3,637	3,518	3,400	3,282	3,163	3,045
SUBORDINATION	OH IVIE LAKE/RESERVOIR NON-SYSTEM PORTION [RESERVOIR]	17	-97	-211	-324	-438	-553
STEAM ELECTRIC POWER,COLORADO (F)							
SUBORDINATION	NASWORTHY LAKE/RESERVOIR SAN ANGELO SYSTEM [RESERVOIR]	1,021	1,021	1,021	1,021	1,021	1,021
Sum of Projected Water Management Strategies (acre-feet/year)		**25,091**	**38,169**	**49,320**	**56,620**	**56,249**	**56,198**

APPENDIX C

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GAM Run 12-010: Lipan-Kickapoo Water Conservation District Management Plan

by Radu Boghici, P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-5808
July 2, 2012

The seal appearing on this document was authorized by Radu Boghici, P.G. 482 on July 2, 2012.

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GAM Run 12-010: Lipan-Kickapoo Water Conservation District Management Plan

by Radu Boghici, P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-5808
July 2, 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) together 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 from the TWDB to Lipan-Kickapoo Water Conservation District management plan to fulfill the requirements noted above. The groundwater management plan for Lipan-Kickapoo Water Conservation District is due for approval by the executive administrator of the TWDB September 25, 2013.

This report discusses the method, assumptions, and results from model runs using the groundwater availability model for the Edwards-Trinity (Plateau) Aquifer and for the Lipan Aquifer.

Tables 1 and 2 summarize the groundwater availability model data required by the statute, and Figures 1 and 2 show the area of the models from which the values in the tables were extracted. This model run replaces the results of GAM Run 08-08. GAM Run 12-010 meets current standards set after the release of GAM Run 08-08 and includes model results from the groundwater availability models for the Edwards-Trinity (Plateau) and Lipan Aquifers.

METHODS:

We ran the groundwater availability models for the Edwards-Trinity (Plateau) Aquifer and the Lipan Aquifer for this analysis. Water budgets for each year of 1980 through 1998 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:

Edwards-Trinity (Plateau) Aquifer

- We used version 1.01 of the groundwater availability model for the Edwards-Trinity (Plateau) Aquifer. See Anaya and Jones (2009) for assumptions and limitations of the model.
- The Edwards-Trinity (Plateau) Aquifer model includes two layers representing the Edwards Group and associated limestone hydrostratigraphic units (Layer 1) and the undifferentiated Trinity Group hydrostratigraphic units (Layer 2). An individual water budget for the district was determined for the Edwards-Trinity (Plateau) Aquifer (Layer 1 and Layer 2 collectively).
- The root mean squared error (a measure of the difference between simulated and actual water levels during model calibration) in the entire groundwater availability model representing the Edwards-Trinity (Plateau) Aquifer for the period of 1990 to 2000 is 143 feet, or six percent of the range of measured water levels (Anaya and Jones, 2009).
- Recharge rates are based on (1980 - 2000) precipitation (Anaya and Jones, 2009).

Lipan Aquifer

- We used version 1.01 of the groundwater availability model for the Lipan Aquifer for this analysis. See Beach and others (2004) for assumptions and limitations of the model.
- The Lipan Aquifer model includes one layer representing the Quaternary Leona Formation, portions of the underlying Permian Formations, and the Edwards-Trinity (Plateau) Aquifer to the west, south, and north.
- The model uses general head boundaries to simulate the eastern and western aquifer boundaries. Inflow on the general-head boundary to the west represents inflow from the Edwards-Trinity (Plateau) Aquifer. The mean absolute error (a measure of the difference between simulated and actual water levels during model calibration) in the groundwater availability model for the Lipan Aquifer is 18 feet for the calibration period (1980-89) and 17 feet for the verification period (1990-99: Beach and others, 2004).
- Recharge rates are based on (1980 - 2000) precipitation (Beach and others, 2004).

RESULTS:

A groundwater budget summarizes the amount of water entering and leaving the aquifer according to the groundwater availability model. Selected components were extracted from the groundwater budget 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, as shown in Tables 1 and 2. The components of the modified budget shown in Tables 1 and 2 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 net 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 and 2. 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 a district or county boundary, 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 (Figure 1).

TABLE 1: SUMMARIZED INFORMATION FOR THE EDWARDS-TRINITY (PLATEAU) AQUIFER THAT IS NEEDED FOR LIPAN-KICKAPOO WATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT. THESE FLOWS INCLUDE BRACKISH WATERS.

Management Plan requirement	*Aquifer or confining unit*	*Results*
Estimated annual amount of recharge from precipitation to the district	Edwards-Trinity (Plateau) Aquifer	15,770
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Edwards-Trinity (Plateau) Aquifer	23,439
Estimated annual volume of flow into the district within each aquifer in the district	Edwards-Trinity (Plateau) Aquifer	11,338
Estimated annual volume of flow out of the district within each aquifer in the district	Edwards-Trinity (Plateau) Aquifer	4,438
Estimated net annual volume of flow between each aquifer in the district	From the Edwards-Trinity (Plateau) Aquifer into adjacent Lipan	3,300

TABLE 2: SUMMARIZED INFORMATION FOR THE LIPAN AQUIFER THAT IS NEEDED FOR LIPAN-KICKAPOO WATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT. THESE FLOWS MAY INCLUDE FRESH AND BRACKISH WATERS.

Management Plan requirement	*Aquifer or confining unit*	*Results*
Estimated annual amount of recharge from precipitation to the district	Lipan Aquifer	39,262
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Lipan Aquifer	10,724
Estimated annual volume of flow into the district within each aquifer in the district	Lipan Aquifer	21,581
Estimated annual volume of flow out of the district within each aquifer in the district	Lipan Aquifer	22,895
Estimated net annual volume of flow between each aquifer in the district	From the Edwards-Trinity (Plateau) Aquifer into the Lipan Aquifer	3,300

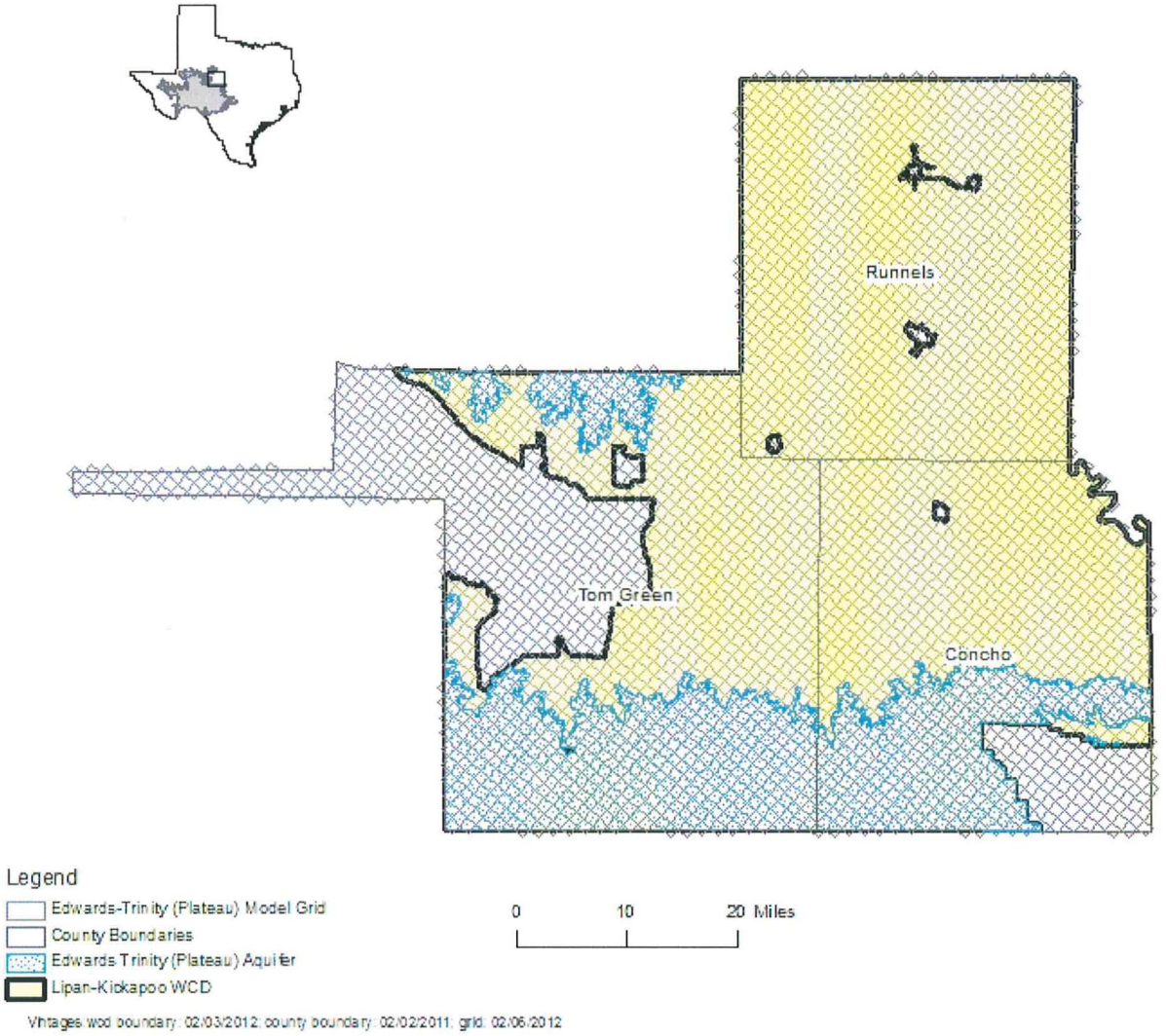

FIGURE 1: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE EDWARDS-TRINITY (PLATEAU) AQUIFER FROM WHICH THE INFORMATION IN TABLE 1 WAS EXTRACTED (THE AQUIFER EXTENT WITHIN THE DISTRICT BOUNDARY).

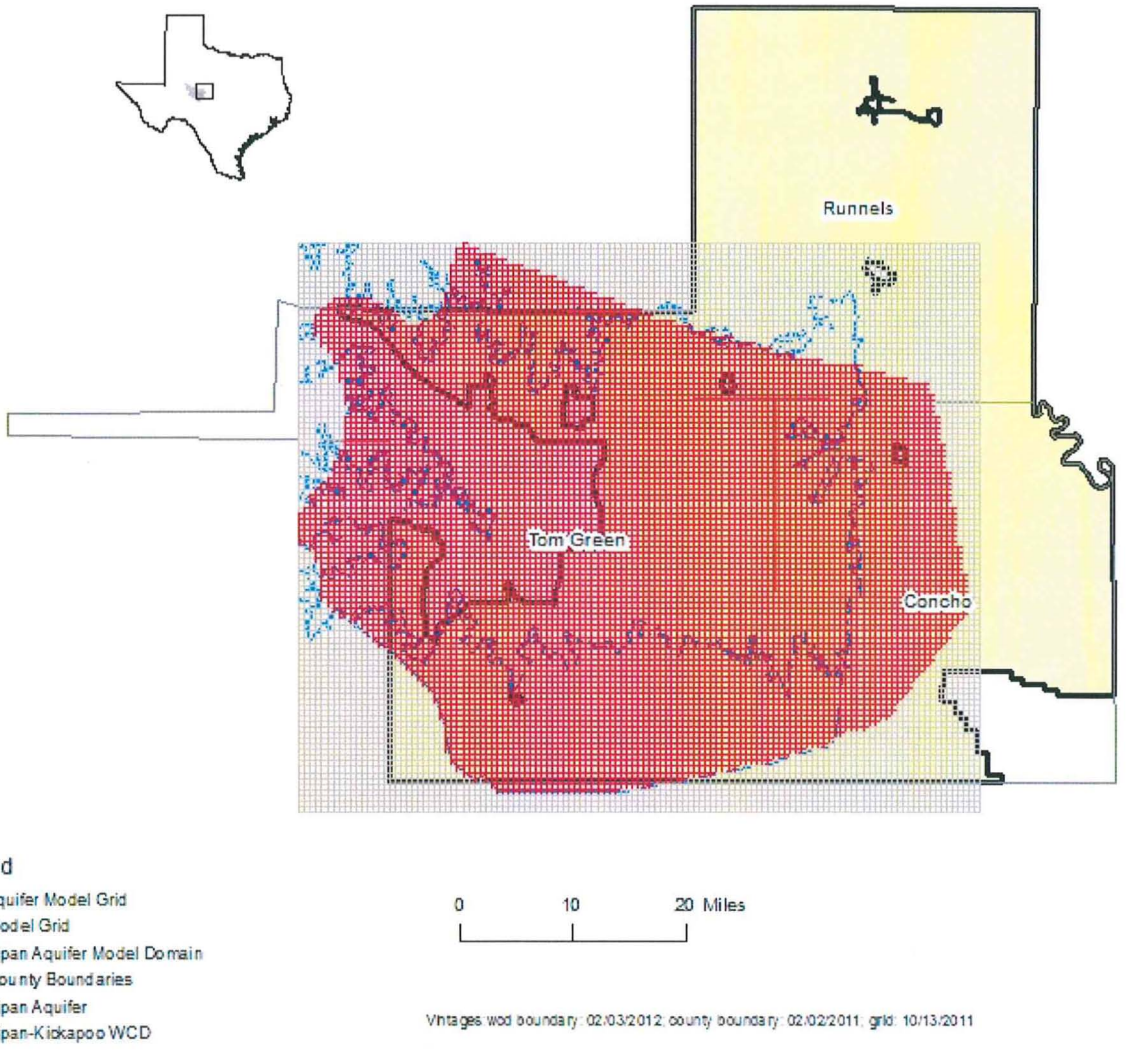

FIGURE 2: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE LIPAN AQUIFER FROM WHICH THE INFORMATION IN TABLE 2 WAS EXTRACTED (THE AQUIFER EXTENT WITHIN THE DISTRICT BOUNDARY).

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 interaction with streams are specific to particular historic time periods.

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 related 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:

Anaya, R., and Jones, I., 2009, Groundwater Availability Model for the Edwards-Trinity (Plateau) and Pecos Valley Aquifers of Texas: Texas Water Development Board Report 373, 103 p., http://www.twdb.state.tx.us/gam/eddt_p/eddt_p.htm.

Beach, James A., Burton, Stuart, and Kolarik, Barry, 2004, Groundwater availability model for the Lipan Aquifer in Texas: final report prepared for the Texas Water Development Board by LBG-Guyton Associates, 246 p., http://www.twdb.texas.gov/groundwater/models/gam/lipn/lipn.asp

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.

Wade, S., 2008, GAM Run 08-08: Texas Water Development Board, GAM Run 08-08 Report, 6 p., http://www.twdb.texas.gov/groundwater/docs/GAMruns/GR08-08.pdf

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APPENDIX D

DISTRICT RULES

http://lipan-kickapoo.org/rules.html

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APPENDIX E

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Resolution 2013-01

LIPAN-KICKAPOO WATER CONSERVATION DISTRICT

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989

MANAGEMENT PLAN
2013-2018

WHEREAS, the Lipan-Kickapoo Water Conservation District (Water District) was created by Acts of the 70th Legislature (1987), p. 2010, Ch. 439, S.B. 1525, in accordance with Article 16, Section 59 of the Constitution of Texas and Chapters 51 and 52 of the Texas Water Code, as amended; and

WHEREAS, S.B. 1525 was amended by Acts of the 77th Legislature (2001), H.B. 1909, in accordance with Chapters 36 and 49 of the Texas Water Code, as amended; and

WHEREAS, the District is required by Chapter 36.1071 of the Texas Water Code to develop and adopt a Management Plan; and

WHEREAS, the District is required by Chapter 36.1072 of the Texas Water Code to review and readopt the plan with or without revisions at least once every five years and to submit the adopted Management Plan to the Executive Administrator of the Texas Water Development Board for review and approval; and

WHEREAS, the District's readopted revised Management Plan shall be approved by the Executive Administrator if the plan is administratively complete; and

WHEREAS, the District Board of Directors, after reviewing the existing Management Plan, has determined that this plan should be revised and replaced with a new Management Plan expiring in 2018; and

WHEREAS, the District Board of Directors has determined that the Management Plan addresses the requirements of Chapter 36.1071.

NOW, THEREFORE, be it resolved, that the Board of Directors of the Lipan-Kickapoo Water Conservation District, following notice and hearing, hereby adopts this Management Plan; and

FURTHER, be it resolved, that this new Management Plan shall become effective immediately upon adoption and final approval of the Texas Water Development Board.

Adopted this 15th day of May, 2013, by the Board of Directors of the Lipan-Kickapoo Water Conservation District.

Michael C Hoelscher
Presiding Officer

Attest:

Lem Brooks
Board Secretary

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APPENDIX F

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Standard-Times

GOSANANGELO.COM

34 West Harris Avenue San Angelo, TX 76903

PROOF OF PUBLICATION

STATE OF TEXAS

COUNTY OF TOM GREEN

On this 30th Day of April, 2013 personally appeared

Before me the undersigned, a Notary Public

in and for said county and state,

Barry Peckham – Financial Controller

of the SAN ANGELO STANDARD-TIMES.

A daily newspaper published at SAN ANGELO,

County of TOM GREEN, State of TEXAS and of General

Circulation in Tom Green County, State of Texas

who, being by me duly sworn, states that the attached

advertisement, a true copy of which is hereto annexed, was

published in said newspaper in its issues thereof the

following dates: 16th, 23rd and 30th Day of April, 2013.

Subscribed and sworn to before me this

30th day of April, 2013

Financial Controller San Angelo Standard-Times

Gilbert A. Velez Ad # 156072

PUBLIC NOTICE
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT
P.O. BOX 67
VANCOURT, TX 76955
Ph: (325) 469-3988 Email: lkwcd@centex.net
Website: lipan-kickapoo.org

A Public Hearing is scheduled to be held at the Lipan-Kickapoo Water Conservation District Office, Suite C, Vancourt Post Office Building, Vancourt, Texas on Wednesday, May 15, 2013, at 7:30 am. The purpose of this hearing is to take public comment on a proposed revised Management Plan (2013-2018) for the District. Full text copies of the Proposed Management Plan may be obtained from the Water District office, by email request, from the district website, or by calling the district office. Written comments on the proposed Management Plan are being taken until 4 pm, Monday, May 13, 2013. Comments may be mailed to the Water District or submitted in person or email.

Tuesday, April 16, 2013 - Standard-Times -

Public Notices **Public Notices**

PUBLIC NOTICE
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT
P.O. BOX 67
VANCOURT, TX 76955
Ph: (325) 469-3988 Email: lkwcd@centex.net
Website: lipan-kickapoo.org

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STANDARD-TIMES « Tuesday, April 23, 2013 «

Public Notices **Public Notices**

PUBLIC NOTICE
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT
P.O. BOX 67
VANCOURT, TX 76955
Ph: (325) 469-3988 Email: lkwcd@centex.net
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STANDARD-TIMES « Tuesday, April 30, 2013 «

Public Notices **Public Notices**

PUBLIC NOTICE
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT
P.O. BOX 67
VANCOURT, TX 76955
Ph: (325) 469-3988 Email: lkwcd@centex.net
Website: lipan-kickapoo.org

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NOTICE OF HEARING
ON
PROPOSED MANAGEMENT PLAN
FOR THE
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT

Wednesday, May 15, 2013 at 7:30 AM

A Public Hearing is scheduled to be held at the Lipan-Kickapoo Water Conservation District Office, Suite C, Vancourt Post Office Building, Vancourt, Texas. The purpose of this hearing is to take public comment on a Revised Management Plan (2013-2018) for the District.

PUBLIC NOTICE

REGULAR MEETING OF THE BOARD OF DIRECTORS

LIPAN-KICKAPOO WATER CONSERVATION DISTRICT

The Board of Directors will meet in Regular Session on Wednesday, May 15, 2013, immediately following the Public Hearing on the Proposed Revised Management Plan (2013-2018) for the District. The meeting will be held at the Lipan-Kickapoo Water Conservation District Office, Suite C, Vancourt Post Office Building, Vancourt, Texas. Items on this agenda may be taken out of the order indicated.

AGENDA

(1) Call to Order

(2) Public Comments.

Requests for an exemption to the spacing & density rules for a non-exempt irrigation or water supply well by:

a) Cody Weishuhn, operator, for J & L Taylor Family located in Survey C. Mund, Section 1647, Abstract 1692 in Tom Green County;

b) Ben Weise, Concho Rural Water Supply Corp., located in Survey C. Wolf, Mason & Perry #2, Section 634, Abstract 3952, Block 18 in Tom Green County.

Requests for an exemption to the spacing & density rules for a domestic or livestock well by:

c) Joe Sefcik, located in Homestead Circle, Survey L. Schuchert, Section 160, Abstract 1867 in Tom Green County.

d) Marcus Kocich, located in Survey J.M. West, Section 68, Abstract 8040 in Tom Green County.

e) Richard & Janis Dixon, located in the Old Township of Wingate, Block 22 in Runnels County.

f) Carl Young, located in Survey C. Schoner, Section 633, Abstract 1905 in Tom Green County.

(3) Discussion and possible action on the requests by Cody Weishuhn, Ben Weise, Joe Sefcik, Marcus Kocich, Richard & Janis Dixon, and Carl Young for exemptions to the spacing & density rules.

(4) Review and approve the minutes of the previous regular meeting on January 16, 2013 and the special meetings on February 6, 2013 and March 20, 2013.

(5) Review and approve the financial report and ratification of payments for January - April 2013.

(6) Review and approve payment of any unpaid bills.

(7) Issue certificates of election to newly elected candidates.

(8) Administer Oath of Office to newly elected/appointed Board Members.

(9) Election of Officers.

(10) Discussion and possible action on Revised Management Plan (2013-2018) for the District.

(11) Discussion and possible action to amend the budget ending September 30, 2013.

(12) Review and possible action on bids for a new replacement pickup truck.

(13) Discussion and possible action to pass a resolution classifying the funds received from the Lipan Creek Flood Control District as "Restricted Funds" to be distributed to the local volunteer fire departments as stated in the interlocal agreement.

(14) Review and possible action on any Rules Violations reported by District staff.

(15) General Managers Report / District Activity Report - Consider accepting as a matter of record.
I. Highlights
II. Meetings Attended
III. Field/Lab Operation
IV. Office Operation
V. Water Management Operation
VI. Miscellaneous

(16) Next regular meeting tentatively set for August 7, 2013 (1st Wednesday) at 7:30 AM.
On the Agenda will be:
(1) Budget workshop for FY 2013-14

(17) Adjournment.

** Under the Open Meetings Act, Chapter 551, all meetings of the District are open to the Public, except for executive sessions. The Act does not give the public a right to speak at such meetings. However, the Board at its discretion may allow any person to address the Board on any item and for the length of time as determined by the Board .*

*** Pursuant to the provisions of Section 551.071, 551.074 and 551.076 of the open meetings act of the Government Code, the Board reserves the right to convene in Executive Session at any time deemed necessary for consideration of legal matters or consultation with legal counsel, personnel matters, or district security.*

Date: May 7, 2013
Time: 8:54 AM

POSTED May 7, 2013
At 10:32 o'clock A M.
Elesa Ocker
County Clerk, Runnels County, Texas
By [signature] Deputy

NOTICE OF HEARING
ON
PROPOSED MANAGEMENT PLAN
FOR THE
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT

Wednesday, May 15, 2013 at 7:30 AM

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PUBLIC NOTICE

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Date: May 7, 2013
Time: 8:54 AM

NOTICE OF HEARING
ON
PROPOSED MANAGEMENT PLAN
FOR THE
LIPAN-KICKAPOO WATER CONSERVATION DISTRICT

FILED FOR RECORD
MAY -7 AM 11:56
COUNTY CLERK
COUNTY OF TOM GREEN, TEXAS

Wednesday, May 15, 2013 at 7:30 AM

A Public Hearing is scheduled to be held at the Lipan-Kickapoo Water Conservation District Office, Suite C, Vancourt Post Office Building, Vancourt, Texas. The purpose of this hearing is to take public comment on a Revised Management Plan (2013-2018) for the District.

PUBLIC NOTICE

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LIPAN-KICKAPOO WATER CONSERVATION DISTRICT

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Date: May 7, 2013
Time: 8:54 AM

#5078
FILED
The 7th Day of May
2013 at 10:07 O'clock A M
Barbara L. Hoffman
County Clerk Concho Co. TX
By Crystal Ellis

APPENDIX G

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Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

April 12, 2013

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Under §36.1071, Texas Water Code, as amended, the Lipan-Kickapoo WCD is required to coordinate with surface water entities located within the district in preparation of its management plan. Although there is only one surface water entity located within the district's boundaries, the district submitted a copy of the proposed management plan not only to the Tom Green County Water Control and Improvement District #1 that is located within the District boundaries, but also to the surface water entities that have storage either in the district, partially in the district, or adjacent to the district for review and comments. The surface water entities that received copies of the proposed management plan included:

1) Tom Green County Water Control Water Control and Improvement District #1
2) City of San Angelo
3) Upper Colorado River Authority
4) City of Winters
5) Colorado River Municipal Water District
6) City of Ballinger
7) Region F Regional Water Planning Group.

Comments or suggestions were requested to be submitted to the District by May 13, 2013. No comments or suggestions were received by the District.

Copies of the cover letters and certified mail receipts are enclosed.

Sincerely,

Allan J. Lange
General Manager

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Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

April 12, 2013

Ms. Linda Schneeman
District Manager
Tom Green County Water Control and Improvement District #1
PO Box 488
Veribest, TX 76866

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Dear Ms. Schneeman:

The Lipan-Kickapoo WCD has drafted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

Under §36.1071, Texas Water Code, as amended, the District is required to coordinate with surface water entities in preparation of its management plan. In compliance with this chapter of the water code, the District is submitting to you a copy of the new proposed management plan for your review and comments.

Please review this management plan and submit any comments or suggestions to the District by May 13, 2013. If you have any questions or need additional information, as you review this plan, please contact me at 469-3988. We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@airmail.net

April 12, 2013

Mr. Ricky Dickson
City of San Angelo
72 W. College Ave.
San Angelo, Texas 76903

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Dear Mr. Dickson:

The Lipan-Kickapoo WCD has drafted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

Under §36.1071, Texas Water Code, as amended, the District is required to coordinate with surface water entities in preparation of its management plan. In compliance with this chapter of the water code, the District is submitting to you a copy of the new proposed management plan for your review and comments.

Please review this management plan and submit any comments or suggestions to the District by May 13, 2013. If you have any questions or need additional information, as you review this plan, please contact me at 469-3988. We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

April 12, 2013

Mr. Chuck Brown
Upper Colorado River Authority
512 Orient
San Angelo, Texas 76903

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Dear Mr. Brown:

The Lipan-Kickapoo WCD has drafted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

Under §36.1071, Texas Water Code, as amended, the District is required to coordinate with surface water entities in preparation of its management plan. In compliance with this chapter of the water code, the District is submitting to you a copy of the new proposed management plan for your review and comments.

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Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

April 12, 2013

Lewis Bergman
City of Winters
310 South Main
Winters, Texas 79567

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Dear Mr. Bergman:

The Lipan-Kickapoo WCD has drafted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

Under §36.1071, Texas Water Code, as amended, the District is required to coordinate with surface water entities in preparation of its management plan. In compliance with this chapter of the water code, the District is submitting to you a copy of the new proposed management plan for your review and comments.

Please review this management plan and submit any comments or suggestions to the District by May 13, 2013. If you have any questions or need additional information, as you review this plan, please contact me at 469-3988. We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

April 12, 2013

Mr. John Grant
General Manager
Colorado River Municipal Water District
P.O. Box 869
Big Spring, Texas 79721-0869

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Dear Mr. Grant:

The Lipan-Kickapoo WCD has drafted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

Under §36.1071, Texas Water Code, as amended, the District is required to coordinate with surface water entities in preparation of its management plan. In compliance with this chapter of the water code, the District is submitting to you a copy of the new proposed management plan for your review and comments.

Please review this management plan and submit any comments or suggestions to the District by May 13, 2013. If you have any questions or need additional information, as you review this plan, please contact me at 469-3988. We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

April 12, 2013

Mr. Tommy New
City of Ballinger
PO Box 497
Ballinger, Texas 76821

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Dear Mr. New:

The Lipan-Kickapoo WCD has drafted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

Under §36.1071, Texas Water Code, as amended, the District is required to coordinate with surface water entities in preparation of its management plan. In compliance with this chapter of the water code, the District is submitting to you a copy of the new proposed management plan for your review and comments.

Please review this management plan and submit any comments or suggestions to the District by May 13, 2013. If you have any questions or need additional information, as you review this plan, please contact me at 469-3988. We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

April 12, 2013

Mr. John Grant
President
Region F Regional Water Planning Group
P.O. Box 869
Big Spring, Texas 79721-0869

Subject: Lipan-Kickapoo WCD Management Plan - PROPOSED

Dear Mr. Grant:

The Lipan-Kickapoo WCD has drafted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

Under §36.1071, Texas Water Code, as amended, the District is required to coordinate with surface water entities in preparation of its management plan. In compliance with this chapter of the water code, the District is submitting to you a copy of the new proposed management plan for your review and comments.

Please review this management plan and submit any comments or suggestions to the District by May 13, 2013. If you have any questions or need additional information, as you review this plan, please contact me at 469-3988. We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Lewis Bergman
City of Winters
310 S. Main
Winters, TX 79567

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X V. Ochoa ☐ Agent ☐ Addressee

B. Received by (Printed Name) V Ochoa
C. Date of Delivery 4-15-13

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1060 0001 6048 2123

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7010 1060 0001 6048 2123

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT, TX 76955 Postmark Here APR 12 2013 USPS

Sent To Lewis Bergman City of Winters
Street, Apt. No.; or PO Box No. 310 S. Main
City, State, ZIP+4 Winters, TX 79567

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. John Grant, President
Region F. Regional Water
Planning Group
P.O. Box 869
Big Spring, TX 79721

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Pam Nichols ☐ Agent ☐ Addressee

B. Received by (Printed Name) Pam Nichols
C. Date of Delivery 4-15-13

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1060 0001 6048 2116

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7010 1060 0001 6048 2116

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
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Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT, TX 76955 Postmark Here APR 12 2013 USPS

Sent To Mr. John Grant, President Region F. Regional Water Planning Group
Street, Apt. No.; or PO Box No. P.O. Box 869
City, State, ZIP+4 Big Spring, TX 79721-0869

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. John Grant
General Manager
Colorado River Municipal
Water District
P.O. Box 869
Big Spring, TX 79721

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Pam Nichols ☐ Agent ☐ Addressee

B. Received by (Printed Name) Pam Nichols
C. Date of Delivery 4-15-13

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1060 0001 6048 2093

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7010 1060 0001 6048 2093

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT, TX 76955 Postmark Here APR 12 2013 USPS

Sent To MR. JOHN GRANT Colorado River Municipal Water
Street, Apt. No.; or PO Box No. P.O. Box 869
City, State, ZIP+4 Big Spring, TX 79721-086

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT, TX 76955 Postmark Here APR 12 2013 USPS

Sent To: Mr. Chuck Brown, Upper Colorado River Authority
Street, Apt. No.; or PO Box No.: 512 Orient
City, State, ZIP+4: San Angelo, Tx 76903

PS Form 3800, August 2006 See Reverse for Instructions

7010 1060 0001 6048 1928

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Mr. Chuck Brown
Upper Colorado River Authority
512 Orient
San Angelo, Tx
76903

COMPLETE THIS SECTION ON DELIVERY

A. Signature X [signature] ☒ Agent ☐ Addressee
B. Received by (Printed Name) Ellen Grott C. Date of Delivery 4-15-13
D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service) 7010 1060 0001 6048 1928

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

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Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT, TX 76955 Postmark Here APR 12 2013 USPS

Sent To: Mr. Tommy New, City of Ballinger
Street, Apt. No.; or PO Box No.: P.O. Box 497
City, State, ZIP+4: Ballinger, Tx 76821

PS Form 3800, August 2006 See Reverse for Instructions

7010 1060 0001 6048 2109

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Mr. Tommy New
City of Ballinger
P.O. Box 497
Ballinger, TX 76821

COMPLETE THIS SECTION ON DELIVERY

A. Signature X Donita J. Shields ☒ Agent ☐ Addressee
B. Received by (Printed Name) Donita Shields C. Date of Delivery APR 16 2013
D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service) 7010 1060 0001 6048 2109

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

Postmark Here

Sent To: Mr. Ricky Dickson, City of San Angelo
Street, Apt. No.; or PO Box No.: 72 W. College Ave.
City, State, ZIP+4: San Angelo, Tx 76903

PS Form 3800, August 2006 See Reverse for Instructions

7010 1060 0001 6048 1911

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Mr. Ricky Dickson
City of San Angelo
72 W. College Ave.
San Angelo, Tx 76903

COMPLETE THIS SECTION ON DELIVERY

A. Signature X Ann M. Pierce ☐ Agent ☐ Addressee
B. Received by (Printed Name) Ann M. Pierce C. Date of Delivery 4/15/13
D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service) 7010 1060 0001 6048 1911

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-154

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Ms. Linda Schneeman, Dist Mgr
Tom Green Co. Water Control
and Improvement Dist #1
P.O. Box 488
Veribest, TX 76866

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Linda Schneeman
C. Date of Delivery 4-17-13

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Numb 7010 1060 0001 6048 1935
(Transfer from service label)

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7010 1060 0001 6048 1935

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only, No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$7.57

VANCOURT, TX 76955
Postmark Here
APR 1 2013
USPS

Sent To Ms. Linda Schneeman, Dist Mgr.
Tom Green Co. Water Control + Improvement
Street, Apt. No.; or PO Box No. P.O. Box 488
City, State, ZIP+4 Veribest TX 76866

PS Form 3800, August 2006 See Reverse for Instructions

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

Under §36.1071, Texas Water Code, as amended, the Lipan-Kickapoo WCD is required to coordinate with surface water entities located within the district in preparation of its management plan. Although there is only one surface water entity located within the district's boundaries, the district submitted a copy of the adopted management plan not only to the Tom Green County Water Control and Improvement District #1 that is located within the District boundaries, but also to the surface water entities that have storage either in the district, partially in the district, or adjacent to the district for review and comments. The surface water entities that received copies of the adopted management plan included:

1) Tom Green County Water Control Water Control and Improvement District #1
2) City of San Angelo
3) Upper Colorado River Authority
4) City of Winters
5) Colorado River Municipal Water District
6) City of Ballinger
7) Region F Regional Water Planning Group.

Written comments or suggestions were accepted by the District for 30 days prior to the public hearing and for 14 days following the public hearing. No comments or suggestions were received by the District.

Copies of the cover letters for the adopted management plan and certified mail receipts are enclosed.

Sincerely,

Allan J. Lange
General Manager

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Ms. Linda Schneeman
District Manager
Tom Green County Water Control and Improvement District #1
PO Box 488
Veribest, TX 76866

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

Dear Ms. Schneeman:

The Lipan-Kickapoo WCD has adopted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

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Please review this management plan and submit any comments or suggestions to the District. If you have any questions or need additional information, as you review this plan, please contact me at 469-3988. We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Mr. Ricky Dickson
City of San Angelo
72 W. College Ave.
San Angelo, Texas 76903

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

Dear Mr. Dickson:

The Lipan-Kickapoo WCD has adopted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

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We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Mr. Chuck Brown
Upper Colorado River Authority
512 Orient
San Angelo, Texas 76903

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

Dear Mr. Brown:

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Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Lewis Bergman
City of Winters
310 South Main
Winters, Texas 79567

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

Dear Mr. Bergman:

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We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Mr. John Grant
General Manager
Colorado River Municipal Water District
P.O. Box 869
Big Spring, Texas 79721-0869

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

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Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Mr. Tommy New
City of Ballinger
PO Box 497
Ballinger, Texas 76821

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

Dear Mr. New:

The Lipan-Kickapoo WCD has adopted a new management plan to replace the one adopted in 2008 that is set to expire later this year. Under §36.1072, Texas Water Code, as amended, the District must review and adopt a new plan every five years and submit it to the Texas Water Development Board for review and approval.

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We appreciate your attention and cooperation in reviewing this management plan.

Sincerely,

Allan J. Lange
General Manager

enclosures

Lipan-Kickapoo Water Conservation District

P.O. Box 67
Vancourt, Texas 76955
Ph: 325-469-3988 Fax: 325-469-3989
Email: lkwcd@centex.net

May 20, 2013

Mr. John Grant
President
Region F Regional Water Planning Group
P.O. Box 869
Big Spring, Texas 79721-0869

Subject: Lipan-Kickapoo WCD Management Plan - ADOPTED

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Sincerely,

Allan J. Lange
General Manager

enclosures

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Mr. Ricky Dickson
City of San Angelo
72 W. College Ave.
San Angelo, Tx 76903

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Ann M. Pierce ☐ Agent ☐ Addressee

B. Received by (Printed Name) Ann M. Pierce
C. Date of Delivery 5/22/13

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1060 0001 6048 2024

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OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT TX 76955 MAY Postmark Here USPS

Sent To MR. RICKY DICKSON
Street, Apt. No.; or PO Box No. City of San Angelo 72 W. College Ave.
City, State, ZIP+4 San Angelo, Tx 76903

7010 1060 0001 6048 2024

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Mr. Tommy New
City of Ballinger
P.O. Box 497
Ballinger, Tx 76821

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Debby Legg ☐ Agent ☐ Addressee

B. Received by (Printed Name) Debby Legg
C. Date of Delivery MAY 22 2013

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1060 0001 6048 2147

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT TX 76955 Postmark Here USPS

Sent To Tommy New
Street, Apt. No.; or PO Box No. City of Ballinger PO Box 497
City, State, ZIP+4 Ballinger, Tx 76821

7010 1060 0001 6048 2147

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Mr. Chuck Brown
Upper Colorado River Authority
512 Orient
San Angelo, Tx 76903

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [illegible] ☑ Agent ☐ Addressee

B. Received by (Printed Name) Ellen Groth
C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1060 0001 6048 2000

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT TX 76955 Postmark Here USPS

Sent To Mr. Chuck Brown
Upper Colorado River Authority
Street, Apt. No.; or PO Box No. 512 Orient
City, State, ZIP+4 San Angelo, Tx 76903

7010 1060 0001 6048 2000

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
MR. JOHN GRANT
General Manager
Colorado River Municipal
WATER DISTRICT
P.O. Box 869
Big SPRING, TX 79721

2. Article Number (Transfer from service) 7010 1060 0001 6048 2130

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Pam Nichols ☐ Agent ☐ Addressee

B. Received by (Printed Name) Pam Nichols C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

7010 1060 0001 6048 2130

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Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT TX 76955 Postmark Here USPS

Sent To John Grant General Manager
Street, Apt. No.; or PO Box No. Colorado River Municipal Water Dist P.O. Box 869
City, State, ZIP+4 Big Spring, TX 79721

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
MR. John Grant, President
Region F Regional Water
Planning Group
P.O. Box 869
Big Spring, TX 79721

2. Article Nu (Transfer 7010 1060 0001 6048 2017

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Pam Nichols ☐ Agent ☐ Addressee

B. Received by (Printed Name) Pam Nichols C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

7010 1060 0001 6048 2017

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Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT TX 76955 Postmark Here USPS

Sent To MR. John Grant, President Region F Regional Water Planning Grou
Street, Apt. No.; or PO Box No. P.O. Box 869
City, State, ZIP+4 Big Spring, TX 79721

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Lewis Bergman
City of Winters
310 S. Main
Winters, TX 79567

2. Article Nu (Transfer fr 7010 1060 0001 6048 1973

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X V. Victor ☐ Agent ☐ Addressee

B. Received by (Printed Name) V. Victor C. Date of Delivery 5-22-13

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

7010 1060 0001 6048 1973

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT
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Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT TX 76955 Postmark Here USPS

Sent To Lewis Bergman City of Winters
Street, Apt. No.; or PO Box No. 310 S. Main
City, State, ZIP+4 WINTERS, TX 79567

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Ms. Linda Schneeman, Dist. Mgr.
Tom Green Co. Water Control + Improvement Dist. #1
P.O. Box 488
Veribest, TX 76866

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Linda Schneeman ☐ Agent ☐ Addressee

B. Received by (Printed Name) LINDA SCHNEEMAN
C. Date of Delivery 5/28/2013

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Num (Transfer fro 7010 1060 0001 6048 1997

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7010 1060 0001 6048 1997

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$ 1.92
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.57

VANCOURT TX 76955 USPS Postmark Here

Sent To Ms. Linda Schneeman, Dist Mgr.
Tom Green Co. Water Control + Improvement
Street, Apt. No.; or PO Box No. P.O. Box 488
City, State, ZIP+4 Veribest, TX 76866

PS Form 3800, August 2006 See Reverse for Instructions