

**LOST PINES GROUNDWATER
CONSERVATION DISTRICT**

**MANAGEMENT
PLAN**

**Adopted September 15, 2004;
Revised August 10, 2010;
Revised September 19, 2012**

Table of Contents

Section 1.	The District	1
Section 2.	District Mission and Guiding Principles	1
Section 3.	Time Period Covered By Management Plan	3
Section 4.	Governance	3
Section 5.	District Desired Future Conditions	4
Section 6.	Modeled Available Groundwater	5
	Table 1 Modeled Available Groundwater	
Section 7.	District Water Resources	7
	A. Groundwater	7
	Table 2 Estimate of Historic Groundwater Use	
	Figure 1 Stratigraphic Section	
	Table 3 Estimated Precipitation Recharge Totals for Major and Minor Aquifers	
	Table 4 Estimated Discharge to Surface Water Bodies from Major and Minor Aquifers	
	Table 5A Estimated Flow into and out of District in Major and Minor Aquifers	
	Table 5B Estimated Flow between Major/Minor and Adjacent Aquifers	
	B. Surface Water	17
	Table 6 Projected Surface Water Supplies	
	C. District Water Demands, Needs and Strategies	24
	Table 7 2012 State Water Plan Projected Net Water Demands	
	Table 7A Region K and Region G Projected Demand Detail	
	Table 7B 2011 Updated Estimates of District Exempt Use	
	Table 8 2012 State Water Plan Projected Water Needs	
	Table 9 Proposed Water Management Strategies - 2012 State Water Plan Data	
Section 8.	Management Goals, Objectives, and Performance Standards	25
	A. Statutory Goals	25
	B. District-Specific Goals	28
Section 9.	District Certifications	30
	A. Evidence of Regional Cooperation and Coordination	30

B.	Certified Copy of District Resolution Adopting Management Plan	30
C.	Evidence of Public Notice and Hearing on Management Plan	31

MAPS

ATTACHMENT A: Chapter 36, Summary of Selected Provisions

APPENDICES

Appendix A: Copy of GMA 12 Resolution and Submittal Adopting DFCs

Appendix B: Evidence of Coordination with Surface Water Management Entities

Appendix C: Certified Copy of District Resolution Adopting Management Plan

Appendix D: Evidence of Public Notice and Hearing on Management Plan

Section 1. THE DISTRICT

The Lost Pines Groundwater Conservation District (District) was created in 1999 by Senate Bill 1911, 76th Texas legislature, pursuant to Section 59, Article 16 of the Texas Constitution and Article 7880-3c, Texas Civil Statutes (now Chapter 36, Texas Water Code); ratified by the 77th Texas Legislature in 2001; and confirmed by voters in Bastrop and Lee counties in November 2002.

The District includes all of Bastrop and Lee counties (**Map 1**).

For state water planning purposes, the District was designated by the Texas Water Development Board (TWDB) as part of Groundwater Management Area 12 (GMA 12) (**Map 2**). The District participates in GMA 12 along with Mid-East Texas Groundwater Conservation District, Brazos Valley Groundwater Conservation District, Post Oak Savannah Groundwater Conservation District, and Fayette County Groundwater Conservation District.

The District participates in two of the State's sixteen Regional Planning Areas: Bastrop County is in Lower Colorado Regional Planning Group or Region K and Lee County is in Brazos River Regional Planning Group or Region G (**Map 3**).

Section 2. DISTRICT MISSION AND GUIDING PRINCIPLES: Actions, Procedures, Performance and Avoidance Necessary to Effectuate the Management Plan

Mission. The District's mission is to conserve, preserve and protect interests in groundwater in Bastrop and Lee counties, while addressing statutory goals and requirements. In fulfilling its mission, the District will endeavor to manage groundwater to meet demands on a sustainable basis, by which the District means development, use, and reasonable long-term management of groundwater resources so that those resources can continue to be used by future generations. The District will address applicable statutory management goals, including:

- Providing the most efficient use of groundwater
- Controlling and preventing waste of groundwater
- Addressing conjunctive surface water management issues
- Addressing natural resource issues that impact the use and availability of groundwater and are impacted by the use of groundwater
- Addressing drought conditions
- Addressing conservation, recharge enhancement, rainwater harvesting, precipitation enhancement, or brush control, where appropriate and cost effective, and
- Addressing the desired future conditions (meaning a quantitative description, adopted in accordance with Chapter 36, Texas Water Code,¹ of the desired condition of the groundwater resources for relevant aquifers (DFCs)), as those DFCs may be amended from time to time.

¹ See §§ 36.001(30) (defining DFC) and 36.108 (joint planning process). References herein to "Chapter 36" are to Chapter 36, Texas Water Code. All references to a section of Chapter 36 are shown as "§ 36.[section number]."

Based on current conditions, the statutory goal of controlling and preventing subsidence is not applicable to the District.

Guiding Principles. The District's guiding principles derive from its mission statement. Groundwater resources within the District are of vital importance to the residents and businesses in Bastrop and Lee counties and effectively constitute the only source of water available for most of the District. The District was created to provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater within the two counties, while complying with statutory requirements. The District believes its groundwater resources can be managed in a prudent manner through education and conservation coupled with reasonable regulation, and based on increasing quantitative understanding of available groundwater resources, recharge, and current and future demand, including real-time information on aquifer conditions developed via a network of monitoring wells.

Policy.

1. District groundwater is to be conserved, preserved, and protected and waste prevented to maintain the viability of the groundwater supply for future generations in the two counties, while complying with statutory requirements, as amended from time to time, including those applicable to permits for transport of water out-of-District, and including without limitation certain provisions of Chapter 36 which are summarized in Appendix A (which may be supplemented when appropriate).

2. To the extent consistent with statutory goals and requirements and with its DFCs, the District will attempt to manage District aquifers on a sustainable basis. The District defines sustainability as development, use, and reasonable long-term management of groundwater resources so that those resources can continue to be used by future generations.

3. The District, in cooperation with local municipalities and water supply companies, has established a monitoring well network and an aquifer water level monitoring program (the "Monitoring Well Program"), and a system for reporting water levels. The District will measure and monitor water levels to detect declines, to allow the District to consider appropriate action to avoid or minimize depletion of the water supply and to maintain or achieve water levels which are consistent with the DFCs. For instance, it may be necessary for the District to reduce the amount of groundwater that non-exempt users pump to avoid or to minimize depletion of the groundwater supply in specified areas within the District and to achieve water levels which are consistent with the DFCs.

4. This Management Plan and the District rules, as amended from time to time, will be based on the best technical advice available to the District. The District will undertake investigations of the District's groundwater resources, including through the Monitoring Well Program, and will cooperate with investigations of groundwater resources and the interaction of groundwater and surface water by TWDB, TCEQ, GMA 12 or other entities, and will make the results of such investigations available to the Board and to the public. The District recognizes that good long-term groundwater management is built on availability of high-quality data, improved understanding of groundwater flow systems, and increasingly better understanding of the interaction between groundwater and surface water. The District recognizes the uncertainties

inherent in long-term management of groundwater resources created by such factors as climate, drought, changes in exempt uses such as mining and oil and gas development, socioeconomic change and population growth, and also recognizes the uncertainties created by the geology and other characteristics of relevant aquifers. The District believes that uncertainties affecting decision-making can be reduced to some extent by reliance on high-quality data.

5. The District will treat all citizens equally. The District may exercise its discretion to consider unique situations or local conditions and the potential for adverse economic and environmental consequences, guided by this Management Plan, and such exercise of discretion shall not be construed as limiting the power and authority of the District.

6. In implementing this Management Plan, the District will seek cooperation from municipalities, water supply companies, irrigators, and other groundwater users, and will also seek to cooperate and coordinate with state and regional water planning authorities and agencies as well as the districts of GMA 12.

7. In support of its mission of conserving, protecting and preserving interests in groundwater within Bastrop and Lee counties, while addressing statutory goals and requirements, the Board may, among other actions, after notice and hearing, amend or revoke any permit for non-compliance, or reduce the groundwater production authorized by permit for the purpose of managing District groundwater resources consistent with the DFCs. The District may also enforce the terms and conditions of permits and District rules by fine and/or by enjoining the permit holder in a court of competent jurisdiction as provided by § 36.102.

The District's Board of Directors will implement this Management Plan and any necessary changes or modifications to adhere to the policy stated herein.

The rules are on the District website: <http://www.lostpineswater.org/Forms---Documents.aspx>.

Section 3. TIME PERIOD COVERED BY THE MANAGEMENT PLAN

This Management Plan was adopted September 15, 2004, revised August 10, 2010, found administratively complete by TWDB on October 25, 2010, and revised September 19, 2012. The District may review the Management Plan annually, but at least once every five years, the District will review and re-adopt its Management Plan, with or without change, and submit it to TWDB pursuant to Chapter 36.²

Section 4. GOVERNANCE

Board of Directors. The District is governed by a ten-member Board of Directors, five appointed by the Bastrop County Judge and five appointed by the Lee County Judge, qualified

² See § 36.1072.

and sworn as required by law. After the initial appointment of directors and the setting of staggered terms, each Director is appointed to a four-year term beginning in January. Thus, every second year, following the initial appointment of directors, two directors are appointed by the Bastrop County Judge and two Directors are appointed by the Lee County Judge. The succeeding second year, three Directors are appointed by the Lee County Judge and three Directors are appointed by the Bastrop County Judge.

Each year, in January, the Board selects one of its members to serve as president to preside over Board meetings and proceedings, a second member to serve as vice-president to preside over Board meetings and proceedings in the absence or recusal of the president, and a third to serve as secretary-treasurer to keep a true and correct account of all proceedings of the Board. The Board may appoint an assistant secretary to assist the secretary-treasurer. Unless a vacancy occurs, members of the Board and officers serve until their successors are appointed, qualified to hold office, and sworn in. In the event of a vacancy in any office, the Board shall select one of its members to fill out the term of office. In the absence of a General Manager, the president of the Board will serve as General Manager.

The president may establish committees for formulation of policy recommendations to the Board and may appoint the chair and membership of the committees, which may include members of the Board and/or non-board members. Committee members serve at the pleasure of the president.

The Board will hold regular meetings at least four times a year on a day and at a place that the Board may establish from time to time by Board resolution. At the request of the president, or by written request of at least three Board members, the Board may hold a special meeting. The business of the District will be conducted at regular or special Board meetings when a quorum is present. All Board meetings will be conducted in accordance with the Open Meetings Act.

Daily Operations. The Board may employ a person to be the General Manager, with full authority to manage and to operate the affairs of the District, subject only to direction provided by the Board through policies and orders adopted by the Board. The General Manager may, with Board approval, employ all persons necessary to carry out daily operations. The General Manager may delegate duties as may be necessary to efficiently and expeditiously accomplish those duties; provided that no delegation will relieve the General Manager from his or her responsibilities under the Texas Water Code, the District enabling act, District rules, or District policies, orders and permits.

The Board shall establish by resolution an official office of the District, and the office will maintain regular business hours.

Section 5. DISTRICT DFCs (DESIRED FUTURE CONDITIONS)

On August 10, 2010, the GMA-12 DFCs were adopted for the relevant aquifers, i.e., the major and minor Aquifers within the District other than the Yegua-Jackson (the Sparta, Queen City, Carrizo, Calvert Bluff, Simsboro, and Hooper Aquifers) and submitted to TWDB. The Yegua-Jackson Aquifer was considered not relevant for the District and a DFC was not established for it. See **Appendix A**. On September 8, 2010, TWDB notified GMA 12 that the GMA-12 DFC submission was administratively complete. In adopting and submitting the GMA-12 DFCs, the

District stated that in its Management Plan it would further divide the recommended DFCs by county. *Id.* The District's DFC's by county and by aquifer, are as follows:

Desired Future Conditions

Aquifer	County	District-wide DFC in 2060 (Average drawdown in feet)	DFC in 2060 (County-wide average drawdown in feet)
Sparta	Bastrop	7	7
	Lee	-	7
Queen City	Bastrop	13	10
	Lee	-	15
Carrizo	Bastrop	47	30
	Lee	-	60
Calvert Bluff	Bastrop	99	65
	Lee	-	135
Simsboro	Bastrop	237	145
	Lee	-	345
Hooper	Bastrop	129	90
	Lee	-	180

Pursuant to § 36.1071(h), the District used information from the applicable groundwater availability model (GAM) as a joint planning tool with GMA 12 for DFC development and in developing this Management Plan. The applicable GAM for the District was developed for the central parts of the Queen City, Sparta, and Carrizo-Wilcox aquifers³.

Section 6. MODELED AVAILABLE GROUNDWATER ESTIMATE

Pursuant to the 2011 amendment of § 36.1071(e)(3), TWDB provided estimates of modeled available groundwater totals for the District, based on the DFCs established by GMA 12 under § 36.108. They are presented below in Table 1.

³ 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.

