



# **GROUNDWATER MANAGEMENT PLAN**

PECAN VALLEY

GROUNDWATER CONSERVATION DISTRICT

Adopted 2/17/09

Revised 3/18/14

## Table of Contents

District Mission .....	4
Purpose of Management Plan.....	4
Technical District Informaton Required by Texas Administrative Code .....	5
Estimate of Modeled Available Groundwater in District Based on Desired Future Condition.....	5
Amount of Groundwater Being Used within the District on an Annual Basis.....	7
Annual Amount of Recharge from Precipitation to the Groundwater Resources within the District .....	7
Annual Volume of Water that Discharges from the Aquifer to Springs and Surface Water Bodies.....	7
Estimate of Annual Volume of Flow into the District, Out of the District and Between Aquifers in the District.....	7
Projected surface water supply within the District.....	7
Projected total demand for water within the district .....	7
Water supply needs.....	7
Water Management Strategies .....	7
Methodology to Track District Progress in Achieving Management Goals .....	7
Details on the District Management of Groundwater .....	8
District Authority and Management Rules and Policies.....	8
Actions, Procedures, Performance and Avoidance for District Implementation of Management Plan.....	10
Mangement Plan Goals.....	11
Goal A: Providing the Most Efficient Use of Groundwater .....	11
Goal B: Controlling and Preventing Waste of Groundwater.....	11
Goal C: Controlling Preventing Subsidence .....	11

Goal D: Conjunctive Surface Water Management Issues .....	11
Goal E: Natural Resource Issues .....	12
Goal F: Drought Conditions .....	12
Goal G: Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, or Brush Control.....	12
Goal H: Addressing in a Quantitative Manner the Desired Future Conditions .....	13
List of Appendices .....	14

## **District Mission**

The Pecan Valley Groundwater Conservation District (District) provides for the conservation, preservation, protection, recharging, and prevention of waste of the groundwater within the defined boundary of the District, through sound management strategies, while protecting private property rights.

The Pecan Valley Groundwater Conservation District will pursue this goal through the gathering of scientific data regarding the hydrological characteristics of the aquifers that underlie DeWitt County, and the adoption and enforcement of fair and appropriate rules governing well spacing and production and use of the groundwater, and through a monitoring program to manage groundwater withdrawal within the district to a sustainable yield of the aquifer.

## **Purpose of Management Plan**

Senate Bill 1 (SB 1), enacted by the 75th Texas Legislature in 1997, and Senate Bill 2 (SB 2), enacted by the 77th Texas Legislature in 2001, established a comprehensive state-wide water resource planning process and the actions necessary for groundwater conservation districts to manage and conserve the groundwater resources of the State of Texas. These bills require all groundwater conservation districts to develop a management plan which defines the groundwater needs and groundwater supplies within each district and the goals each district has set to achieve its mission. In addition, the 79th Texas Legislature enacted HB 1763 in 2005 that requires joint planning among districts that are in the same Groundwater Management Area (GMA). These districts must jointly agree upon and establish the desired future conditions (DFC) of the aquifers within their respective GMAs. Through this process, the districts will submit the DFC conditions to the executive administrator of the Texas Water Development Board (TWDB), who will provide each district in the GMA with the amount of Modeled Available Groundwater (MAG) for each district. The MAG will be based on the desired future conditions jointly established for each aquifer within the respective GMA divisions.

Technical information, such as the desired conditions of the aquifers within the District's jurisdiction and the amount of modeled available groundwater from such aquifers is required by statute to be included in the District's management plan and will guide the District's regulatory and management policies. This management plan is intended to satisfy the requirements of SB 1, SB 2, HB 1763, the statutory requirements of Texas Water Code (TWC) Chapter 36, and the rules and requirements of the Texas Water Development Board.

## **Technical District Information Required by Texas Administrative Code**

### ***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 15. GMA 15 adopted DFC’s for the Gulf Coast Aquifer on July 14, 2010. The adopted DFC’s were then forwarded to the TWDB for development of the MAG calculations. The submittal package for the DFC’s can be found here:

[http://www.twdb.state.tx.us/groundwater/docs/DFC/GMA15\\_DFC\\_Adopted\\_2010-0714.pdf](http://www.twdb.state.tx.us/groundwater/docs/DFC/GMA15_DFC_Adopted_2010-0714.pdf)

A summary of the modeled available groundwater is summarized below. Please refer to Appendix C for full details.

County	Year					
	2010	2020	2030	2040	2050	2060
Aransas	1,862	1,862	1,862	1,862	1,862	1,862
Bee	9,514	9,514	9,490	9,490	9,438	9,438
Calhoun	2,995	2,995	2,995	2,995	2,995	2,995
Colorado	48,953	48,953	48,953	48,953	48,953	48,953
<b>DeWitt</b>	<b>14,701</b>	<b>14,636</b>	<b>14,630</b>	<b>14,619</b>	<b>14,616</b>	<b>14,616</b>
Fayette	9,204	9,073	8,905	8,895	8,886	8,856
Goliad	11,699	11,699	11,699	11,699	11,699	11,699
Jackson	76,386	76,386	76,386	76,386	76,386	76,386
Karnes	3,243	3,235	3,230	3,226	3,222	3,116
Lavaca	20,385	20,385	20,385	20,385	20,378	20,373
Matagorda	45,896	45,896	45,896	45,896	45,896	45,896
Refugio	29,328	29,328	29,328	29,328	29,328	29,328
Victoria	35,694	35,694	35,694	35,694	35,694	35,694
Wharton	178,493	178,493	178,493	178,493	178,493	178,493
<b>Total</b>	<b>488,353</b>	<b>488,149</b>	<b>487,946</b>	<b>487,921</b>	<b>487,846</b>	<b>487,705</b>

<sup>1</sup> MAG values for the Gulf Coast Aquifer were documented in TWDB GAM Run 10-028 MAG (Hill & Oliver, November 18, 2011) – See Appendix C

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

Please refer to Appendix A

***Annual Amount of Recharge from Precipitation to the Groundwater Resources within the District***

Please refer to Appendix B

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

Please refer to Appendix B

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

Please refer to Appendix B

***Projected Surface Water Supply within the District***

Please refer to Appendix A

***Projected Total Demand for Water within the District***

Please refer to Appendix A

***Water Supply Needs***

Please refer to Appendix A

***Water Management Strategies***

Please refer to Appendix A

***Methodology to Track District Progress in Achieving Management Goals***

The General Manager of the District will prepare and present an annual report to the Board of Directors evaluating the impact of the District's activities on its goals, management objectives, and performance standards. The Annual Report will be presented 120 days following the completion of the District's fiscal year.

## **Details on the District Management of Groundwater**

### ***District Authority and Management Rules and Policies***

The Texas Legislature has determined that GCDs, such as the Pecan Valley Groundwater Conservation District, are the state's preferred method of groundwater management. The Texas Legislature codified its groundwater management policy decision in Section 36.0015 of the Texas Water Code, which provides that GCDs will manage groundwater resources through rules developed and implemented in accordance with Chapter 36 of the Texas Water Code. Chapter 36 establishes directives for GCDs and the statutory authority to carry out such directives to enable GCDs to have the proper tools to protect and preserve the groundwater resources with their boundaries. The District will give strong consideration to the economic and cultural activities which occur within the District and which rely upon the continued use of groundwater.

The District using the regulatory tools it has been given by Chapter 36 to properly address the groundwater issues within DeWitt County, such as groundwater quality and groundwater supply. The District believes that the prevention of contamination of its groundwater resources through abandoned and deteriorated water wells is important. Wells that have been abandoned or not properly maintained provide direct conduits or pathways that allow contamination from the surface to quickly reach the groundwater resources of the District. To address the threats to the water quality of its groundwater resources, the District requires, through its rules, that all abandoned, deteriorated, or replaced wells be plugged in compliance with the Water Well Drillers and Pump Installers Rules of the Texas Department of Licensing and Regulation. The District will also place a priority on the capping of water wells that the well owner plans to use at a later date in order to eliminate waste, prevent pollution, and stop future deterioration of the well casing.

The District has established a monitoring well network to monitor the changing storage conditions of the groundwater supplies within the District. The District will make a regular assessment of water supply and groundwater storage conditions and has reported and will continue to report those conditions to the District Board of Directors and to the public. The District has also worked and will continue to work with any local governmental entities or agencies of the State of Texas on any well monitoring efforts or well investigations which are conducted.

The District is using the regulatory tools granted to GCDs by Chapter 36 to preserve and protect the existing and historic users of groundwater within the District. The Texas Legislature empowered the District to protect existing users of groundwater, which are those individuals or entities currently invested in and using groundwater or the groundwater resources within the District for a beneficial purpose, and preserve historic use by historic users, which are those individuals or entities who used groundwater beneficially in the past. The District



strives to protect and preserve such use to the extent practicable under the goals and objectives of this Management Plan. In accordance with Section 36.116 of the Texas Water Code, the District is also protecting historic use through District Rules on spacing of wells and production limits on groundwater to the extent practicable consistent with this Management Plan.

In order to better manage the groundwater resources of DeWitt County during times of high demand or within areas of high demand, the District may establish Critical Groundwater Depletion Areas and adopt different Rules for those areas. The District may also adopt different Rules for each subdivision of an aquifer or geologic strata located in whole or in part within the boundaries of the District or each geographic area overlying a subdivision of an aquifer located in whole or in part within the boundaries of the District. The District has adopted Rules to regulate groundwater withdrawals by means of spacing and/or production limits. The relevant factors to be considered in making a determination to grant or deny a permit or limit groundwater withdrawals shall include those set forth in the Chapter 36 of the Texas Water Code, and the rules of the District.

## **Actions, Procedures, Performance and Avoidance for District Implementation of Management Plan**

The District will use the Management Plan to guide the District in its efforts to preserve and protect the groundwater resources of DeWitt County. Operations of the District, agreements entered into by the District and planning efforts in which the District may participate will be consistent with the provisions of this plan.

A copy of the Rules of Pecan Valley Groundwater Conservation District may be found at [www.pvgcd.org](http://www.pvgcd.org). The District will adopt rules relating to the permitting of wells and the production of groundwater. The rules adopted by the District shall be pursuant to the TWC Ch36 and the provisions of this plan. All rules will be adhered to and enforced. The promulgation and enforcement of the rules will be based on the best technical evidence available.

The District shall treat all citizens with equality. Citizens may apply to the District for discretion in enforcement of the rules on grounds of adverse economic effect or unique local conditions. In granting of discretion to any rule, the Board shall consider the potential for adverse effect on adjacent landowners. The exercise of said discretion by the Board shall not be construed as limiting the power of the Board.

The District may amend the District rules as necessary to comply with changes to Chapter 36 of the Texas Water Code and to insure the best management practices of the groundwater in the District. The implementation of the rules of the District will be based on the best available scientific and technical data, and on fair and reasonable evaluation.

The District is committed to work and plan with other GCD's in Groundwater Management Area 15. The District will use the Management Plan as part of its cooperation efforts with the neighboring GCDs. The District will manage the supply of groundwater within the District based on Desired Future Conditions and Modeled Available Groundwater resulting from the Groundwater Management Area 15 cooperative planning process, exempt and non-exempt wells and groundwater demands, and the District's best available data.

The District has encouraged and will continue to encourage public cooperation in the implementation of the management plan for the District.

## **Management Goals**

### **A. Providing the Most Efficient Use of Groundwater**

**Objective:** Develop and maintain a Water Well Registration Program for tracking well information for wells within the District's boundaries.

**Performance Standard:** Each year the District will summarize within the annual report the changes related to water well registration including the number of new and existing wells registered.

**Objective:** Develop and maintain a Water Well Permitting Program for tracking all permits authorizing water well operation and groundwater production.

**Performance Standard:** Each year the District will summarize within the annual report the changes related to water well permitting including the number of new applications and the disposition of the applications.

### **B. Controlling and Preventing Waste of Groundwater**

**Objective:** Initiate a program to identify the location of abandoned wells that will include a survey of landowners, well drillers, and the Texas Railroad Commission regarding any known abandoned wells, and initiate actions as necessary to enforce the notice, plugging and other requirements of Section 1901.255, Occupations Code.

**Performance Standard:** Include in the annual report the number of water well inspections resulting from these activities.

**Objective:** Develop and maintain a Groundwater Conservation Education Program

**Performance Standard:** Each year the District will summarize within the annual report the educational activities including the number of educational materials developed and/or delivered to local schools, the number of public speaking events and presentations, the number of community events participated in, and the number of educational publications.

### **C. Controlling and Preventing Subsidence**

This goal is not applicable to the Pecan Valley Groundwater Conservation District.

### **D. Conjunctive Surface Water Management Issues**

**Objective:** Participate in the regional water planning process by attending at least two South Central Texas Regional Water Planning Group (Region L) meetings.

**Performance Standard:** Report annually to the Board the attendees, dates and the number of meetings attended.

## **E. Natural Resource Issues**

**Objective:** Develop and maintain a Water Quality Monitoring Program.

**Performance Standard:** Each year, the District will summarize within the annual report the monitoring activities including the number of wells monitored and the year to year change of water quality.

## **F. Drought Conditions**

**Objective:** Collect and review drought condition information related to DeWitt County and the surrounding region of Texas on a monthly basis.

**Performance Standard:** Each year the District will summarize within the annual report the monthly drought information including U.S. Drought Monitor. Additionally, the number of weeks and/or months that the District experienced drought based on the US Drought Monitor will be reported in the annual report.

## **G. Conservation, Recharge Enhancement, Rainwater Harvesting, and Brush Control**

**Objective (Conservation):** The District will submit at least one article regarding water conservation for publication each year to at least one newspaper of general circulation in DeWitt County.

**Performance Standard (Conservation):** A copy of the article submitted will be included in the Annual Report given to the Board of Directors

**Objective (Rainwater Harvesting):** The District will provide information on rainwater harvesting each year by offering new information about rainwater harvesting on the District website at least once a year.

**Performance Standard (Rainwater Harvesting):** Each year the District will summarize within the annual report all efforts made in promoting rainwater harvesting including providing educational links to the district website and any other educational avenues.

**Objective (Brush Control):** The District will evaluate the State Brush Control Plan as it is revised from time to time at least once each year to determine whether projects within the District will increase the groundwater resources of the District.

**Performance Standard (Brush Control):** Upon review of a newly revised State Brush Control Plan, the District's Annual Report will include a copy of the most recent brush control information pertaining to the District.

Goals related to Recharge Enhancement and Precipitation Enhancement are not applicable to the Pecan Valley Groundwater Conservation District.

## H. Addressing the Desired Future Conditions

**Objective:** Develop and maintain a Water Well Inspection Program for non-exempt wells.

**Performance Standard:** Each year the District will summarize within the annual report the findings of the inspection activities including the number of water wells inspected and information regarding the number of wells that require improvement in order to prevent waste and/or prevent groundwater contamination.

**Objective:** The District will monitor water levels and evaluate whether the average change in water levels is in conformance with the DFC's adopted by the District. The District will estimate the total annual groundwater production for each aquifer based on water use reports, estimated exempt use and other relevant information and compare these production estimates to the MAG's.

**Performance Standard:** Each year the District will summarize within the annual report the monitoring activities including the number of wells monitored and the average annual change of water levels and compare them to the DFC's. The District will also record the estimated annual production from each aquifer and compare these amounts to the MAG. These production amounts will also be reported in the annual report.

## **List of Appendices**

**Appendix A** - Estimated Historical Water Use and 2012 State Water Plan Datasets provided by Texas Water Development Board

**Appendix B** – Groundwater Availability Model Run 12-024 provided by Texas Water Development Board

**Appendix C** – Groundwater Availability Model Run 10-028 MAG

**Appendix D** – Public Notices Regarding Hearing Related to Plan Adoption

**Appendix E** – Letters Coordinating with Regional Surface Water Management Entities

**Appendix F** – Pecan Valley Groundwater Conservation District Board of Director Resolution Adopting Revised Management Plan

**Appendix G** – Minutes of Pecan Valley Groundwater Conservation District Board of Directors Meetings related to the public hearing for and adoption of the Management Plan

**Appendix H** – Pecan Valley Groundwater Conservation District contact information



# **GROUNDWATER MANAGEMENT PLAN**

PECAN VALLEY

GROUNDWATER CONSERVATION DISTRICT

Adopted 2/17/09

Revised 3/18/14

## Table of Contents

District Mission .....	4
Purpose of Management Plan.....	4
Technical District Informaton Required by Texas Administrative Code .....	5
Estimate of Modeled Available Groundwater in District Based on Desired Future Condition.....	5
Amount of Groundwater Being Used within the District on an Annual Basis.....	7
Annual Amount of Recharge from Precipitation to the Groundwater Resources within the District .....	7
Annual Volume of Water that Discharges from the Aquifer to Springs and Surface Water Bodies.....	7
Estimate of Annual Volume of Flow into the District, Out of the District and Between Aquifers in the District.....	7
Projected surface water supply within the District.....	7
Projected total demand for water within the district .....	7
Water supply needs.....	7
Water Management Strategies .....	7
Methodology to Track District Progress in Achieving Management Goals .....	7
Details on the District Management of Groundwater .....	8
District Authority and Management Rules and Policies.....	8
Actions, Procedures, Performance and Avoidance for District Implementation of Management Plan.....	10
Mangement Plan Goals.....	11
Goal A: Providing the Most Efficient Use of Groundwater .....	11
Goal B: Controlling and Preventing Waste of Groundwater.....	11
Goal C: Controlling Preventing Subsidence .....	11



Goal D: Conjunctive Surface Water Management Issues .....	11
Goal E: Natural Resource Issues .....	12
Goal F: Drought Conditions .....	12
Goal G: Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, or Brush Control.....	12
Goal H: Addressing in a Quantitative Manner the Desired Future Conditions .....	13
List of Appendices .....	14

## **District Mission**

The Pecan Valley Groundwater Conservation District (District) provides for the conservation, preservation, protection, recharging, and prevention of waste of the groundwater within the defined boundary of the District, through sound management strategies, while protecting private property rights.

The Pecan Valley Groundwater Conservation District will pursue this goal through the gathering of scientific data regarding the hydrological characteristics of the aquifers that underlie DeWitt County, and the adoption and enforcement of fair and appropriate rules governing well spacing and production and use of the groundwater, and through a monitoring program to manage groundwater withdrawal within the district to a sustainable yield of the aquifer.

## **Purpose of Management Plan**

Senate Bill 1 (SB 1), enacted by the 75th Texas Legislature in 1997, and Senate Bill 2 (SB 2), enacted by the 77th Texas Legislature in 2001, established a comprehensive state-wide water resource planning process and the actions necessary for groundwater conservation districts to manage and conserve the groundwater resources of the State of Texas. These bills require all groundwater conservation districts to develop a management plan which defines the groundwater needs and groundwater supplies within each district and the goals each district has set to achieve its mission. In addition, the 79th Texas Legislature enacted HB 1763 in 2005 that requires joint planning among districts that are in the same Groundwater Management Area (GMA). These districts must jointly agree upon and establish the desired future conditions (DFC) of the aquifers within their respective GMAs. Through this process, the districts will submit the DFC conditions to the executive administrator of the Texas Water Development Board (TWDB), who will provide each district in the GMA with the amount of Modeled Available Groundwater (MAG) for each district. The MAG will be based on the desired future conditions jointly established for each aquifer within the respective GMA divisions.

Technical information, such as the desired conditions of the aquifers within the District's jurisdiction and the amount of modeled available groundwater from such aquifers is required by statute to be included in the District's management plan and will guide the District's regulatory and management policies. This management plan is intended to satisfy the requirements of SB 1, SB 2, HB 1763, the statutory requirements of Texas Water Code (TWC) Chapter 36, and the rules and requirements of the Texas Water Development Board.

## **Technical District Information Required by Texas Administrative Code**

### ***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 15. GMA 15 adopted DFC’s for the Gulf Coast Aquifer on July 14, 2010. The adopted DFC’s were then forwarded to the TWDB for development of the MAG calculations. The submittal package for the DFC’s can be found here:

[http://www.twdb.state.tx.us/groundwater/docs/DFC/GMA15\\_DFC\\_Adopted\\_2010-0714.pdf](http://www.twdb.state.tx.us/groundwater/docs/DFC/GMA15_DFC_Adopted_2010-0714.pdf)

A summary of the modeled available groundwater is summarized below. Please refer to Appendix C for full details.

County	Year					
	2010	2020	2030	2040	2050	2060
Aransas	1,862	1,862	1,862	1,862	1,862	1,862
Bee	9,514	9,514	9,490	9,490	9,438	9,438
Calhoun	2,995	2,995	2,995	2,995	2,995	2,995
Colorado	48,953	48,953	48,953	48,953	48,953	48,953
<b>DeWitt</b>	<b>14,701</b>	<b>14,636</b>	<b>14,630</b>	<b>14,619</b>	<b>14,616</b>	<b>14,616</b>
Fayette	9,204	9,073	8,905	8,895	8,886	8,856
Goliad	11,699	11,699	11,699	11,699	11,699	11,699
Jackson	76,386	76,386	76,386	76,386	76,386	76,386
Karnes	3,243	3,235	3,230	3,226	3,222	3,116
Lavaca	20,385	20,385	20,385	20,385	20,378	20,373
Matagorda	45,896	45,896	45,896	45,896	45,896	45,896
Refugio	29,328	29,328	29,328	29,328	29,328	29,328
Victoria	35,694	35,694	35,694	35,694	35,694	35,694
Wharton	178,493	178,493	178,493	178,493	178,493	178,493
<b>Total</b>	<b>488,353</b>	<b>488,149</b>	<b>487,946</b>	<b>487,921</b>	<b>487,846</b>	<b>487,705</b>

<sup>1</sup> MAG values for the Gulf Coast Aquifer were documented in TWDB GAM Run 10-028 MAG (Hill & Oliver, November 18, 2011) – See Appendix C

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

Please refer to Appendix A

***Annual Amount of Recharge from Precipitation to the Groundwater Resources within the District***

Please refer to Appendix B

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

Please refer to Appendix B

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

Please refer to Appendix B

***Projected Surface Water Supply within the District***

Please refer to Appendix A

***Projected Total Demand for Water within the District***

Please refer to Appendix A

***Water Supply Needs***

Please refer to Appendix A

***Water Management Strategies***

Please refer to Appendix A

***Methodology to Track District Progress in Achieving Management Goals***

The General Manager of the District will prepare and present an annual report to the Board of Directors evaluating the impact of the District's activities on its goals, management objectives, and performance standards. The Annual Report will be presented 120 days following the completion of the District's fiscal year.

## **Details on the District Management of Groundwater**

### ***District Authority and Management Rules and Policies***

The Texas Legislature has determined that GCDs, such as the Pecan Valley Groundwater Conservation District, are the state's preferred method of groundwater management. The Texas Legislature codified its groundwater management policy decision in Section 36.0015 of the Texas Water Code, which provides that GCDs will manage groundwater resources through rules developed and implemented in accordance with Chapter 36 of the Texas Water Code. Chapter 36 establishes directives for GCDs and the statutory authority to carry out such directives to enable GCDs to have the proper tools to protect and preserve the groundwater resources with their boundaries. The District will give strong consideration to the economic and cultural activities which occur within the District and which rely upon the continued use of groundwater.

The District using the regulatory tools it has been given by Chapter 36 to properly address the groundwater issues within DeWitt County, such as groundwater quality and groundwater supply. The District believes that the prevention of contamination of its groundwater resources through abandoned and deteriorated water wells is important. Wells that have been abandoned or not properly maintained provide direct conduits or pathways that allow contamination from the surface to quickly reach the groundwater resources of the District. To address the threats to the water quality of its groundwater resources, the District requires, through its rules, that all abandoned, deteriorated, or replaced wells be plugged in compliance with the Water Well Drillers and Pump Installers Rules of the Texas Department of Licensing and Regulation. The District will also place a priority on the capping of water wells that the well owner plans to use at a later date in order to eliminate waste, prevent pollution, and stop future deterioration of the well casing.

The District has established a monitoring well network to monitor the changing storage conditions of the groundwater supplies within the District. The District will make a regular assessment of water supply and groundwater storage conditions and has reported and will continue to report those conditions to the District Board of Directors and to the public. The District has also worked and will continue to work with any local governmental entities or agencies of the State of Texas on any well monitoring efforts or well investigations which are conducted.

The District is using the regulatory tools granted to GCDs by Chapter 36 to preserve and protect the existing and historic users of groundwater within the District. The Texas Legislature empowered the District to protect existing users of groundwater, which are those individuals or entities currently invested in and using groundwater or the groundwater resources within the District for a beneficial purpose, and preserve historic use by historic users, which are those individuals or entities who used groundwater beneficially in the past. The District

strives to protect and preserve such use to the extent practicable under the goals and objectives of this Management Plan. In accordance with Section 36.116 of the Texas Water Code, the District is also protecting historic use through District Rules on spacing of wells and production limits on groundwater to the extent practicable consistent with this Management Plan.

In order to better manage the groundwater resources of DeWitt County during times of high demand or within areas of high demand, the District may establish Critical Groundwater Depletion Areas and adopt different Rules for those areas. The District may also adopt different Rules for each subdivision of an aquifer or geologic strata located in whole or in part within the boundaries of the District or each geographic area overlying a subdivision of an aquifer located in whole or in part within the boundaries of the District. The District has adopted Rules to regulate groundwater withdrawals by means of spacing and/or production limits. The relevant factors to be considered in making a determination to grant or deny a permit or limit groundwater withdrawals shall include those set forth in the Chapter 36 of the Texas Water Code, and the rules of the District.

## **Actions, Procedures, Performance and Avoidance for District Implementation of Management Plan**

The District will use the Management Plan to guide the District in its efforts to preserve and protect the groundwater resources of DeWitt County. Operations of the District, agreements entered into by the District and planning efforts in which the District may participate will be consistent with the provisions of this plan.

A copy of the Rules of Pecan Valley Groundwater Conservation District may be found at [www.pvgcd.org](http://www.pvgcd.org). The District will adopt rules relating to the permitting of wells and the production of groundwater. The rules adopted by the District shall be pursuant to the TWC Ch36 and the provisions of this plan. All rules will be adhered to and enforced. The promulgation and enforcement of the rules will be based on the best technical evidence available.

The District shall treat all citizens with equality. Citizens may apply to the District for discretion in enforcement of the rules on grounds of adverse economic effect or unique local conditions. In granting of discretion to any rule, the Board shall consider the potential for adverse effect on adjacent landowners. The exercise of said discretion by the Board shall not be construed as limiting the power of the Board.

The District may amend the District rules as necessary to comply with changes to Chapter 36 of the Texas Water Code and to insure the best management practices of the groundwater in the District. The implementation of the rules of the District will be based on the best available scientific and technical data, and on fair and reasonable evaluation.

The District is committed to work and plan with other GCD's in Groundwater Management Area 15. The District will use the Management Plan as part of its cooperation efforts with the neighboring GCDs. The District will manage the supply of groundwater within the District based on Desired Future Conditions and Modeled Available Groundwater resulting from the Groundwater Management Area 15 cooperative planning process, exempt and non-exempt wells and groundwater demands, and the District's best available data.

The District has encouraged and will continue to encourage public cooperation in the implementation of the management plan for the District.



## **Management Goals**

### **A. Providing the Most Efficient Use of Groundwater**

**Objective:** Develop and maintain a Water Well Registration Program for tracking well information for wells within the District's boundaries.

**Performance Standard:** Each year the District will summarize within the annual report the changes related to water well registration including the number of new and existing wells registered.

**Objective:** Develop and maintain a Water Well Permitting Program for tracking all permits authorizing water well operation and groundwater production.

**Performance Standard:** Each year the District will summarize within the annual report the changes related to water well permitting including the number of new applications and the disposition of the applications.

### **B. Controlling and Preventing Waste of Groundwater**

**Objective:** Initiate a program to identify the location of abandoned wells that will include a survey of landowners, well drillers, and the Texas Railroad Commission regarding any known abandoned wells, and initiate actions as necessary to enforce the notice, plugging and other requirements of Section 1901.255, Occupations Code.

**Performance Standard:** Include in the annual report the number of water well inspections resulting from these activities.

**Objective:** Develop and maintain a Groundwater Conservation Education Program

**Performance Standard:** Each year the District will summarize within the annual report the educational activities including the number of educational materials developed and/or delivered to local schools, the number of public speaking events and presentations, the number of community events participated in, and the number of educational publications.

### **C. Controlling and Preventing Subsidence**

This goal is not applicable to the Pecan Valley Groundwater Conservation District.

### **D. Conjunctive Surface Water Management Issues**

**Objective:** Participate in the regional water planning process by attending at least two South Central Texas Regional Water Planning Group (Region L) meetings.

**Performance Standard:** Report annually to the Board the attendees, dates and the number of meetings attended.

## **E. Natural Resource Issues**

**Objective:** Develop and maintain a Water Quality Monitoring Program.

**Performance Standard:** Each year, the District will summarize within the annual report the monitoring activities including the number of wells monitored and the year to year change of water quality.

## **F. Drought Conditions**

**Objective:** Collect and review drought condition information related to DeWitt County and the surrounding region of Texas on a monthly basis.

**Performance Standard:** Each year the District will summarize within the annual report the monthly drought information including U.S. Drought Monitor. Additionally, the number of weeks and/or months that the District experienced drought based on the US Drought Monitor will be reported in the annual report.

## **G. Conservation, Recharge Enhancement, Rainwater Harvesting, and Brush Control**

**Objective (Conservation):** The District will submit at least one article regarding water conservation for publication each year to at least one newspaper of general circulation in DeWitt County.

**Performance Standard (Conservation):** A copy of the article submitted will be included in the Annual Report given to the Board of Directors

**Objective (Rainwater Harvesting):** The District will provide information on rainwater harvesting each year by offering new information about rainwater harvesting on the District website at least once a year.

**Performance Standard (Rainwater Harvesting):** Each year the District will summarize within the annual report all efforts made in promoting rainwater harvesting including providing educational links to the district website and any other educational avenues.

**Objective (Brush Control):** The District will evaluate the State Brush Control Plan as it is revised from time to time at least once each year to determine whether projects within the District will increase the groundwater resources of the District.

**Performance Standard (Brush Control):** Upon review of a newly revised State Brush Control Plan, the District's Annual Report will include a copy of the most recent brush control information pertaining to the District.

Goals related to Recharge Enhancement and Precipitation Enhancement are not applicable to the Pecan Valley Groundwater Conservation District.

## H. Addressing the Desired Future Conditions

**Objective:** Develop and maintain a Water Well Inspection Program for non-exempt wells.

**Performance Standard:** Each year the District will summarize within the annual report the findings of the inspection activities including the number of water wells inspected and information regarding the number of wells that require improvement in order to prevent waste and/or prevent groundwater contamination.

**Objective:** The District will monitor water levels and evaluate whether the average change in water levels is in conformance with the DFC's adopted by the District. The District will estimate the total annual groundwater production for each aquifer based on water use reports, estimated exempt use and other relevant information and compare these production estimates to the MAG's.

**Performance Standard:** Each year the District will summarize within the annual report the monitoring activities including the number of wells monitored and the average annual change of water levels and compare them to the DFC's. The District will also record the estimated annual production from each aquifer and compare these amounts to the MAG. These production amounts will also be reported in the annual report.

## **List of Appendices**

**Appendix A** - Estimated Historical Water Use and 2012 State Water Plan Datasets provided by Texas Water Development Board

**Appendix B** – Groundwater Availability Model Run 12-024 provided by Texas Water Development Board

**Appendix C** – Groundwater Availability Model Run 10-028 MAG

**Appendix D** – Public Notices Regarding Hearing Related to Plan Adoption

**Appendix E** – Letters Coordinating with Regional Surface Water Management Entities

**Appendix F** – Pecan Valley Groundwater Conservation District Board of Director Resolution Adopting Revised Management Plan

**Appendix G** – Minutes of Pecan Valley Groundwater Conservation District Board of Directors Meetings related to the public hearing for and adoption of the Management Plan

**Appendix H** – Pecan Valley Groundwater Conservation District contact information

**APPENDIX A – Estimated Historical Water Use and 2012 State Water Plan Datasets**

---

# Estimated Historical Water Use And 2012 State Water Plan Datasets: Pecan Valley Groundwater Conservation District

by Stephen Allen  
Texas Water Development Board  
Groundwater Resources Division  
Groundwater Technical Assistance Section  
stephen.allen@twdb.texas.gov  
(512) 463-7317  
February 12, 2014

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

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

<http://www.twdb.texas.gov/groundwater/docs/GCD/GMPChecklist0113.pdf>

The five reports included in part 1 are:

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

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

***DISCLAIMER:***

The data presented in this report represents the most up-to-date WUS and 2012 SWP data available as of 2/12/2014. Although it does not happen frequently, neither of these datasets are static so they are subject to change pending the availability of more accurate WUS data or an amendment to the 2012 SWP. District personnel must review these datasets and correct any discrepancies in order to ensure approval of their groundwater management plan.

The WUS dataset can be verified at this web address:

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

The 2012 SWP dataset can be verified by contacting Sabrina Anderson (sabrina.anderson@twdb.texas.gov or 512-936-0886).

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

# Estimated Historical Water Use

## TWDB Historical Water Use Survey (WUS) Data

Groundwater and surface water historical use estimates are currently unavailable for calendar year 2012. TWDB staff anticipates the calculation and posting of these estimates at a later date.

### DEWITT COUNTY

All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Mining	Steam Electric	Irrigation	Livestock	Total
2011	GW	4,064	242	1,808	0	601	1,560	8,275
	SW	13	0	369	0	0	1,040	1,422
2010	GW	3,372	165	338	0	462	1,499	5,836
	SW	12	0	69	0	0	1,000	1,081
2009	GW	3,701	172	191	0	648	1,105	5,817
	SW	31	0	39	0	0	736	806
2008	GW	3,531	191	43	0	636	1,109	5,510
	SW	32	0	9	0	0	740	781
2007	GW	3,021	177	0	0	153	1,342	4,693
	SW	25	0	0	0	0	896	921
2006	GW	3,628	209	0	0	265	1,232	5,334
	SW	36	0	0	0	0	821	857
2005	GW	3,232	519	0	0	234	1,196	5,181
	SW	37	0	0	0	0	797	834
2004	GW	4,021	582	0	0	96	112	4,811
	SW	41	0	0	0	0	1,813	1,854
2003	GW	2,776	584	0	0	61	59	3,480
	SW	11	0	0	0	0	940	951
2002	GW	3,204	188	0	0	88	103	3,583
	SW	41	0	0	0	0	1,658	1,699
2001	GW	2,763	576	0	0	88	93	3,520
	SW	50	0	0	0	0	1,509	1,559
2000	GW	2,939	210	0	0	102	102	3,353
	SW	48	0	0	0	0	916	964



# Projected Surface Water Supplies

## TWDB 2012 State Water Plan Data

### DEWITT COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
L	GONZALES COUNTY WSC	GUADALUPE	CANYON LAKE/RESERVOIR	49	49	49	49	49	49
L	LIVESTOCK	GUADALUPE	LIVESTOCK LOCAL SUPPLY	634	634	634	634	634	634
L	LIVESTOCK	LAVACA	LIVESTOCK LOCAL SUPPLY	127	127	127	127	127	127
L	LIVESTOCK	LAVACA-GUADALUPE	LIVESTOCK LOCAL SUPPLY	17	17	17	17	17	17
L	LIVESTOCK	SAN ANTONIO	LIVESTOCK LOCAL SUPPLY	68	68	68	68	68	68
<b>Sum of Projected Surface Water Supplies (acre-feet/year)</b>				<b>895</b>	<b>895</b>	<b>895</b>	<b>895</b>	<b>895</b>	<b>895</b>

# Projected Water Demands

## TWDB 2012 State Water Plan Data

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

### DEWITT COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
L	GONZALES COUNTY WSC	GUADALUPE	107	108	108	108	106	104
L	COUNTY-OTHER	GUADALUPE	801	797	783	762	734	721
L	MANUFACTURING	GUADALUPE	176	190	202	215	225	242
L	YORKTOWN	GUADALUPE	343	344	340	334	323	318
L	IRRIGATION	GUADALUPE	147	122	100	80	64	50
L	MINING	GUADALUPE	10	11	11	11	11	11
L	LIVESTOCK	GUADALUPE	1,267	1,267	1,267	1,267	1,267	1,267
L	CUERO	GUADALUPE	1,249	1,257	1,250	1,232	1,198	1,177
L	MANUFACTURING	LAVACA	8	9	10	10	11	12
L	YOAKUM	LAVACA	352	354	351	345	334	328
L	MINING	LAVACA	37	39	40	40	41	42
L	LIVESTOCK	LAVACA	253	253	253	253	253	253
L	COUNTY-OTHER	LAVACA	145	145	142	138	133	131
L	LIVESTOCK	LAVACA-GUADALUPE	34	34	34	34	34	34
L	MINING	LAVACA-GUADALUPE	17	17	17	17	18	18
L	IRRIGATION	SAN ANTONIO	12	10	8	7	5	4
L	COUNTY-OTHER	SAN ANTONIO	67	66	65	63	61	60
L	LIVESTOCK	SAN ANTONIO	135	135	135	135	135	135
<b>Sum of Projected Water Demands (acre-feet/year)</b>			<b>5,160</b>	<b>5,158</b>	<b>5,116</b>	<b>5,051</b>	<b>4,953</b>	<b>4,907</b>

# Projected Water Supply Needs

## TWDB 2012 State Water Plan Data

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

### DEWITT COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
L	COUNTY-OTHER	GUADALUPE	208	212	226	247	275	288
L	COUNTY-OTHER	LAVACA	38	38	41	45	50	52
L	COUNTY-OTHER	SAN ANTONIO	17	18	19	21	23	24
L	CUERO	GUADALUPE	3,827	3,819	3,826	3,844	3,878	3,899
L	GONZALES COUNTY WSC	GUADALUPE	13	12	12	12	14	16
L	IRRIGATION	GUADALUPE	0	25	47	67	83	97
L	IRRIGATION	SAN ANTONIO	0	2	4	5	7	8
L	LIVESTOCK	GUADALUPE	0	0	0	0	0	0
L	LIVESTOCK	LAVACA	0	0	0	0	0	0
L	LIVESTOCK	LAVACA-GUADALUPE	0	0	0	0	0	0
L	LIVESTOCK	SAN ANTONIO	0	0	0	0	0	0
L	MANUFACTURING	GUADALUPE	69	55	43	30	20	3
L	MANUFACTURING	LAVACA	7	6	5	5	4	3
L	MINING	GUADALUPE	1	0	0	0	0	0
L	MINING	LAVACA	5	3	2	2	1	0
L	MINING	LAVACA-GUADALUPE	2	2	2	2	1	1
L	YOAKUM	LAVACA	1,148	1,146	1,149	1,155	1,166	1,172
L	YORKTOWN	GUADALUPE	806	805	809	815	826	831
<b>Sum of Projected Water Supply Needs (acre-feet/year)</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

# Projected Water Management Strategies

## TWDB 2012 State Water Plan Data

### DEWITT COUNTY

WUG, Basin (RWPG)

All values are in acre-feet/year

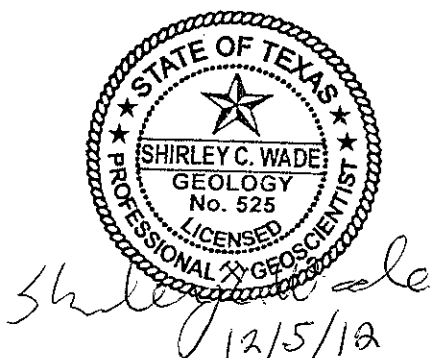
Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
<b>COUNTY-OTHER, LAVACA (L)</b>							
MUNICIPAL WATER CONSERVATION	CONSERVATION [DEWITT]	0	0	0	0	0	6
<b>CUERO, GUADALUPE (L)</b>							
MUNICIPAL WATER CONSERVATION	CONSERVATION [DEWITT]	99	181	187	190	197	218
<b>YOAKUM, LAVACA (L)</b>							
MUNICIPAL WATER CONSERVATION	CONSERVATION [DEWITT]	14	16	17	18	20	27
<b>YORKTOWN, GUADALUPE (L)</b>							
MUNICIPAL WATER CONSERVATION	CONSERVATION [DEWITT]	0	2	2	2	5	13
<b>Sum of Projected Water Management Strategies (acre-feet/year)</b>		<b>113</b>	<b>199</b>	<b>206</b>	<b>210</b>	<b>222</b>	<b>264</b>

**APPENDIX B – Groundwater Availability Model Run 12-024**

---

# GAM RUN 12-024: PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT MANAGEMENT PLAN

by Shirley C. Wade, Ph.D., P.G.  
Texas Water Development Board  
Groundwater Resources Division  
Groundwater Availability Modeling Section  
(512) 936-0883  
December 5, 2012



The seal appearing on this document was authorized by Shirley C. Wade, P.G. 525 on December 5, 2012.

*This page is intentionally blank*

---

# GAM RUN 12-024: PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT MANAGEMENT PLAN

by Shirley C. Wade, Ph.D., P.G.  
Texas Water Development Board  
Groundwater Resources Division  
Groundwater Availability Modeling Section  
(512) 936-0883  
December 5, 2012

## ***EXECUTIVE SUMMARY:***

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

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

The purpose of this report is to provide Part 2 of a two-part package of information from the TWDB to Pecan Valley Groundwater Conservation District to fulfill the requirements noted above. The groundwater management plan for the Pecan Valley Groundwater Conservation District is due for approval by the executive administrator of the TWDB before April 3, 2014.



This report discusses the methods, assumptions, and results from model runs using the groundwater availability models for the central portion of the Gulf Coast Aquifer and the southern portion of the Carrizo-Wilcox, Queen City, and Sparta aquifers. 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 08-38. GAM Run 12-024 meets current standards set after the release of GAM Run 08-38. If after review of the figures, Pecan Valley Groundwater Conservation District determines that the district boundaries used in the assessment do not reflect current conditions, please notify the Texas Water Development Board immediately. The TWDB has also approved, for planning purposes, the fully penetrating alternative model for the central portion of the Gulf Coast which is an alternative model that can have water budget information extracted for the district. Please contact the author of this report if a comparison report using this model is desired.

### ***METHODS:***

In accordance with the provisions of the Texas State Water Code, Section 36.1071, Subsection (h), the groundwater availability models for the central portion of the Gulf Coast Aquifer and the southern portion of the Carrizo-Wilcox, Queen City, and Sparta aquifers were run for this analysis. Water budgets within Pecan Valley Groundwater Conservation District for 1981 through 1999 were extracted using ZONEBUDGET Version 3.01 (Harbaugh, 2009). The average annual water budget values for recharge, surface water outflow, inflow to the district, outflow from the district, net inter-aquifer flow (upper), and net inter-aquifer flow (lower) for the portions of the aquifers located within the district are summarized in this report.

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

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

- Version 1.01 of the groundwater availability model for the central portion of the Gulf Coast Aquifer was used for this analysis. See Chowdhury and others (2004) and Waterstone and others (2003) for assumptions and limitations of the groundwater availability model.
- The model for the central section of the Gulf Coast Aquifer assumes partially penetrating wells in the Evangeline Aquifer due to a lack of data for aquifer properties in the lower section of the aquifer.

- This groundwater availability model includes four layers, which generally correspond to the aquifers that comprise the Gulf Coast Aquifer system (from top to bottom):
  1. the Chicot Aquifer,
  2. the Evangeline Aquifer,
  3. the Burkeville Confining Unit, and
  4. the Jasper Aquifer including parts of the Catahoula Formation.
- A combined water budget for the district was determined for the four layers listed above.
- The mean absolute error (a measure of the difference between simulated and measured water levels) in the entire model for 1999 is 26 feet, which is 4.6 percent of the hydraulic head drop across the model area (Chowdhury and others, 2004).

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

- Version 2.01 of the groundwater availability model for the southern part of the Carrizo-Wilcox, Queen City, and Sparta aquifers was used for this analysis. See Deeds and others (2003) and Kelley and others (2004) for assumptions and limitations of the groundwater availability model for the southern part of the Carrizo-Wilcox, Queen City, and Sparta aquifers.
- This groundwater availability model includes eight layers, which generally correspond to (from top to bottom):
  1. the Sparta Aquifer,
  2. the Weches Confining Unit,
  3. the Queen City Aquifer,
  4. the Reklaw Confining Unit,
  5. the Carrizo Aquifer,
  6. the Upper Wilcox Aquifer,
  7. the Middle Wilcox Aquifer, and
  8. the Lower Wilcox Aquifer.

- Of the eight layers listed above, individual water budgets for the district were determined for the combined layers of the Carrizo-Wilcox Aquifer (Layers 5 through 8). The official boundaries for the Sparta Aquifer and the Queen City Aquifer do not extend within the district's boundaries.
- The root mean square error (a measure of the difference between simulated and actual water levels during model calibration) in the groundwater availability model is 33 feet for the Carrizo-Wilcox Aquifer for the calibration period (1980 to 1990). The root mean square error is 48 feet for the Carrizo-Wilcox Aquifer in the verification period (1991 to 1999) (Kelley and others, 2004). These root mean square errors are between seven and ten percent of the range of measured water levels (Kelley and others, 2004).
- Groundwater in the Carrizo-Wilcox, Queen City, and Sparta aquifers ranges from fresh to brackish in composition (Kelley and others, 2004). Groundwater with total dissolved solids concentrations of less than 1,000 milligrams per liter (mg/l) are considered fresh and total dissolved solids concentrations of 1,000 to 10,000 mg/l are considered brackish.

## **RESULTS:**

A groundwater budget summarizes the amount of water entering and leaving the aquifer according to the groundwater availability model. Selected groundwater budget components listed below were extracted from the model results for the aquifers located within the district and averaged over the duration of the calibration and verification portion of the model runs in the district, as shown in Tables 1 and 2.

- 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.

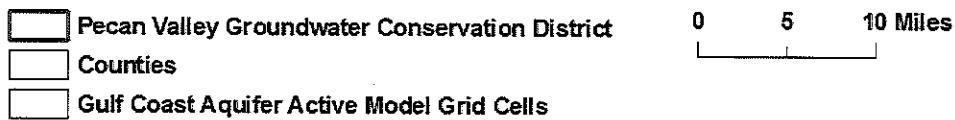
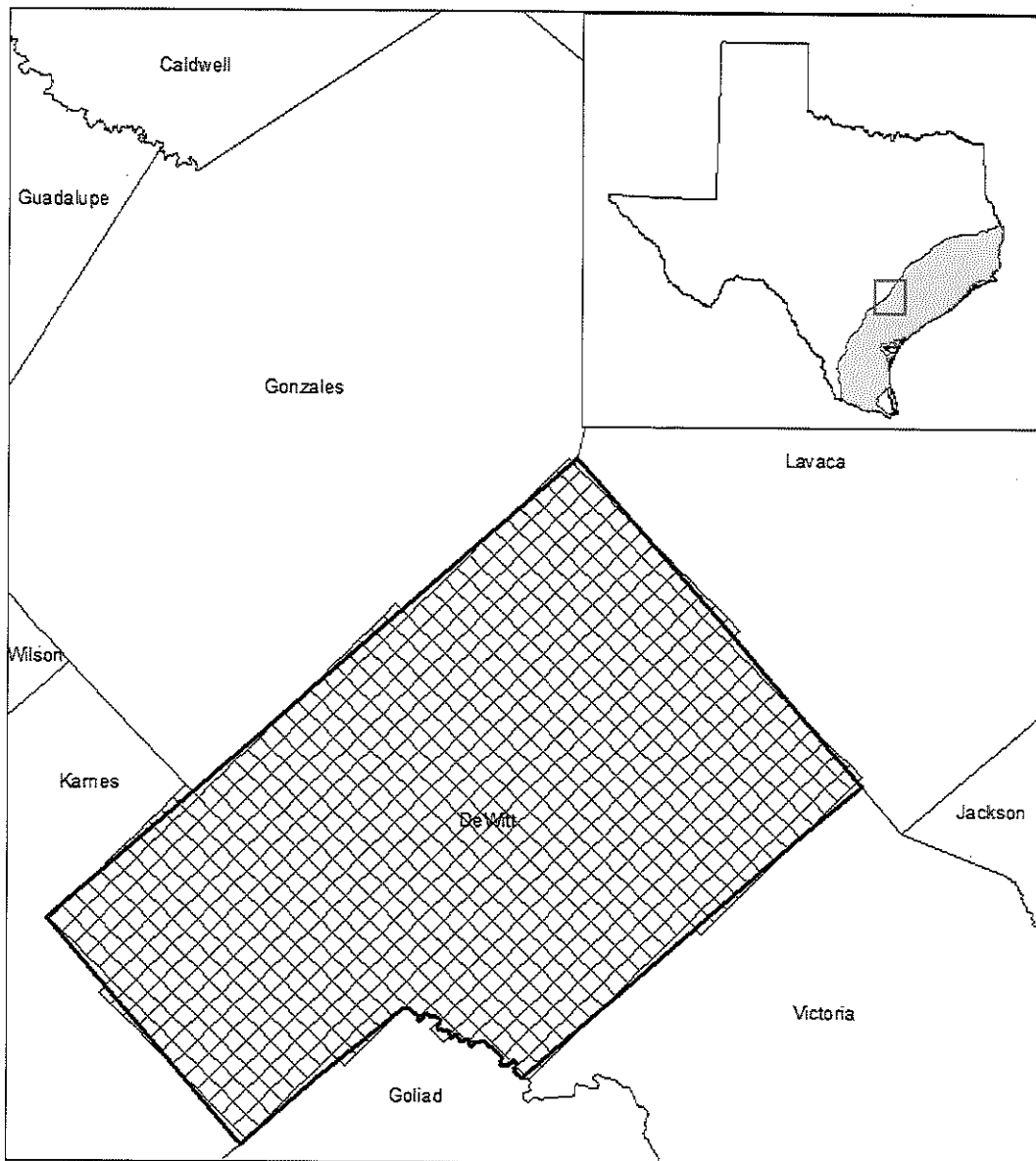
The information needed for the District’s management plan is summarized in Tables 1 and 2. It is important to note that sub-regional water budgets are not exact. This is due to the size of the model cells and the approach used to extract data from the model. To avoid double accounting, a model cell that 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 (Figures 1 and 2).

**TABLE 1: SUMMARIZED INFORMATION FOR THE GULF COAST AQUIFER THAT IS NEEDED FOR PECAN VALLEY GROUNDWATER 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 BRACKISH WATERS.**

<i>Management Plan requirement</i>	<i>Aquifer or confining unit</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the district	Gulf Coast Aquifer	9,832
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Gulf Coast Aquifer	9,967
Estimated annual volume of flow into the district within each aquifer in the district	Gulf Coast Aquifer	1,854
Estimated annual volume of flow out of the district within each aquifer in the district	Gulf Coast Aquifer	10,652
Estimated net annual volume of flow between each aquifer in the district	Not Applicable	Not Applicable

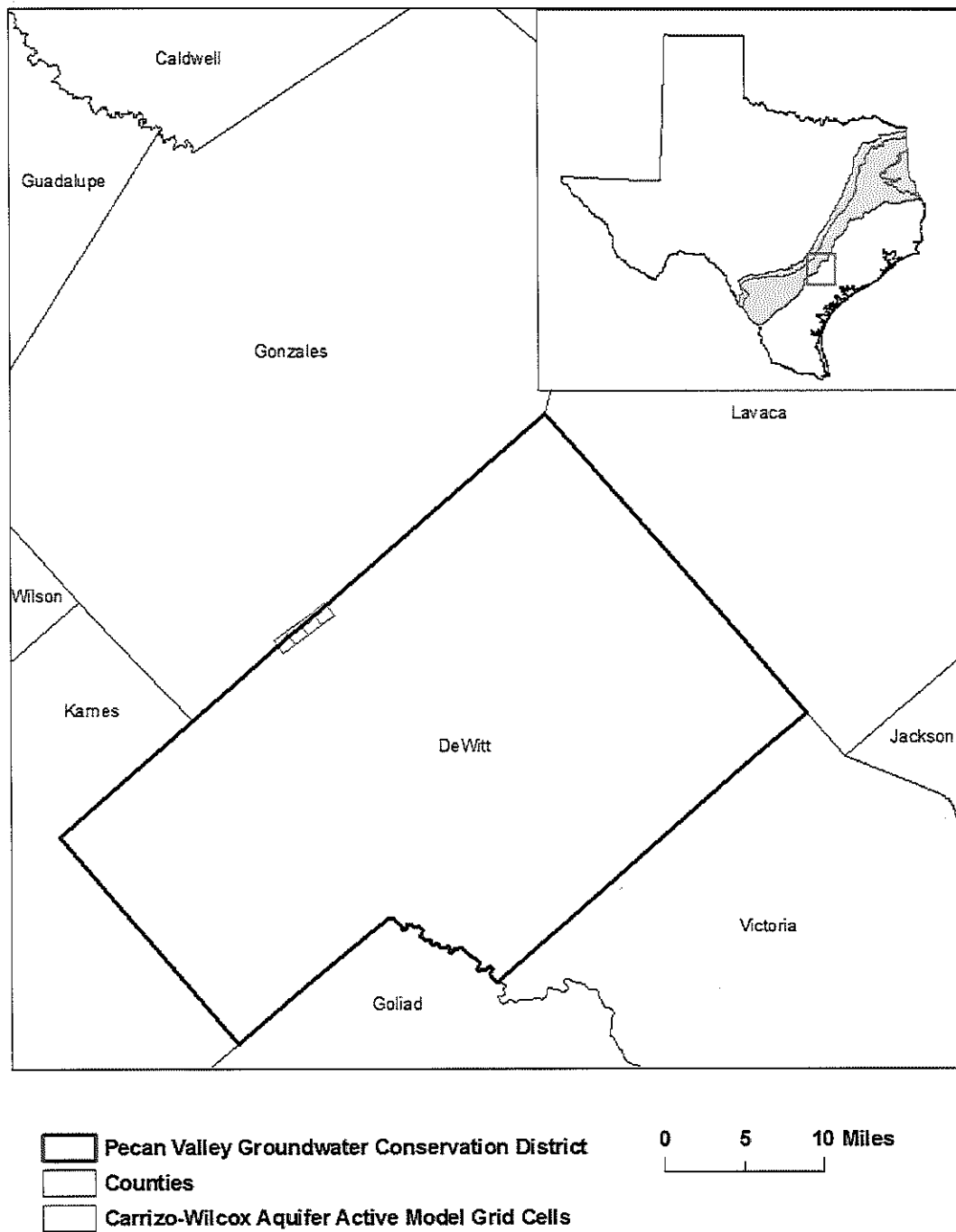
**TABLE 2: SUMMARIZED INFORMATION FOR THE CARRIZO-WILCOX AQUIFER THAT IS NEEDED FOR PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT. THESE FLOWS MAY INCLUDE BRACKISH WATERS.**

<i>Management Plan requirement</i>	<i>Aquifer or confining unit</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the district	Carrizo-Wilcox Aquifer	0
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Carrizo-Wilcox Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Carrizo-Wilcox Aquifer	346
Estimated annual volume of flow out of the district within each aquifer in the district	Carrizo-Wilcox Aquifer	317
Estimated net annual volume of flow between each aquifer in the district	From the Carrizo-Wilcox Aquifer into the Reklaw Formation confining unit	16



gcd boundary date 08.22.12, glfc\_c model grid date 10.13.11, county boundary date 02.02.11

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



gcd boundary date 08.22.12, qcsp\_s\_model grid date 05.22.12, county boundary date 02.02.11

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

- Chowdhury, Ali. H., Wade, S., Mace, R.E., and Ridgeway, C., 2004, Groundwater Availability Model of the Central Gulf Coast Aquifer System: Numerical Simulations through 1999- Model Report, 114 p.,  
[http://www.twdb.texas.gov/groundwater/models/gam/glfc\\_c/TWDB\\_Recalibration\\_Report.pdf](http://www.twdb.texas.gov/groundwater/models/gam/glfc_c/TWDB_Recalibration_Report.pdf).
- Deeds, N., Kelley, V., Fryar, D., Jones, T., Whallon, A.J., and Dean, K.E., 2003, Groundwater Availability Model for the Southern Carrizo-Wilcox Aquifer: Contract report to the Texas Water Development Board, 452 p.,  
[http://www.twdb.texas.gov/groundwater/models/gam/czwx\\_s/CZWX\\_S\\_Full\\_Report.pdf](http://www.twdb.texas.gov/groundwater/models/gam/czwx_s/CZWX_S_Full_Report.pdf).
- Harbaugh, A. W., 2009, Zonebudget Version 3.01, A computer program for computing subregional water budgets for MODFLOW ground-water flow models, U.S. Geological Survey Groundwater Software.
- Kelley, V.A., Deeds, N.E., Fryar, D.G., and Nicot, J.P., 2004, Groundwater availability models for the Queen City and Sparta aquifers: Contract report to the Texas Water Development Board, 867 p.,  
[http://www.twdb.texas.gov/groundwater/models/gam/qcsp/QCSP\\_Model\\_Report.pdf](http://www.twdb.texas.gov/groundwater/models/gam/qcsp/QCSP_Model_Report.pdf).
- National Research Council, 2007, Models in Environmental Regulatory Decision Making Committee on Models in the Regulatory Decision Process, National Academies Press, Washington D.C., 287 p.
- Ridgeway, C.K., 2008, GAM Run 08-38: Texas Water Development Board, GAM Run 08-38 Report, 6 p.,  
<http://www.twdb.texas.gov/groundwater/docs/GAMruns/GR08-38.pdf>.
- Waterstone Environmental Hydrology and Engineering Inc. and Parsons, 2003, Groundwater availability of the Central Gulf Coast Aquifer: Numerical Simulations to 2050, Central Gulf Coast, Texas Contract report to the Texas Water Development Board, 157 p.

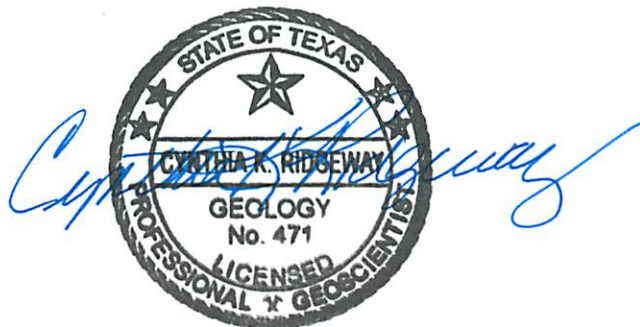
**APPENDIX C – Groundwater Availability Model Run 10-028 MAG**

# GAM Run 10-028 MAG

by Melissa E. Hill, Ph.D., P.G. and Wade Oliver

Edited and finalized by Shirley Wade to reflect statutory changes effective September 1, 2011

Texas Water Development Board  
Groundwater Availability Modeling Section  
(512) 936-0883  
November 18, 2011



Cynthia K. Ridgeway, the Manager of the Groundwater Availability Modeling Section and Interim Director of the Groundwater Resources Division, 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 November 18, 2011.

*This page is intentionally left blank.*

## **EXECUTIVE SUMMARY:**

The modeled available groundwater for the Gulf Coast Aquifer as a result of the desired future conditions adopted by the members of Groundwater Management Area 15 is approximately 488,000 acre-feet per year. This is shown divided by county, regional water planning area, and river basin in Table 1 for use in the regional water planning process. Modeled available groundwater is summarized by county, regional water planning area, river basin, and groundwater conservation district in tables 2 through 5. The estimates were extracted from the simulation documented in Table 7 of Groundwater Availability Model Run 10-008 Addendum, which meets the desired future conditions adopted by Groundwater Management Area 15.

## **REQUESTOR:**

Mr. Neil Hudgins of the Coastal Bend Groundwater Conservation District on behalf of Groundwater Management Area 15

## **DESCRIPTION OF REQUEST:**

In a letter dated July 15<sup>th</sup>, 2010 and received July 30<sup>th</sup>, 2010, Mr. Neil Hudgins provided the Texas Water Development Board (TWDB) with the desired future condition (DFC) of the Gulf Coast Aquifer for Groundwater Management Area 15. The desired future condition for the Gulf Coast Aquifer, as described in Resolution 2010-01 and adopted July 14, 2010 by the groundwater conservation districts (GCDs) within Groundwater Management Area 15, are described below:

*An average drawdown of the Gulf Coast Aquifer within the [Groundwater Management Area] 15 boundary of 12 feet relative to year 1999 starting conditions in accordance with Table 7 of [Groundwater Availability Model] Run 10-008 Addendum.*

In response to receiving the adopted future condition, the Texas Water Development Board estimated the modeled available groundwater for each groundwater conservation district within Groundwater Management Area 15.

## **METHODS:**

Groundwater Management Area 15 lies within the domain of the groundwater availability model for the central portion of the Gulf Coast Aquifer in Texas. The location of Groundwater Management Area 15, the Gulf Coast Aquifer, and the groundwater availability model cells that represent the aquifer are shown in Figure 1. The Gulf Coast Aquifer System is comprised of the Chicot, Evangeline, and Jasper aquifers. The Burkeville Confining Unit lies between the Evangeline and Jasper aquifers (Waterstone Engineering Inc. and others, 2003).

The previously completed Groundwater Availability Model (GAM) Run 10-008 (Hutchison, 2010), its addendum GAM Run 10-008 Addendum (Wade, 2010), GAM Run 09-010 (Anaya, 2010), GAM Run 08-56 (Anaya, 2009), GAM Run 07-43 (Donnelly, 2008b), and GAM Run 07-42 (Donnelly, 2008a) document the model results reviewed by members of Groundwater Management Area 15 when developing the desired future condition. The results presented in this

report are based on the model simulation shown as the “12 foot scenario” shown in Table 7 of GAM Run 10-008 Addendum (Wade, 2010).

### **PARAMETERS AND ASSUMPTIONS:**

The parameters and assumptions for the model run using the groundwater availability model for the central portion of the Gulf Coast Aquifer are described below:

- Version 1.01 of the groundwater availability model for the central portion of the Gulf Coast Aquifer was used for this analysis. See Chowdhury and others (2004) and Waterstone Engineering Inc. and others (2003) for assumptions and limitations of the groundwater availability model.
- The model includes four layers representing: the Chicot Aquifer and shallow surface alluvial deposits (layer 1), the Evangeline Aquifer (layer 2), the Burkeville Confining Unit (layer 3), and the Jasper Aquifer including portions of the Catahoula Formation (layer 4) as described in Waterstone Engineering Inc. and others (2003).
- The mean absolute error (a measure of the difference between simulated and measured water levels during model calibration) in the entire model for 1999 is 26 feet, which is 4.8 percent of the hydraulic head drop across the model area (Chowdhury and others, 2004).
- The recharge, evapotranspiration, and streamflows for the model run represent average conditions between 1981 and 1999 in the historical-calibration period of the model (Chowdhury and others, 2004).
- See Wade (2010) for a full description of the methods, assumptions, and results of the groundwater availability model run.

### **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. This is distinct from “managed available groundwater,” shown in the draft version of this report dated November 10, 2010, which was a permitting value and accounted for the estimated use of the aquifer exempt from permitting. This change was made to reflect changes in statute by the 82<sup>nd</sup> Texas Legislature, effective September 1, 2011.

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

Texas Water Development Board is now 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 Gulf Coast Aquifer in Groundwater Management Area 15 consistent with the desired future conditions is approximately 488,000 acre-feet per year. This has been divided 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).

The modeled available groundwater is also summarized by county (Table 2), regional water planning area (Table 3), river basin (Table 4), and groundwater conservation district (Table 5). Note that some small differences exist between the results shown in Table 2 of this report and Table 7 of Wade (2010) due to a re-assignment of grid cells to be more consistent with previous and known interpretations of political boundaries. The most significant of these adjustments is in Fayette County, where 339 acre-feet per year of pumping from the Gulf Coast Aquifer was previously reported as existing in Groundwater Management Area 12 (Wade, 2010). Since the groundwater management area boundary was originally delineated along the Gulf Coast Aquifer boundary in this area, this pumping is now associated with Groundwater Management Area 15.

In Table 5, the modeled available groundwater among all districts has been calculated both excluding and including areas outside the jurisdiction of a groundwater conservation district. Though a small portion of Corpus Christi Aquifer Storage and Recovery Conservation District falls within Groundwater Management Area 15, results are not shown for this area below because no model cells representing the Gulf Coast Aquifer fall within the district.

## **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:**

- Anaya, R., 2009, GAM Run 08-56: Texas Water Development Board GAM Run 08-56 Report, 63 p.
- Anaya, R., 2010, GAM Run 09-010: Texas Water Development Board GAM Run 09-10 Report, 30 p.
- Chowdhury, A.H., Wade, S., Mace, R.E., and Ridgeway, C., 2004, Groundwater availability model of the Central Gulf Coast Aquifer System: numerical simulations through 1999 Model Report, Texas Water Development Board, 108 p.
- Donnelly, A.C., 2008a, GAM Run 07-42: Texas Water Development Board GAM Run 07-42 Report, 51 p.
- Donnelly, A.C., 2008b, GAM Run 07-43: Texas Water Development Board GAM Run 07-43 Report, 51 p.
- Hutchison, W.R., 2010, GAM Run 10-008: Texas Water Development Board GAM Run 10-008 Report, 9 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.
- Wade, S.C., 2010, GAM Run 10-008 Addendum: Texas Water Development Board GAM Run 10-008 Addendum Report, 8 p.
- Waterstone Engineering, Inc., and Parsons, Inc., 2003, Groundwater availability of the central Gulf Coast Aquifer: numerical simulations to 2050 Central Gulf Coast, Texas-Final Report: contract report to the Texas Water Development Board, variously p.



Table 1. Modeled available groundwater for the Gulf Coast Aquifer in Groundwater Management Area 15. Results are in acre-feet per year and are summarized by county, regional water planning area, and river basin.

County	Regional Water Planning Area	Basin	Year					
			2010	2020	2030	2040	2050	2060
Aransas	N	San Antonio-Nueces	1,862	1,862	1,862	1,862	1,862	1,862
Bee	N	Nueces	30	30	30	30	30	30
		San Antonio-Nueces	9,484	9,484	9,460	9,460	9,408	9,408
Calhoun	L	Colorado-Lavaca	361	361	361	361	361	361
		Guadalupe	17	17	17	17	17	17
		Lavaca	2	2	2	2	2	2
		Lavaca-Guadalupe	2,574	2,574	2,574	2,574	2,574	2,574
		San Antonio-Nueces	41	41	41	41	41	41
Colorado	K	Brazos-Colorado	10,464	10,464	10,464	10,464	10,464	10,464
		Colorado	16,058	16,058	16,058	16,058	16,058	16,058
		Lavaca	22,431	22,431	22,431	22,431	22,431	22,431
Dewitt	L	Guadalupe	10,613	10,548	10,548	10,548	10,548	10,548
		Lavaca	2,932	2,932	2,926	2,915	2,912	2,912
		Lavaca-Guadalupe	417	417	417	417	417	417
		San Antonio	739	739	739	739	739	739
Fayette	K	Brazos	17	17	17	17	17	17
		Colorado	6,254	6,123	5,961	5,956	5,952	5,924
		Lavaca	2,933	2,933	2,927	2,922	2,917	2,915
Goliad	L	Guadalupe	4,417	4,417	4,417	4,417	4,417	4,417
		San Antonio	6,121	6,121	6,121	6,121	6,121	6,121
		San Antonio-Nueces	1,161	1,161	1,161	1,161	1,161	1,161
Jackson	P	Colorado-Lavaca	23,615	23,615	23,615	23,615	23,615	23,615
		Lavaca	41,927	41,927	41,927	41,927	41,927	41,927
		Lavaca-Guadalupe	10,844	10,844	10,844	10,844	10,844	10,844
Karnes	L	Guadalupe	12	12	12	12	12	12
		Nueces	78	78	78	78	78	78
		San Antonio	3,069	3,061	3,056	3,052	3,048	2,944
		San Antonio-Nueces	84	84	84	84	84	82
Lavaca	P	Guadalupe	41	41	41	41	41	41
		Lavaca	19,944	19,944	19,944	19,944	19,937	19,932
		Lavaca-Guadalupe	400	400	400	400	400	400
Matagorda	K	Brazos-Colorado	23,055	23,055	23,055	23,055	23,055	23,055
		Colorado	4,179	4,179	4,179	4,179	4,179	4,179
		Colorado-Lavaca	18,662	18,662	18,662	18,662	18,662	18,662
Refugio	L	San Antonio	1,522	1,522	1,522	1,522	1,522	1,522
		San Antonio-Nueces	27,806	27,806	27,806	27,806	27,806	27,806

Table 1. Continued.

County	Regional Water Planning Area	Basin	Year					
			2010	2020	2030	2040	2050	2060
Victoria	L	Guadalupe	14,617	14,617	14,617	14,617	14,617	14,617
		Lavaca	217	217	217	217	217	217
		Lavaca-Guadalupe	19,924	19,924	19,924	19,924	19,924	19,924
		San Antonio	936	936	936	936	936	936
Wharton	K	Brazos-Colorado	34,020	34,020	34,020	34,020	34,020	34,020
		Colorado	31,406	31,406	31,406	31,406	31,406	31,406
		Colorado-Lavaca	11,624	11,624	11,624	11,624	11,624	11,624
		Lavaca	1,690	1,690	1,690	1,690	1,690	1,690
	P	Colorado	441	441	441	441	441	441
		Colorado-Lavaca	11,549	11,549	11,549	11,549	11,549	11,549
		Lavaca	87,763	87,763	87,763	87,763	87,763	87,763
<b>Total</b>			<b>488,353</b>	<b>488,149</b>	<b>487,946</b>	<b>487,921</b>	<b>487,846</b>	<b>487,705</b>

Table 2. Modeled available groundwater for the Gulf Coast Aquifer summarized by county in Groundwater Management Area 15. Results are in acre-feet per year.

County	Year					
	2010	2020	2030	2040	2050	2060
Aransas	1,862	1,862	1,862	1,862	1,862	1,862
Bee	9,514	9,514	9,490	9,490	9,438	9,438
Calhoun	2,995	2,995	2,995	2,995	2,995	2,995
Colorado	48,953	48,953	48,953	48,953	48,953	48,953
Dewitt	14,701	14,636	14,630	14,619	14,616	14,616
Fayette	9,204	9,073	8,905	8,895	8,886	8,856
Goliad	11,699	11,699	11,699	11,699	11,699	11,699
Jackson	76,386	76,386	76,386	76,386	76,386	76,386
Karnes	3,243	3,235	3,230	3,226	3,222	3,116
Lavaca	20,385	20,385	20,385	20,385	20,378	20,373
Matagorda	45,896	45,896	45,896	45,896	45,896	45,896
Refugio	29,328	29,328	29,328	29,328	29,328	29,328
Victoria	35,694	35,694	35,694	35,694	35,694	35,694
Wharton	178,493	178,493	178,493	178,493	178,493	178,493
<b>Total</b>	<b>488,353</b>	<b>488,149</b>	<b>487,946</b>	<b>487,921</b>	<b>487,846</b>	<b>487,705</b>

Table 3. Modeled available groundwater for the Gulf Coast Aquifer summarized by regional water planning area in Groundwater Management Area 15. Results are in acre-feet per year.

Regional Water Planning Area	Year					
	2010	2020	2030	2040	2050	2060
K	182,793	182,662	182,494	182,484	182,475	182,445
L	97,660	97,587	97,576	97,561	97,554	97,448
N	11,376	11,376	11,352	11,352	11,300	11,300
P	196,524	196,524	196,524	196,524	196,517	196,512
<b>Total</b>	<b>488,353</b>	<b>488,149</b>	<b>487,946</b>	<b>487,921</b>	<b>487,846</b>	<b>487,705</b>

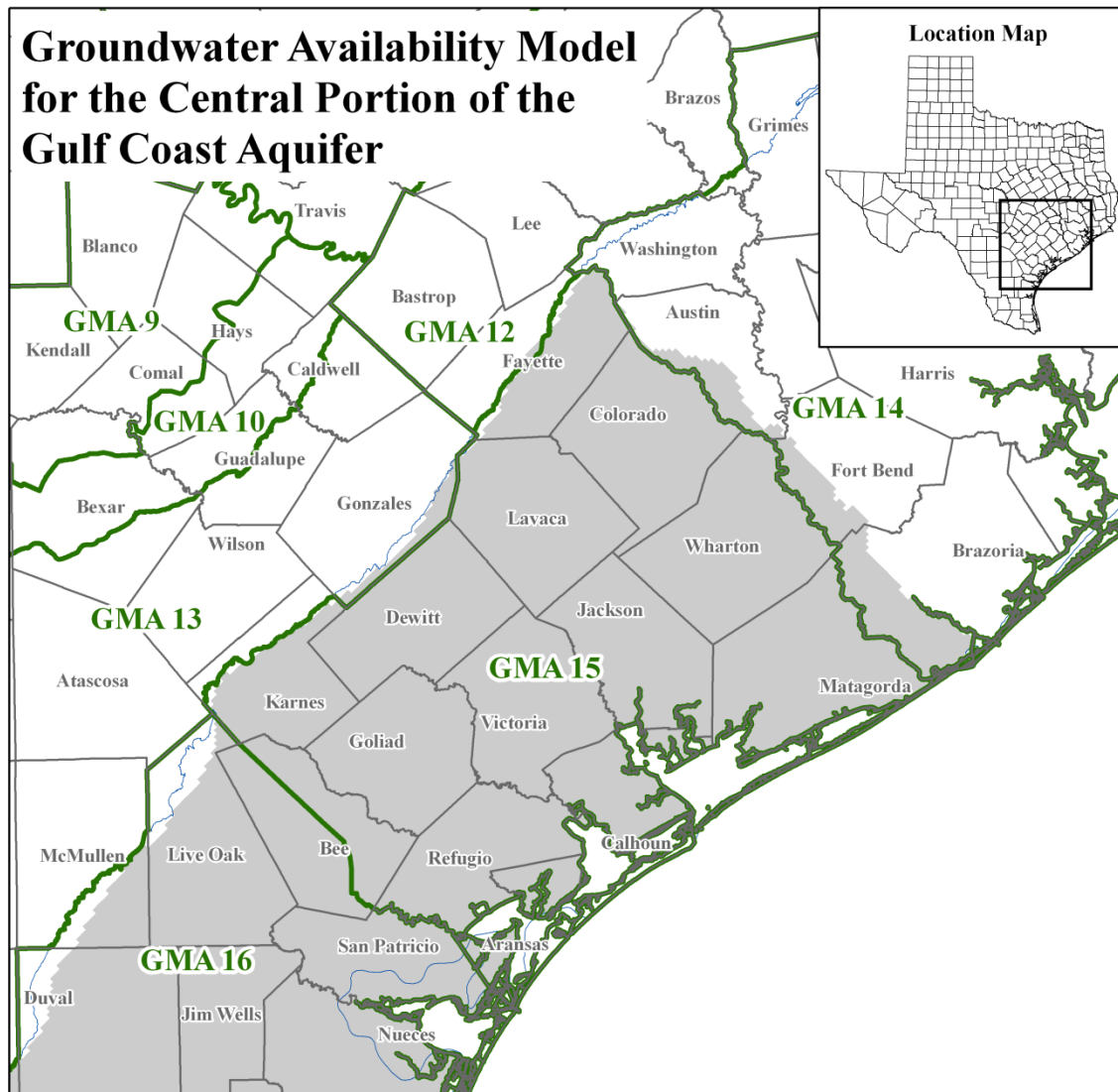
Table 4. Modeled available groundwater for the Gulf Coast Aquifer summarized by river basin in Groundwater Management Area 15. Results are in acre-feet per year.

Basin	Year					
	2010	2020	2030	2040	2050	2060
Brazos	17	17	17	17	17	17
Brazos-Colorado	67,539	67,539	67,539	67,539	67,539	67,539
Colorado	58,338	58,207	58,045	58,040	58,036	58,008
Colorado-Lavaca	65,811	65,811	65,811	65,811	65,811	65,811
Guadalupe	29,717	29,652	29,652	29,652	29,652	29,652
Lavaca	179,839	179,839	179,827	179,811	179,796	179,789
Lavaca-Guadalupe	34,159	34,159	34,159	34,159	34,159	34,159
Nueces	108	108	108	108	108	108
San Antonio	12,387	12,379	12,374	12,370	12,366	12,262
San Antonio-Nueces	40,438	40,438	40,414	40,414	40,362	40,360
<b>Total</b>	<b>488,353</b>	<b>488,149</b>	<b>487,946</b>	<b>487,921</b>	<b>487,846</b>	<b>487,705</b>

Table 5. Modeled available groundwater for the Gulf Coast Aquifer summarized by groundwater conservation district (GCD) in Groundwater Management Area 15. Results are in acre-feet per year. UWCD refers to Underground Water Conservation District.

Goundwater Conservation District	Year					
	2010	2020	2030	2040	2050	2060
Bee GCD	9,504	9,504	9,480	9,480	9,428	9,428
Calhoun County GCD*	2,995	2,995	2,995	2,995	2,995	2,995
Coastal Bend GCD	178,493	178,493	178,493	178,493	178,493	178,493
Coastal Plains GCD	45,896	45,896	45,896	45,896	45,896	45,896
Colorado County GCD	48,953	48,953	48,953	48,953	48,953	48,953
Evergreen UWCD	3,243	3,235	3,230	3,226	3,222	3,116
Fayette County GCD	9,204	9,073	8,905	8,895	8,886	8,856
Goliad County GCD	11,699	11,699	11,699	11,699	11,699	11,699
Lavaca County GCD*	20,385	20,385	20,385	20,385	20,378	20,373
Pecan Valley GCD	14,701	14,636	14,630	14,619	14,616	14,616
Refugio GCD	29,328	29,328	29,328	29,328	29,328	29,328
Texana GCD	76,386	76,386	76,386	76,386	76,386	76,386
Victoria County GCD	35,694	35,694	35,694	35,694	35,694	35,694
<b>Total (excluding non-district areas)</b>	<b>483,486</b>	<b>483,282</b>	<b>483,079</b>	<b>483,054</b>	<b>482,979</b>	<b>482,838</b>
No District	1,872	1,872	1,872	1,872	1,872	1,872
<b>Total (including non-district areas)</b>	<b>488,353</b>	<b>488,149</b>	<b>487,946</b>	<b>487,921</b>	<b>487,846</b>	<b>487,705</b>

\*Lavaca County and Calhoun County GCDs are pending confirmation as of the date of this report



**Legend**

- Texas Counties
- Groundwater Management Areas (GMAs)
- Gulf Coast Aquifer Boundary
- Groundwater availability model for the central portion of the Gulf Coast Aquifer

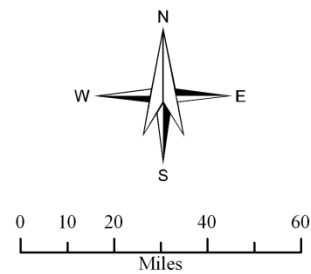


Figure 1. Map showing the areas covered by the groundwater availability model for the central portion of the Gulf Coast Aquifer in Groundwater Management Area 15.

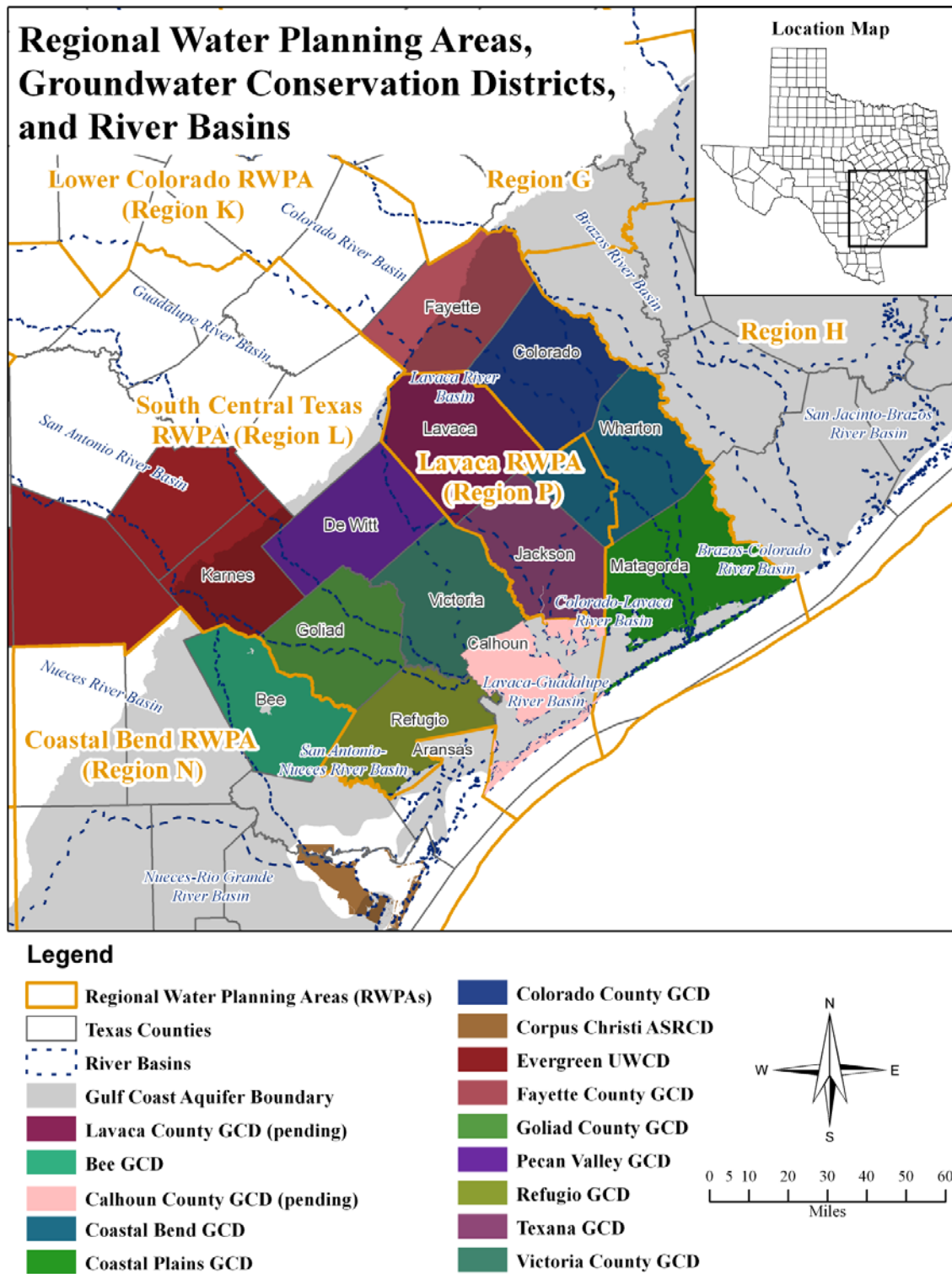


Figure 2. Map showing regional water planning areas, counties, river basins, and groundwater conservation districts (GCD) in and neighboring Groundwater Management Area 15.

**APPENDIX D – Public Notices Regarding Hearing Related to Plan Adoption**

**PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
NOTICE OF PUBLIC HEARING**

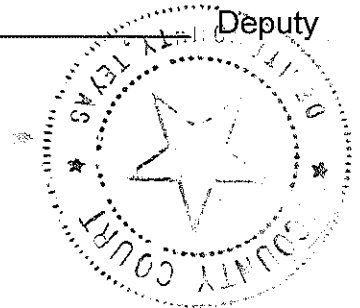
The Board of Directors of the Pecan Valley Groundwater Conservation District will conduct a public hearing on the proposed Revised Management Plan. These hearings are conducted to receive comments and suggestions from the public concerning the proposed Revised Management Plan of the District. The hearing will be held at 2:00 P.M., Tuesday, February 18, 2014 at the DeWitt County Annex located at 115 N. Gonzales Street, Cuero, Texas, 77954. A copy of the proposed Revised Management Plan may be reviewed or copied at the Pecan Valley GCD Office or on the District website at [www.pvgcd.org](http://www.pvgcd.org).

**Certificate of Posting**

The above Notice of Meeting was posted at 4:00 P.M. on Monday, February 3, 2014 at a place convenient to the public on a bulletin board in the DeWitt County Courthouse at Cuero, Texas.

WITNESS MY HAND AND SEAL of office on the above date.

\_\_\_\_\_ Natalie Carson County Clerk  
by \_\_\_\_\_ [Signature] Deputy





**PUBLIC NOTICE**

**PECAN VALLEY  
GROUNDWATER CONSERVATION DISTRICT  
NOTICE OF PUBLIC HEARING**

The Board of Directors of the Pecan Valley Groundwater Conservation District will conduct a public hearing on the proposed Revised Management Plan. These hearings are conducted to receive comments and suggestions from the public concerning the proposed Revised Management Plan of the District. The hearing will be held at 2:00 P.M., Tuesday, February 18, 2014 at the DeWitt County Annex located at 115 N. Gonzales Street, Cuero, Texas, 77954. A copy of the proposed Revised Management Plan may be reviewed or copied at the Pecan Valley GCD Office or on the District website at [www.pvgcd.org](http://www.pvgcd.org).

**AFFIDAVIT OF PUBLICATION  
STATE OF TEXAS**

**COUNTY OF LAVACA**

Before me, the undersigned authority, on this day personally appeared

Kristie Bludau (Name), the General Manager (TITLE)

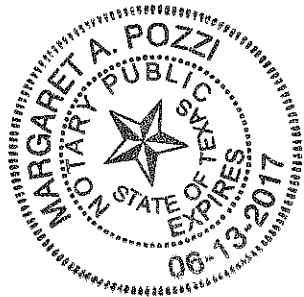
of Yoakum Herald Times, a newspaper having general circulation in Lavaca County, Texas, who being by me duly sworn, deposes and says that the foregoing attached advertising was published in said newspaper on the following date(s), to wit: Wednesday, February 5, 2014

Public Hearing Meeting 2-18-2014 - Pecan Valley Groundwater

KJB (Signature)

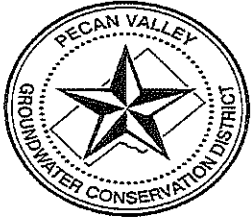
Kristie Bludau (Print Name)

Subscribed and sworn to before me this the 5th day of March, 2014 to certify which witness my hand and seal of office.



Margaret A. Pozzi  
Notary Public in and for Lavaca County, Texas.

**APPENDIX E – Letters Coordinating with Regional Surface Water Management Entities**



**PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT**

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Bee Groundwater Conservation District  
Mr. Lonnie Stewart, Manager  
P.O. Box 682  
Beeville, TX 78104-0682

**Certified Mail Number 7013 1090 0001 7602 6968**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Stewart,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

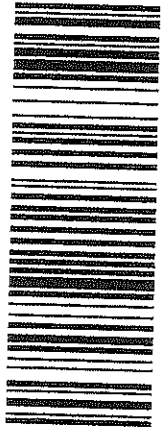
Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 6968

PLACE STICKER AND ENVELOPE ON MAILPIECE  
CERTIFIED MAIL RECEIPT  
CONTAINS RETURN ADDRESS AND MAILING INFORMATION

CERTIFIED MAIL™



7013 1090 0001 7602 6968

7013 1090 0001 7602 6968

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent To **Bee GCD**  
 Street, Apt. No., or PO Box No. **Mr. Lonnie Stewart, Manager**  
**P.O. Box 682**  
 City, State, ZIP+4 **Beeville, TX 78104-0682**

PS Form 3811, 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:

Bee GCD  
Mr. Lonnie Stewart, Manager  
P.O. Box 682  
Beeville, TX 78104-0682

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

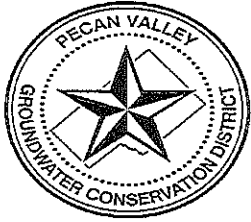
A. Signature  X  Agent  
 Addressee

B. Received by (Printed Name) 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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Calhoun Co. Groundwater Conservation District  
Mr. Mike Anzaldua  
211 S. Ann Street, Ste 301  
Port Lavaca, TX 77979

**Certified Mail Number 7013 1090 0001 7602 6975**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Anzaldua,

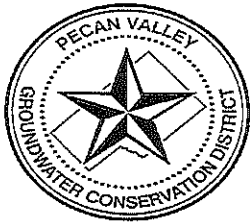
Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager





PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Coastal Plains Groundwater Conservation District  
Mr. Neil Hudgins, Manager  
220 7th Street, Ste 303  
Bay City , TX 77414

**Certified Mail Number 7013 1090 0001 7602 6999**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Hudgins,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager



7013 1090 0001 7602 6999

POSTAGE WILL BE PAID BY ADDRESSEE  
REGISTERED MAIL  
CERTIFIED MAIL



7013 1090 0001 7602 6999  
7013 1090 0001 7602 6999

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To Coastal Plains GCD  
Mr. Neil Hudgins, Manager  
 Street, Apt. No., or PO Box No. 220 7th Street, Ste 303  
 City, State, ZIP+4 Bay City, TX 77414

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:

Coastal Plains GCD  
 Mr. Neil Hudgins, Manager  
 220 7th Street, Ste 303  
 Bay City, TX 77414

2. Article Number  
 (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

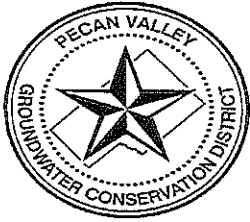
A. Signature X  Agent  
 Addressee

B. Received by (Printed Name) \_\_\_\_\_ 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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Coastal Bend Groundwater Conservation District  
Mr. Neil Hudgins, Manager  
P.O. Box 341  
Wharton, TX 77488

**Certified Mail Number 7013 1090 0001 7602 6982**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Hudgins,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

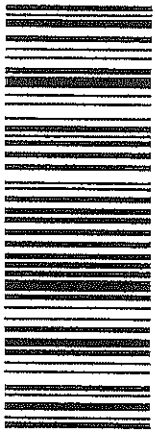
A handwritten signature in cursive script that reads "CKrause".

Charlotte Krause  
General Manager

7013 1090 0001 7602 6982

PLEASE STICK TO TOP OF ENVELOPE TO THE RIGHT  
OF THIS RETURN ADDRESS TO AVOID POSTAGE  
PROBLEMS. DO NOT WRITE IN THESE SPACES.

**CERTIFIED MAIL™**



7013 1090 0001 7602 6982  
7013 1090 0001 7602 6982

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent To **Coastal Bend GCD**

Street, Apt. No.,  
or PO Box No. **Mr. Neil Hudgins, Manager**

City, State, ZIP+4 **P.O. Box 341**  
**Wharton, TX 77488**

PS Form 3800, Aug. 2003 (see 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:

Coastal Bend GCD  
Mr. Neil Hudgins, Manager  
P.O. Box 341  
Wharton, TX 77488

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature   Agent  
 Addressee

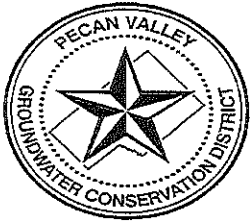
B. Received by (Printed Name) C. Date of Delivery

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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

Colorado County Groundwater Conservation District  
Mr. Jim Brasher, Manager  
P.O. Box 667  
Columbus, TX 78937

**Certified Mail Number 7013 1090 0001 7602 7002**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Brasher,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7002

PLACE STICKER ON TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL™



7013 1090 0001 7602 7002  
7013 1090 0001 7602 7002

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent To **Colorado County GCD**  
**Mr. Jim Brasher, Manager**  
 Street, Apt. No., or PO Box No. **P.O. Box 667**  
 City, State, ZIP+4 **Columbus, TX 78937**

PS Form 3800, August 2005

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:

Colorado County GCD  
 Mr. Jim Brasher, Manager  
 P.O. Box 667  
 Columbus, TX 78937

2. Article Number  
 (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X

Agent

Addressee

B. Received by (Printed Name)

C. Date of Delivery

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

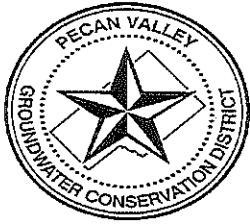
3. Service Type

Certified Mail  Express Mail

Registered  Return Receipt for Merchandise

Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Corpus Christi Aquifer Storage & Recovery District  
City of Corpus Christi  
1201 Leopard Street  
Corpus Christi, TX 78401-2825

**Certified Mail Number 7013 1090 0001 7602 7019**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Sir or Madam,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

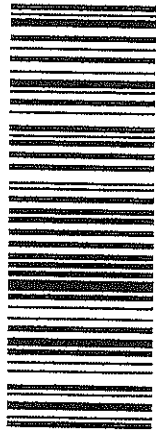
Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7019

PLEASE STICK HERE TO ENVELOPE OR THE RIGHT  
OF THE RETURN ADDRESS (DO NOT WRITE)

**CERTIFIED MAIL™**



7013 1090 0001 7602 7019

7013 1090 0001 7602 7019

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

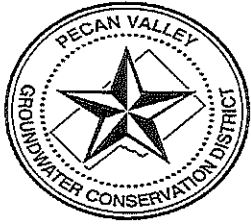
**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Corpus Christi ASR District**  
**City of Corpus Christi**  
 Street, Apt. No., or PO Box No. **1201 Leopard Street**  
 City, State, ZIP+4 **Corpus Christi, TX 78401-2825**

PS Form 3800, August 2004 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <span style="float: right;"><input type="checkbox"/> Agent <input type="checkbox"/> Addressee</span></p> <p><b>X</b></p> <p>B. Received by (Printed Name) <span style="float: right;">C. Date of Delivery</span></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>Corpus Christi ASR District            City of Corpus Christi            1201 Leopard Street            Corpus Christi, TX 78401-2825</p>	<p>3. Service Type</p> <p><input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
<p>2. Article Number (Transfer from service label)</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

Evergreen Underground Water Conservation District  
Mr. Russell Labus  
110 Wyoming Blvd  
Pleasanton, TX 78064

**Certified Mail Number 7013 1090 0001 7602 7026**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Labus,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

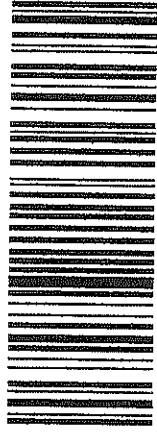
Charlotte Krause  
General Manager



7013 1090 0001 7602 7026

PLACE STICKER ON ENVELOPE OR THE RIGHT  
SIDE OF THE RETURN ADDRESS. HOLD TO OUTER LINE.

**CERTIFIED MAIL™**



7013 1090 0001 7602 7026

7013 1090 0001 7602 7026

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent To: **Evergreen UWCD**  
 Street, Apt. No., or PO Box No.: **Mr. Russell Labus**  
 City, State, ZIP+4: **110 Wyoming Blvd**  
**Pleasanton, TX 78064**

PS Form 3800, August 2005

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:

Evergreen UWCD  
Mr. Russell Labus  
110 Wyoming Blvd  
Pleasanton, TX 78064

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

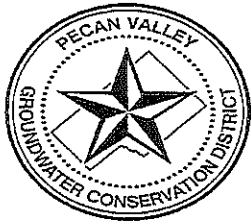
A. Signature  **X**  Agent  
 Addressee

B. Received by (Printed Name) 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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. Gonzales, Cuero, Texas 77954  
(361) 275-8188 Fax:(361) 275-9635  
E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

Fayette County Groundwater Conservatin District  
Mr. David Van Dresar, Manager  
255 Svoboda Lane, Room 115  
La Grange, TX 78945

**Certified Mail Number 7013 1090 0001 7602 7033**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Van Dresar,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7033

PLACE STICKER ON ENVELOPE OR FLIGHT  
COVER. RETURN ADDRESS FOLDS OUTLINE

CERTIFIED MAIL™



7013 1090 0001 7602 7033  
ET01 1090 0001 7602 7033

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

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To  
 Fayette County GCD  
 Street, Apt. No., or PO Box No. Mr. David Van Dresar, Manager  
 City, State, ZIP+4 255 Svoboda Lane, Room 115  
 La Grange, TX 78945

PS Form 3800, All 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:

Fayette County GCD  
 Mr. David Van Dresar, Manager  
 255 Svoboda Lane, Room 115  
 La Grange, TX 78945

2. Article Number  
 (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

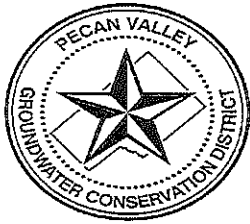
B. Received by (Printed Name) C. Date of Delivery

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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Goliad County Groundwater Conservation District  
Ms. Barbara Smith, Manager  
P.O. Box 562  
Goliad, TX 77963

**Certified Mail Number 7013 1090 0001 7602 7040**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Ms. Smith,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7040

PLACE STICKER TO TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS AND ADDRESS LINE

CERTIFIED MAIL™



7013 1090 0001 7602 7040

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Goliad County GCD**  
 Street, Apt. No., or PO Box No. **Ms. Barbara Smith, Manager**  
 City, State, ZIP+4 **P.O. Box 562**  
**Goliad, TX 77963**

PS Form 3800, 7/03 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:

Goliad GCD  
 Ms. Barbara Smith, Manager  
 P.O. Box 562  
 Goliad, TX 77963

2. Article Number  
 (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  X  Agent  Addressee

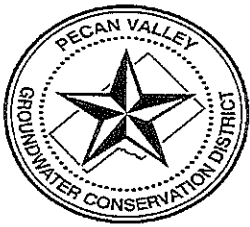
B. Received by (Printed Name) C. Date of Delivery

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

3. Service Type

Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. Gonzales, Cuero, Texas 77954  
(361) 275-8188 Fax:(361) 275-9635  
E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

Refugio Groundwater Conservation District  
Ms. Shanna Niemann, Manager  
P.O. Box 116  
Refugio, TX 78377

**Certified Mail Number 7013 1090 0001 7602 7088**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Ms. Niemann,

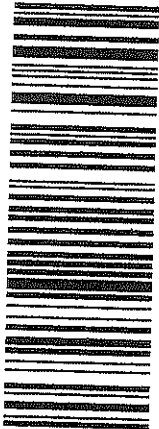
Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7088



7013 1090 0001 7602 7088  
9802 2092 1000 0601 7088  
7013 1090 0001 7602 7088  
9802 2092 1000 0601 7088

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Refugio GCD**  
**Ms. Shanna Niemann, Manager**  
**P.O. Box 116**  
**Refugio, TX 78377**

Street, Apt. No.,  
or PO Box No.  
City, State, ZIP+4

PS Form 3806, 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:

Refugio GCD  
 Ms. Shanna Niemann, Manager  
 P.O. Box 116  
 Refugio, TX 78377

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

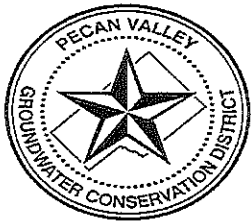
A. Signature  Agent  
 Addressee

B. Received by (Printed Name) 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



**PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT**

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Guadalupe Blanco River Authority  
Mr. W.E. West Jr, General Manager  
933 East Court Street  
Sequin, TX 78155

**Certified Mail Number 7013 1090 0001 7602 7118**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. West Jr.,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

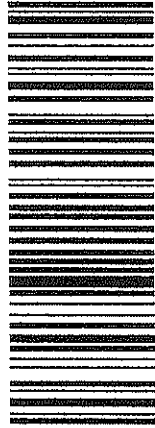
Charlotte Krause  
General Manager



7013 1090 0001 7602 7118

PLACE STICKER ON TOP OF ENVELOPE OR FRONT OF THE RETURN ADDRESS TODAY TO GET THIS SERVICE

CERTIFIED MAIL™



7013 1090 0001 7602 7118  
7013 1090 0001 7602 7118

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	
Sent To <b>Guadalupe Blanco River Authority</b>		
<b>Mr. W.E. West Jr, General Manager</b>		
Street, Apt. No., or PO Box No. <b>933 East Court Street</b>		
City, State, ZIP+4 <b>Sequin, TX 78155</b>		
PS Form 3811, February 2004		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:

Guadalupe Blanco River Authority  
Mr. W.E. West Jr, General Manager  
933 East Court Street  
Sequin, TX 78155

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
**X**  Addressee

B. Received by (Printed Name) 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



**PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT**

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

City of Yorktown  
Attn: Robert Mendez  
P.O. Box 605  
Yorktown, TX 78164

**Certified Mail Number 7013 1090 0001 7602 7170**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Mendez,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7170

PLACE STICKER ON BACK OF MAILPIECE TO RECEIVE TRACKING INFORMATION  
ON THE FRONT OF THE MAILPIECE TO RECEIVE TRACKING INFORMATION  
ON THE FRONT OF THE MAILPIECE TO RECEIVE TRACKING INFORMATION

CERTIFIED MAIL™



7013 1090 0001 7602 7170  
7013 1090 0001 7602 7170

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

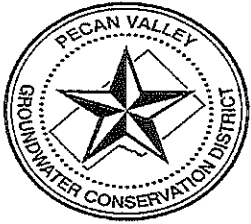
OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To  
**City of Yorktown**  
 Street, Apt. No., or PO Box No. **Attn: Robert Mendez**  
**P.O. Box 605**  
 City, State, ZIP+4 **Yorktown, TX 78164**

PS Form 3800, August 2000 Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul> <p>1. Article Addressed to:</p> <p>City of Yorktown            Attn: Robert Mendez            P.O. Box 605            Yorktown, TX 78164</p>	<p>A. Signature  <input checked="" type="checkbox"/> <b>X</b> <span style="float: right;"><input type="checkbox"/> Agent <input type="checkbox"/> Addressee</span></p> <p>B. Received by (Printed Name) <span style="float: right;">C. Date of Delivery</span></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes            If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. Article Number            (Transfer from service label)</p>	<p>3. Service Type  <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

Lavaca County Commissioners Court  
Judge Tramer J. Woytek  
P.O. Box 243  
Hallettsville, TX 77964

**Certified Mail Number 7013 1090 0001 7602 7057**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Judge Woytek,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7057

PLEASE STICKER TO THE ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS FOR A POSTAGE FREE CERTIFIED MAIL™

CERTIFIED MAIL™



7013 1090 0001 7602 7057  
7013 1090 0001 7602 7057

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

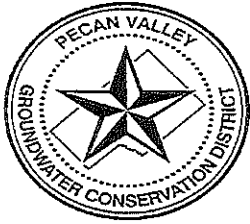
Postmark  
Here

Sent To **Lavaca County Comm. Court**  
**Judge Tramer J. Woytek**  
 Street, Apt. No., or PO Box No. **P.O. Box 243**  
 City, State, ZIP+4 **Hallettsville, TX 77964**

PS Form 3811, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p>
<p>1. Article Addressed to:</p> <p>Lavaca County Commissioners Court          Judge Tramer J. Woytek          P.O. Box 243          Hallettsville, TX 77964</p>	<p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. Article Number (Transfer from service label)</p>	<p>3. Service Type</p> <p><input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

Victoria County Groundwater Conservation District  
Mr. Tim Andrus, Manager  
2805 N. Navarro St., Ste 210  
Victoria, TX 77901

**Certified Mail Number 7013 1090 0001 7602 7064**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Andrus,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7064

PLACE STICKER ON FRONT OF MAILPIECE TO ELIMINATE THE NEED FOR A POSTAGE LABEL

CERTIFIED MAIL™



7013 1090 0001 7602 7064  
ETD

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent To  
 Victoria County GCD  
 Mr. Tim Andruss, Manager  
 2805 N. Navarro St., Ste 210  
 Victoria, TX 77901

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:

Victoria County GCD  
 Mr. Tim Andruss, Manager  
 2805 N. Navarro St., Ste 210  
 Victoria, TX 77901

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

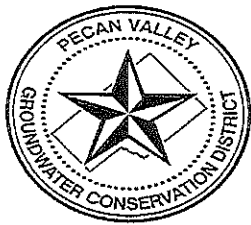
A. Signature  X  Agent  
 Addressee

B. Received by (Printed Name) 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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. Gonzales, Cuero, Texas 77954  
(361) 275-8188 Fax:(361) 275-9635  
E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

Texana Groundwater Conservation District  
Attn: Tim Andruss, Manager  
P.O. Box 1098  
Edna, TX 77957

**Certified Mail Number 7013 1090 0001 7602 7095**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Andruss,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

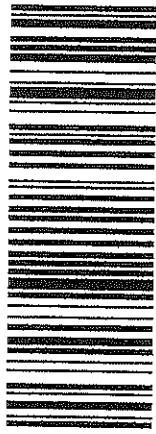
If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager



7013 1090 0001 7602 7095



7013 1090 0001 7602 7095  
7013 1090 0001 7602 7095

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Texana GCD**  
 Street, Apt. No., or PO Box No. **Attn: Tim Andruss, Manager**  
 City, State, ZIP+4 **P.O. Box 1098**  
**Edna, TX 77957**

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:

Texana GCD  
P.O. Box 1098  
Edna, TX 77957

2. Article Number  
*(Transfer from service label)*

**COMPLETE THIS SECTION ON DELIVERY**

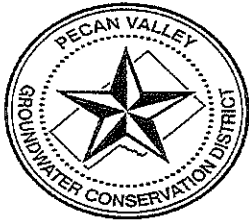
A. Signature  Agent  
**X**  Addressee

B. Received by (*Printed Name*) 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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

Texas Water Development Board  
P.O. Box 13231  
Austin, TX 78711-3231

**Certified Mail Number 7013 1090 0001 7602 7101**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Sir or Madam,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

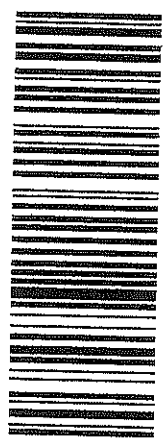
Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7101

PLACE STICKER ON ENVELOPE TO THE RIGHT  
OF THE POSTAGE AND CERTIFIED MAIL LABELS

**CERTIFIED MAIL™**



7013 1090 0001 7602 7101

7013 1090 0001 7602 7101

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent To

Texas Water Development Board  
P.O. Box 13231  
Austin, TX 78711-3231

PS Form 3811, February 2004 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:

Texas Water Development Board  
P.O. Box 13231  
Austin, TX 78711-3231

2. Article Number  
*(Transfer from service label)*

**COMPLETE THIS SECTION ON DELIVERY**

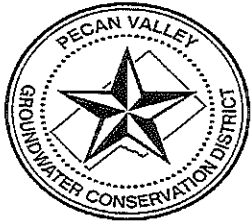
A. Signature  Agent  
**X**  Addressee

B. Received by (*Printed Name*) 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



**PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT**

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

San Antonio River Authority  
Ms. Suzanne B. Scott, General Manager  
100 E. Guenther Street  
San Antonio, TX 78204

**Certified Mail Number 7013 1090 0001 7602 7125**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Ms. Scott,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7125

PLEASE STICK TO THE SENDER'S INSTRUCTIONS  
ON THE RETURN ADDRESS LABEL TO PREVENT  
DELIVERY PROBLEMS.

**CERTIFIED MAIL™**



7013 1090 0001 7602 7125  
ETOL ETOL

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To  
 Street, Apt. No., or PO Box No. Ms. Suzanne Scott, General Manager  
 City, State, ZIP+4 100 E. Guenther Street  
 San Antonio, TX 78204

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:

San Antonio River Authority  
 Ms. Suzanne Scott, General Manager  
 100 E. Guenther Street  
 San Antonio, TX 78204

2. Article Number  
*(Transfer from service label)*

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature   Agent  
 Addressee

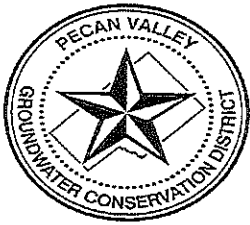
B. Received by (*Printed Name*) C. Date of Delivery

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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. Gonzales, Cuero, Texas 77954  
(361) 275-8188 Fax:(361) 275-9635  
E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

South Central Texas Regional Water Planning Group  
Ms. Erin Newberry  
P.O. Box 839980  
San Antonio, TX 78283

**Certified Mail Number 7013 1090 0001 7602 7132**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Ms. Newberry,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

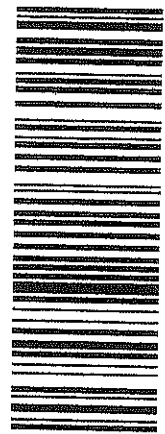
Charlotte Krause  
General Manager

---

7013 1090 0001 7602 7132

PLACE STICKER TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD DOTTED LINE

**CERTIFIED MAIL™**



7013 1090 0001 7602 7132  
7013 1090 0001 7602 7132

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent to **South Central Texas RWPG**  
 Street, Apt. No., or PO Box No. **Ms. Erin Newberry**  
**P.O. Box 839980**  
 City, State, ZIP+4 **San Antonio, TX 78283**

PS Form 3800, August 2005 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:

South Central Texas RWPG  
 Ms. Erin Newberry  
 P.O. Box 839980  
 San Antonio, TX 78283

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

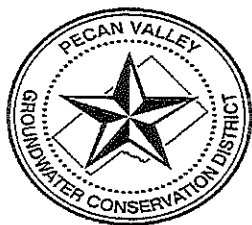
A. Signature  Agent  
 Addressee

B. Received by (Printed Name) 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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT

107 N. Gonzales, Cuero, Texas 77954

(361) 275-8188 Fax:(361) 275-9635

E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org)

Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

April 16, 2014

DeWitt County Commissioners Court  
c/o Judge Daryl Fowler  
307 N. Gonzales St.  
Cuero, TX 77954

**Certified Mail Number 7013 1090 0001 7602 7149**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Judge Fowler,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager



7013 1090 0001 7602 7149

PLEASE STICK TAPE TO ENVELOPE TO THE RIGHT  
OF THE RETURN ADDRESS TO AVOID DAMAGE

**CERTIFIED MAIL™**



7013 1090 0001 7602 7149  
7013 1090 0001 7602 7149

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

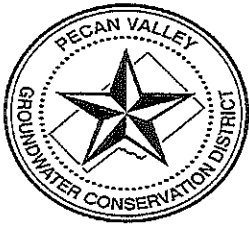
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark  
Here

Sent To **DeWitt County Commissioners Court**  
 Street, Apt or PO Box **c/o Judge Daryl Fowler**  
**307 N. Gonzales St.**  
 City, State, **Cuero, TX 77954**

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <b>X</b> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p><b>DeWitt County Commissioners Court</b>  <b>c/o Judge Daryl Fowler</b>  <b>307 N. Gonzales St.</b>  <b>Cuero, TX 77954</b></p>	<p>3. Service Type  <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
<p>2. Article Number (Transfer from service label)</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. Gonzales, Cuero, Texas 77954  
(361) 275-8188 Fax:(361) 275-9635  
E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

City of Yoakum  
Attn: Kevin Coleman, City Manager  
P.O. Box 736  
Yoakum, TX 77995

**Certified Mail Number 7013 1090 0001 7602 7163**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Coleman,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

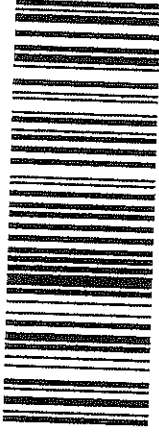
Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7163

PLEASE STICK TO THE TOP EDGE OF THE RIGHT OF THE RETURN ADDRESS LABEL TO THE CERTIFIED MAIL™

CERTIFIED MAIL™



7013 1090 0001 7602 7163  
7013 1090 0001 7602 7163

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark Here

Sent To

City of Yoakum  
Attn: Kevin Coleman, City Manager  
P.O. Box 736  
Yoakum, TX 77995

PS Form 3811, February 2004 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:

City of Yoakum  
Attn: Kevin Coleman  
P.O. Box 736  
Yoakum, TX 77995

2. Article Number  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Addressee

B. Received by (Printed Name) 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



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. Gonzales, Cuero, Texas 77954  
(361) 275-8188 Fax:(361) 275-9635  
E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

City of Cuero  
Att: Raymie Zella, City Manager  
212 E. Main  
Cuero, TX 77954

**Certified Mail Number 7013 1090 0001 7602 7156**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Mr. Zella,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7156



7013 1090 0001 7602 7156  
7013 1090 0001 7602 7156

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

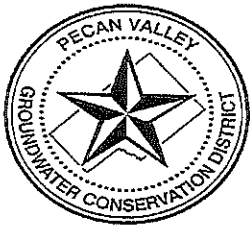
**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To: **City of Cuero**  
 Street, Apt. No., or PO Box No.: **Att: Raymie Zella, City Manager**  
 212 E. Main  
 City, State, ZIP+4: **Cuero, TX 77954**

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <input type="checkbox"/> Agent  <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>City of Cuero          Att: Raymie Zella          212 E. Main          Cuero, TX 77954</p>	<p>3. Service Type  <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number          (Transfer from service label)</p>	



PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. Gonzales, Cuero, Texas 77954  
(361) 275-8188 Fax:(361) 275-9635  
E-Mail: [director@pvgcd.org](mailto:director@pvgcd.org) Website: [www.pvgcd.org](http://www.pvgcd.org)

Darnell Knippa  
President

Clem Waskow  
Vice-President

Will Sauermilch  
Sec/Treas.

Marvin Sager  
Director

Tim Pennell  
Director

---

April 16, 2014

City of Nordheim  
Attn: Katherine Payne, Mayor  
P.O. Box 266  
Nordheim, TX 78141

**Certified Mail Number 7013 1090 0001 7602 7187**

RE: Pecan Valley Groundwater Conservation District Revised Management Plan

Dear Ms. Payne,

Please find attached to this letter a copy of the Revised Management Plan for Pecan Valley Groundwater Conservation District. A public hearing was held on February 18, 2014 with no comments being submitted verbally or in writing. The District approved the revisions on March 18, 2014 and signed the resolution adopting the Revised Management Plan.

If you have any questions, please contact the District.

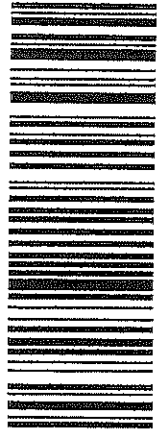
Sincerely,

Charlotte Krause  
General Manager

7013 1090 0001 7602 7187

PLACE STICKER TAPE TO ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS TO AVOID POSTAGE

CERTIFIED MAIL™



7013 1090 0001 7602 7187

7013 1090 0001 7602 7187

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To  
 City of Nordheim  
 Attn: Katherine Payne, Mayor  
 Street, Apt. No., or PO Box No. P.O. Box 266  
 City, State, ZIP+4 Nordheim, TX 78141

PS Form 3800, August 2005 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <input type="checkbox"/> Agent  <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>City of Nordheim          Attn: Katherine Payne          P.O. Box 266          Nordheim, TX 78141</p>	<p>3. Service Type  <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number          (Transfer from service label)</p>	

**APPENDIX F – Pecan Valley Groundwater Conservation District Board of  
Director Resolution Adopting Revised Management Plan**



**RESOLUTION**

**Resolution Number: 2014-3-18**


**Resolution Adopting the Revised Pecan Valley Groundwater Conservation District Management Plan**

**WHEREAS** on February 5, 2014, a Notice of Hearing was published in the Cuero Record, Yorktown News and Yoakum Herald Times newspapers regarding a public hearing on the adoption of the Revised Pecan Valley Groundwater Conservation District Management Plan; and


**WHEREAS** on March 18, 2014, the Pecan Valley Groundwater Conservation District Board of Directors, with a quorum being present, conducted a public hearing regarding the adoption of the Revised Pecan Valley Groundwater Conservation District Management Plan;

**NOW THEREFORE BE IT RESOLVED** that the Revised Pecan Valley Groundwater Conservation District Management Plan is **ADOPTED** as described in the Pecan Valley Groundwater Conservation District Management Plan attached hereto and made part hereof for all purposes and that said Management Plan be submitted to the Executive Administrator of the Texas Water Development Board for review and approval.

**ADOPTED** by a vote of 5 ayes and 0 nays on the **18th day of March, 2014**.

  
\_\_\_\_\_  
Darnell Knippa - Board President

I, the undersigned, do hereby certify that the above **Resolution was adopted** by the Board of Directors of the Pecan Valley Groundwater Conservation District on the **18th day of March, 2014**.

  
\_\_\_\_\_  
Will Sauermilch, Secretary, Board of Directors

**APPENDIX G – Minutes of Pecan Valley Groundwater Conservation District Board of Directors Meetings related to the public hearing for and adoption of the Management Plan**

PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. GONZALES CUERO, TX 77954  
PUBLIC HEARING AND BOARD MEETING  
MINUTES

FEBRUARY 18, 2014 – 2:00 P.M.

Board Members Present: Clem Waskow, Vice-Chairman (At Large), Wilbert Sauermilch, Secretary/Treasurer (Pct. 3), Marvin Sager, Director (Pct. 4), and Tim Pennell, Director (Pct. 1).

Board Members Absent: Darnell Knippa, Chairman (Pct. 2).

Also in attendance: Charlotte Krause, GM, Marcia Mann, Admin. Assistant, and Jim Allison, Board Attorney.

Guests: Johnny Hernandez & Beth Reinecke (BHP); Josh Atkins (Pioneer); James Martin (Cletus Operating); Bill Pace (ConocoPhillips); and Rebecca Graber.

1. Call to order: The meeting was called to order by the Vice-Chairman at 2:00 P.M.
2. Welcome guests: Guests were welcomed by Vice-Chairman.
3. Public comment: No public comment.

PUBLIC HEARINGS OPENED AT 2:01 P.M.

4. Public Hearing – Petrohawk Energy – Harvey Mueller
  - a. Public Hearing on the Operating Permit Amendment Application from Petrohawk Energy on Harvey Mueller's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting 100 AF of water per year for a total of 120 AF of water per year. This property is located on Noe Hinojosa Road near Nordheim, Texas and involves 398 acres. No public comment or objection stated.
  - b. Discussion and consideration of operating permit amendment application from Petrohawk Energy on Harvey Mueller's property: A motion to approve the Operating Permit Amendment Application in the amount of 100 AF of water per year, for a total of 120 AF of water per year, was made by Tim Pennell, seconded by Marvin Sager, which carried unanimously.
5. Public Hearing - Petrohawk Energy – Jerome Respondek
  - a. Public Hearing on the Operating Permit Amendment Application from Petrohawk Energy on Jerome Respondek's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit

Amendment Application is requesting 30 AF of water per year for a total of 60 AF of water per year. This property is located on Salt Creek Cemetery Road near Yorktown, Texas and involves 151 acres. No public comment or objection stated.

- b. Discussion and consideration of operating permit amendment application from Petrohawk Energy on Jerome Respondek's property: A motion to approve the Operating Permit Amendment Application in the amount of 30 AF of water per year, for a total of 60 AF of water per year, was made by Marvin Sager, seconded by Wilbert Sauermilch, which carried unanimously.

6. Public Hearing – Petrohawk Energy – Karen Brandt

- a. Public Hearing on the Operating Permit Amendment Application from Petrohawk Energy on Karen Brandt's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting 40 AF of water per year for a total of 72.89 AF of water per year from this water well for a combined total of 142.89 AF of water per year from 4 water wells. This property is located on Noe Hinojosa Road near Nordheim, Texas and involves 575 acres. No public comment or objection stated.

- b. Discussion and consideration of operating permit amendment application from Petrohawk Energy on Karen Brandt's property: A motion to approve the Operating Permit Amendment Application in the amount of 40 AF of water per year, for a total of 72.89 AF of water per year from this water well and a combined total of 142.89 AF of water per year from 4 water wells, was made by Tim Pennell, seconded by Marvin Sager, which carried unanimously.

7. Public Hearing – Petrohawk Energy – Karen Brandt

- a. Public Hearing on the Operating Permit Amendment Application from Petrohawk Energy on Karen Brandt's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting 33 AF of water per year for a total of 53 AF of water per year from this water well for a combined total of 175.89 AF of water per year from 4 water wells. This property is located on Noe Hinojosa Road near Nordheim, Texas and involves 575 acres. No public comment or objection stated.

- b. Discussion and consideration of operating permit amendment application from Petrohawk Energy on Karen Brandt's property: A motion to approve the Operating Permit Amendment Application in the amount of 33 AF of water per year, for a total of 53 AF of water per year from this water well and a combined total of 175.89 AF of water per year from 4 water wells, was made by Wilbert Sauermilch, seconded by Marvin Sager, which carried unanimously.
-

8. Public Hearing – Petrohawk Energy – Karen Brandt
    - a. Public Hearing on the Operating Permit Amendment Application from Petrohawk Energy on Karen Brandt's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting 33 AF of water per year for a total of 53 AF of water per year from this water well for a combined total of 208.89 AF of water per year from 4 water wells. This property is located on Noe Hinojosa Road near Nordheim, Texas and involves 575 acres. No public comment or objection stated.
    - b. Discussion and consideration of operating permit amendment application from Petrohawk Energy on Karen Brandt's property: A motion to approve the Operating Permit Amendment Application in the amount of 33 AF of water per year, for a total of 53 AF of water per year from this water well and a combined total of 208.89 AF of water per year from 4 water wells, was made by Tim Pennell, seconded by Marvin Sager, which carried unanimously.
  9. Public Hearing – Petrohawk Energy – Karen Brandt
    - a. Public Hearing on the Operating Permit Amendment Application from Petrohawk Energy on Karen Brandt's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting 40 AF of water per year for a total of 70 AF of water per year from this water well for a combined total of 248.89 AF of water per year from 4 water wells. This property is located on Noe Hinojosa Road near Nordheim, Texas and involves 575 acres. No public comment or objection stated.
    - b. Discussion and consideration of operating permit amendment application from Petrohawk Energy on Karen Brandt's property: A motion to approve the Operating Permit Amendment Application in the amount of 40 AF of water per year, for a total of 70 AF of water per year from this water well and a combined total of 248.89 AF of water per year from 4 water wells, was made by Tim Pennell, seconded by Marvin Sager, which carried unanimously.
  10. Public Hearing – Petrohawk Energy – Rodney Butler
    - a. Public Hearing on the Operating Permit Amendment Application from Petrohawk Energy on Rodney Butler's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting 40 AF of water per year for a total of 80 AF of water per year from 2 water wells. This property is located on Cabeza Road near Nordheim, Texas and involves 221 acres. No public comment or objection stated.
-

- b. Discussion and consideration of operating permit amendment application from Petrohawk Energy on Rodney Butler's property: A motion to approve the Operating Permit Amendment Application in the amount of 40 AF of water per year, for a total of 80 AF of water per year from 2 water wells, was made by Tim Pennell, seconded by Wilbert Sauermilch, which carried unanimously.

11. Public Hearing – Pioneer Natural Resources – Hope Schorlemer

- a. Public Hearing on the Operating Permit Application from Pioneer Natural Resources on Hope Schorlemer's property: The proposed permit application is to be to hydraulic fracture an oilfield location. The Operating Permit Application is requesting 34 AF of water per year for a total of 94 AF of water per year from 3 water wells. This property is located on FM 119 near Yorktown, Texas and involves 188 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit application from Pioneer Natural Resources on Hope Schorlemer's property: A motion to approve the Operating Permit Application in the amount of 34 AF of water per year, for a total of 94 AF of water per year from 3 water wells, was made by Marvin Sager, seconded by Wilbert Sauermilch, which carried unanimously.

12. Public Hearing – Pioneer Natural Resources – Harland Metting

- a. Public Hearing on the Operating Permit Application from Pioneer Natural Resources on Harland Metting's property: The proposed permit application is to be to hydraulic fracture an oilfield location. The Operating Permit Application is requesting 80 AF of water per year for a total of 160 AF of water per year from 2 water wells. This property is located on FM 2980 near Yorktown, Texas and involves 408 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit application from Pioneer Natural Resources on Harland Metting's property: A motion to approve the Operating Permit Application in the amount of 80 AF of water per year, for a total of 160 AF of water per year from 2 water wells, was made by Tim Pennell, seconded by Wilbert Sauermilch, which carried unanimously.

13. Public Hearing – Burlington Resources – Aaron Koopman

- a. Public Hearing on the Operating Permit Application from Burlington Resources on Aaron Koopman's property: The proposed permit application is for mining use. The Operating Permit Application is requesting 50 AF of water per year. This property is located on Gruenau Road near Yorktown, Texas and involves 104 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit application from Burlington Resources on Aaron Koopman's property: A motion to approve the Operating Permit Application in the amount of 50 AF of water per year was made by Tim Pennell, seconded by Wilbert Sauermilch, which carried unanimously.

14. Public Hearing – Cletus Operating, LLC

- a. Public Hearing on the Drilling and Operating Permit Applications from Cletus Operating, LLC: The proposed permit application is for commercial use. The Operating Permit Application is requesting 1.37 AF of water per year. This property is located on Hwy 183 near Cuero, Texas and involves 2.75 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit application from Cletus Operating, LLC: A motion to approve the Drilling Permit Application and to approve the Operating Permit Application in the amount of 1.37 AF of water per year was made by Marvin Sager, seconded by Tim Pennell, which carried unanimously.

15. Public Hearing – Janet Adamek

- a. Public Hearing on the Operating Permit Amendment Application from Janet Adamek: The proposed permit amendment application is for commercial water sales. The Operating Permit Amendment Application is requesting 10 AF of water per year for a total of 20 AF of water per year. This property is located on FM 966 near Yoakum, Texas and involves 158 acres. Rebecca Graber, applicant's neighbor expressed concern that this increase would adversely affect the water level in her domestic well. After an explanation of the District's rules on production amounts and an assurance that Ms. Adamek is not in violation of those rules, Ms. Graber had no additional questions.
- b. Discussion and consideration of operating permit amendment application from Janet Adamek: A motion to approve the Operating Permit Amendment Application in the amount of 10 AF of water per year for a total of 20 AF of water per year was made by Tim Pennell, seconded by Marvin Sager, which carried unanimously.

16. Public Hearing – Spacing Variance – Anthony Warren

- a. Public Hearing on the Spacing Variance from Anthony Warren: This hearing is to receive public comments on the Spacing Variance from Anthony Warren. The proposed water well would be less than 50 feet from property line and would be used for livestock purposes. This property is located on Harvest Lane near Cuero, Texas. No public comment or objection stated.
- b. Discussion and consideration of spacing variance application from Anthony Warren: A motion to approve the Spacing Variance was made by Marvin Sager, seconded by Wilbert Sauermilch, which carried unanimously.

17. Public Hearing – Management Plan

- a. The Board of Directors of the Pecan Valley Groundwater Conservation District will conduct a public hearing on the proposed Revised Management Plan: No public comment or objection stated.

PUBLIC HEARINGS CLOSED AT 2:25 P.M.

18. Minutes from 01-21-14 Meeting (provided prior to meeting): A motion to approve the minutes as presented was made by Wilbert Sauermilch, seconded by Tim Pennell, which carried unanimously.
  19. Financial Reports – December & January (provided prior to meeting): A motion to approve the December & January financial reports as presented was made by Wilbert Sauermilch, seconded by Marvin Sager, which carried unanimously.
  20. Quarterly Investment Reports: Quarterly Investment Reports for the 4<sup>th</sup> quarter of 2013 and for the 1<sup>st</sup> quarter of 2014 were presented. A motion to approve both Quarterly Investment Reports as presented was made by Wilbert Sauermilch, seconded by Tim Pennell, which carried unanimously.
  21. Discussion and consideration of annual audit from Goldman, Hunt & Notz, CPA's: A motion to approve the annual audit report from Goldman, Hunt & Notz, amended to include collateralization documentation from Cuero National Bank, was made by Tim Pennell, seconded by Wilbert Sauermilch, which carried unanimously.
  22. Discussion and consideration of annual report: GM summarized her annual report of the past fiscal year activities of the District. A motion to accept and approve the annual report as presented was made by Tim Pennell, seconded by Marvin Sager, which carried unanimously.
  23. Discussion and consideration of approving Master Service Agreement and Task Order with Daniel B. Stephens & Associates for water quality testing program: Attorney Allison confirmed that the Agreement has been modified as requested and is ready to be executed.
  24. Closed Meeting (If necessary) – Close the meeting to conduct private consultation with PVGCD attorney regarding matters protected by the attorney-client privilege pursuant to V.T.C.A. Government Code 551.07, or to discuss matters regarding personnel pursuant to V.T.C.A. Government Code 551.074: No Executive Session called.
  25. Return to Open Meeting (If Necessary) – Return to open meeting and take any action deemed necessary based upon discussions in closed meeting pursuant to V.T.C.A. Government Code 551.102: No Executive Session called.
  26. Next Scheduled Board Meeting: Next meeting is scheduled for March 18, 2014.
  27. Adjournment: The meeting adjourned at 2:55 P.M. with a motion by Tim Pennell, seconded Wilbert Sauermilch, which carried unanimously.
-



*W. Sauermilch*

---

Sec/Wilbert Sauermilch

Recorded: Marcia Mann, Admin. Assistant

PECAN VALLEY GROUNDWATER CONSERVATION DISTRICT  
107 N. GONZALES CUERO, TX 77954  
PUBLIC HEARING AND BOARD MEETING  
MINUTES

MARCH 18, 2014 – 2:00 P.M.

Board Members Present: Darnell Knippa, Chairman (Pct. 2), Clem Waskow, Vice-Chairman (At Large), Wilbert Sauermilch, Secretary/Treasurer (Pct. 3), Marvin Sager, Director (Pct. 4), and Tim Pennell, Director (Pct. 1).

Also in attendance: Charlotte Krause, GM, Marcia Mann, Admin. Assistant, and Jim Allison, Board Attorney.

Guests: Johnny Hernandez (BHP); Mary Martin; Robert Egg; Blake Stewart; Andrew Donnelly and Michelle Sutherland (Daniel B. Stephens & Associates, Inc.).

1. Call to order: The meeting was called to order by the Chairman at 2:00 P.M.
2. Welcome guests: Guests were welcomed by Chairman.
3. Public comment: No public comment.

PUBLIC HEARINGS OPENED AT 2:05 P.M.

4. Public Hearing – Stingray Wells, LLC – Wayne Blank
  - a. Public Hearing on the Drilling and Operating Permit Applications from Stingray Wells, LLC, on Wayne Blank's property: The proposed permit application is to be used for industrial use for office space for an injection well. The Operating Permit Application is requesting 2 AF of water per year. This property is located at 5121 US Hwy 183 North near Cuero, Texas and involves 125 acres. No public comment or objection stated.
  - b. Discussion and consideration of drilling and operating permit applications from Stingray Wells, LLC, on Wayne Blank's property: A motion to approve the Drilling Permit and to approve the Operating Permit Application in the amount of 2 AF of water per year was made by Tim Pennell, seconded by Clem Waskow, which carried unanimously.
5. Public Hearing - Kyle S. Powell
  - a. Public Hearing on the Drilling and Operating Permit Kyle S. Powell: The proposed permit application is for commercial use for an RV Park/Man camp. The Operating Permit Application is requesting 3.5 AF of water per year. This property is located on State Highway 72 West near Yorktown, Texas and involves 7 acres. No public comment or objection stated.

- b. Discussion and consideration of drilling and operating permit applications from Kyle S. Powell: A motion to approve the Drilling Permit and to approve the Operating Permit Application in the amount of 3.5 AF of water per year was made by Tim Pennell, seconded by Marvin Sager, which carried unanimously.
6. Public Hearing – Petrohawk Energy – Bonnie Burton & Lanette Gips
  - a. Public Hearing on the Operating Permit Application from Petrohawk Energy on Bonnie Burton & Lanette Gips's property: The proposed permit application is to be used to hydraulic fracture an oilfield location. The Operating Permit Application is requesting 30 AF of water per year. This property is located on US Highway 87 North near Westhoff, Texas and involves 114 acres. No public comment or objection stated.
  - b. Discussion and consideration of operating permit application from Petrohawk Energy on Bonnie Burton & Lanette Gips's property: A motion to approve the Operating Permit Application in the amount of 30 AF of water per year was made by Clem Waskow, seconded by Tim Pennell, which carried unanimously.
7. Public Hearing – Petrohawk Energy – August & Hazel Schulle
  - a. Public Hearing on the Operating Permit Application from Petrohawk Energy on August & Hazel Schulle's property: The proposed permit application is to be used to hydraulic fracture an oilfield location. The Operating Permit Application is requesting 40 AF of water per year. This property is located on US Highway 87 North near Westhoff, Texas and involves 182.43 acres. No public comment or objection stated.
  - b. Discussion and consideration of operating permit application from Petrohawk Energy on August & Hazel Schulle's property: A motion to approve the Operating Permit Application in the amount of 40 AF of water per year was made by Marvin Sager, seconded by Wilbert Sauermilch, which carried unanimously.
8. Public Hearing – Petrohawk Energy – Leonard Kolodziejczyk
  - a. Public Hearing on the Operating Permit Application from Petrohawk Energy on Leonard Kolodziejczyk's property: The proposed permit application is to be used to hydraulic fracture an oilfield location. The Operating Permit Application is requesting 20 AF of water per year. This property is located on FM 2656 near Yorktown, Texas and involves 105 acres. No public comment or objection stated.
  - b. Discussion and consideration of operating permit application from Petrohawk Energy on Leonard Kolodziejczyk's property: A motion to approve the Operating Permit Application in the amount of 20 AF of water per year was made by Tim Pennell, seconded by Wilbert Sauermilch, which carried unanimously.

9. Public Hearing – Petrohawk Energy – John Paul Mokwa

- a. Public Hearing on the Operating Permit Application from Petrohawk Energy on John Paul Mokwa's property: The proposed permit application is to be to hydraulic fracture an oilfield location. The Operating Permit Application is requesting 40 AF of water per year. This property is located on Lincke Road near Yorktown, Texas and involves 172 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit application from Petrohawk Energy on John Paul Mokwa's property: A motion to approve the Operating Permit Application in the amount of 40 AF of water per year was made by Marvin Sager, seconded by Wilbert Sauermilch, which carried unanimously.

10. Public Hearing – Sabine Oil & Gas, LLC – Gary Boening

- a. Public Hearing on the Operating Permit Application from Sabine Oil & Gas, LLC on Gary Boening's property: The proposed permit application is to be used to hydraulic fracture an oilfield location. The Operating Permit Application is requesting 40 AF of water per year. This property is located on Dagg Road near Yoakum, Texas and involves 131 acres. Mary Martin, property owner adjacent to Gary Boening, stated some concerns regarding the way water was being moved from one side of Mr. Boening's property to the other through a pipe. Because of the way the pipe has been run, it is causing water to back up on Ms. Martin's only road access to her property. Attorney Allison explained that the District has no authority over the water once it has been pumped. She was advised to contact Sabine and was given a contact name by GM.
- b. Discussion and consideration of operating permit application from Sabine Oil & Gas, LLC on Gary Boening's property: A motion to approve the Operating Permit Application in the amount of 40 AF of water per year was made by Clem Waskow, seconded by Tim Pennell, which carried unanimously.

11. Public Hearing – Pioneer Natural Resources – Charles Riedesel

- a. Public Hearing on the Operating Permit Amendment Application from Pioneer Natural Resources on Charles Riedesel's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting an additional 40 AF of water per year for a total of 60 AF of water per year from this water well and a combined total of 80 AF of water per year from two permitted water wells. This property is located on FM 119 near Yorktown, Texas and involves 323 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit amendment application from Pioneer Natural Resources on Charles Riedesel's property: A motion to approve the Operating Permit Amendment Application in the amount of an additional 40 AF of water per year from this water well and a combined total of 80

AF of water per year from 2 permitted water wells, was made by Clem Waskow, seconded by Tim Pennell, which carried unanimously.

12. Public Hearing – Pioneer Natural Resources – Charles Riedesel

- a. Public Hearing on the Operating Permit Amendment Application from Pioneer Natural Resources on Charles Riedesel's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting an additional 40 AF of water per year for a total of 60 AF of water per year from this water well and a combined total of 120 AF of water per year from two permitted water wells. This property is located on FM 119 near Yorktown, Texas and involves 323 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit amendment application from Pioneer Natural Resources on Charles Riedesel's property: A motion to approve the Operating Permit Amendment Application in the amount of an additional 40 AF of water per year from this water well and a combined total of 120 AF of water per year from 2 permitted water wells, was made by Wilbert Sauermilch, seconded by Clem Waskow, which carried unanimously.

13. Public Hearing – Pioneer Natural Resources – Charles Riedesel

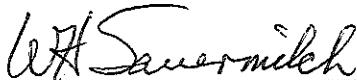
- a. Public Hearing on the Operating Permit Amendment Application from Pioneer Natural Resources on Charles Riedesel's property: The proposed permit amendment application is to be to hydraulic fracture an oilfield location. The Operating Permit Amendment Application is requesting an additional 40 AF of water per year for a total of 60 AF of water per year from this water well. This property is located on FM 240 near Yorktown, Texas and involves 194 acres. No public comment or objection stated.
- b. Discussion and consideration of operating permit amendment application from Pioneer Natural Resources on Charles Riedesel's property: A motion to approve the Operating Permit Amendment Application in the amount of an additional 40 AF of water per year for a total of 60 AF of water per year from this water well, was made by Wilbert Sauermilch, seconded by Tim Pennell, which carried unanimously.

PUBLIC HEARINGS CLOSED AT 2:20 P.M.

14. Minutes from 02-18-14 Meeting (provided prior to meeting): A motion to approve the minutes as presented was made by Wilbert Sauermilch, seconded by Marvin Sager, which carried unanimously.

15. Financial Reports – February (provided prior to meeting): A motion to approve the February financial reports as presented was made by Wilbert Sauermilch, seconded by Marvin Sager, which carried unanimously.

16. Discussion and consideration of adoption of Revised Management Plan: A motion to approve and adopt the Revised Management Plan as presented was made by Wilbert Sauermilch, seconded by Clem Waskow, which carried unanimously.
17. Discussion and consideration of updates from Daniel B. Stephens & Assoc. regarding water quality testing program: Andrew Donnelly presented an overview of their preliminary data analysis and recommendations for water quality testing program development. A summary of possible testing options, along with an estimated cost structure, were included for the Board's consideration.
18. Discussion and consideration of monitor well report: GM reported that monitor well readings have been taken on the majority of wells in the current monitoring program. The remaining well readings will be completed shortly.
19. Closed Meeting (If necessary) – Close the meeting to conduct private consultation with PVGCD attorney regarding matters protected by the attorney-client privilege pursuant to V.T.C.A. Government Code 551.07, or to discuss matters regarding personnel pursuant to V.T.C.A. Government Code 551.074: No Executive Session called.
20. Return to Open Meeting (If Necessary) – Return to open meeting and take any action deemed necessary based upon discussions in closed meeting pursuant to V.T.C.A. Government Code 551.102: No Executive Session called.
21. Next Scheduled Board Meeting: Next meeting is scheduled for April 15, 2014.
22. Adjournment: The meeting adjourned at 3:35 P.M. with a motion by Marvin Sager, seconded Clem Waskow, which carried unanimously.



---

Sec/Wilbert Sauermilch

Recorded: Marcia Mann, Admin. Assistant

**APPENDIX H – Pecan Valley Groundwater Conservation District contact information**

## District Contact Information

Mailing Address:

107 N. Gonzales Street  
Cuero, TX 77954

Email Address:

[director@pvgcd.org](mailto:director@pvgcd.org)

Phone Number:

(361) 275-8188

FAX Number:

(361) 275-9635

Board of Directors:

Mr. Darnell Knippa, President  
Mr. Clem Waskow, Vice President  
Mr. Wilbert Sauermilch, Secretary/Treasurer  
Mr. Marvin Sager, Director  
Mr. Tim Pennell, Director

Staff:

Ms. Charlotte Krause, General Manager  
Ms. Marcia Mann, Administrative Assistant