

**Lower Colorado River Authority
Water Conservation Plan Form
for Municipal Water Use by Public Water Suppliers**

Name of Applicant/Utility: Lakeway Municipal Utility District

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Lakeway, TX 78734

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Form completed by: Margaret Cathey

Title: Finance/Administration Manager

Signature: _____ Date: _____

Utility Profile

1. The Lakeway Municipal Utility District (District) is a political subdivision of the State of Texas. It was created under the auspices of the Texas Commission on Environmental Quality (formerly known as Texas Natural Resources Conservation Commission and before that Texas Water Rights Commission) in February of 1972. At the same time, a Certificate of Convenience authorized the District to provide water service to an adjacent area outside the District boundaries. This area is currently located in the City of Lakeway. An election of the voters approved the formation of the District as well as the issuance of bonds to provide funds to construct required facilities.

The District is located in the southwest corner of Travis County on the shores of Lake Travis.

The District's service area map and the CCN was included in the plan submitted in 2000 and 2006.

2. The District is approximately two square miles.

The In-District service area is 1,868 acres. The Out-of-District service area for water includes 627 acres.

3. Water Use and Customer data

Total Water Pumped (000)

<u>Month</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>3-Year Avg.</u>
January	39,415	36,550	50,214	42,060
February	43,180	38,407	44,045	41,877
March	38,231	46,649	51,964	45,615
April	55,112	45,402	63,522	54,679
May	66,737	47,597	67,704	60,679
June	96,804	48,092	81,343	75,413
July	90,278	42,594	104,445	79,106
August	86,282	67,219	124,561	92,687
September	87,532	57,463	81,859	75,618
October	73,602	64,078	64,690	67,457
November	61,526	54,933	58,172	58,210
December	<u>51,320</u>	<u>42,747</u>	<u>45,095</u>	<u>46,387</u>
Total	790,019	591,731	837,614	739,788
Avg. MGD	2,164	1,621	2,295	2,027

Total Water Sold (000) (billing is bi-monthly)

<u>Month</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>3-Year Avg.</u>
January	78,346	82,949	96,483	85,926
March	69,911	63,814	76,835	70,187
May	90,249	73,133	100,982	88,121
July	155,092	87,412	128,253	123,586
September	160,249	100,766	205,750	155,588
November	<u>118,027</u>	<u>105,480</u>	<u>111,181</u>	111,563
Total	671,874	513,554	719,484	634,971
Yrly. Water Loss	66,825	78,177	118,130	87,711

4. Population estimates and projections. The method for the calculation of current population is number of residential water accounts times 2.7 persons.

Year 2009:	10,810
Year 2015:	11,090
Year 2020:	11,370
Service Area Build-out population:	11,655

5. Estimated gallons per capita per day water used (GPCD).

2008 Population	10,808
2008 Gallons per person per day	187

6. Water supply sources

	<u>Source</u>	<u>Amount Available</u>
Surface water	Lake Travis	On demand
LCRA contract	Lake Travis	1,000 M
Hurst Creek interconnect	Lake Travis	On demand
WCID #17 interconnect	Lake Travis	On demand

7. Treatment and Distribution System

8. Design daily capacity of system. 5.56 mgd.

Treatment Plants - the District has one plant and two raw water supply barges floating on Lake Travis. The plant firm capacity follows:

W-3	5.56 Mg
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Treated Water Storage - the capacities follow:

Clearwells	0.50 Mg
Elevated	2.96 Mg

Transmission and Service Piping - approximately 80 miles of transmission and service piping varying in size from 20" to 1" in diameter are in place to connect plants to storage and to provide service to customers

9. Percent of water service area on:

centralized wastewater collection system	74 %
septic systems	26 %

10. Current average monthly wastewater volume. 13,463,000 total system gallons per mo.

11. Design capacity of wastewater system. 0.810 mgd & 0.400 mgd (1.210 mgd total)

Water Conservation Goals

1. Utility System Water loss goals:

5-Year:	Reduce by 1%
10-Year:	Reduce by 2%

2. Gallons per capita per day (gpcd) goals:

5-Year:	Reduce by 1%
10-Year:	Reduce by 2%

Water Conservation Measures

1. Metering Devices. Raw and finished water production meters are proven annually.

2. Universal Metering. All water users are metered.

A continuing customer meter proving and replacement program is in effect with obviously erring meters being checked first. Other meters are checked each month on a scheduled program. The program will replace every meter every 10 years.

3. Unaccounted-for water loss. A system wide water audit process is and will continue in effect. The audit is performed each bi-monthly billing cycle.

4. Education and Information Programs

May – Announcement to all customers on water conservation.

June - Public Service Announcement in Lake Travis View reminding users of volumetric water rates and contingency plan.

November - Annual Rate announcement.

December - Flier on general conservation tips for winter on freeze prevention.

New Customer Package - have packages of conservation materials prepared for distribution to office visitors and new customers.

5. Water Rates.

WATER RATES – In & Out of District

Monthly Base Charge:	\$19.00
Vol. Charge, per 000, ID & OD, Bi-monthly	
0 – 15,000	\$2.25
15,001 – 30,000	\$3.00
30,001 – 50,000	\$3.50
50,001 – 80,000	\$4.00
80,001 – 100,000	\$4.50
Over 100,000	\$5.00

COMMERCIAL & IRRIGATION

0 – 100,000	\$3.50
Over 100,000	\$4.50

To stimulate conservation, the District includes volumetric rates in its rate design. The District may adjust the conservation-oriented component of its rate design at any time it revises its overall rates and charges schedule.

6. Reservoir systems operations plan. Not applicable.

7. Implementation and Enforcement. The Board of Directors has approved this Plan as evidenced by the President and Secretary's signature at the end of this Plan.
8. Regional planning group. The District contracts with the LCRA for raw water. The LCRA represents our interests at the regional level.

Additional Mandatory Requirements

1. Samco, an independent leak detection company, will continue to be utilized to provide technical assistance and training in leak detection.
2. The District utilizes an Access database program to account for all water pumped and distributed. The District uses customized billing software AVR to account for all water sold in the various categories.
3. The District complies with the LCRA Wholesale Water Customer Requirement.
4. The District continually reviews the database for monitoring the effectiveness and efficiency of the water conservation plan.

Additional Conservation Strategies

1. The District Office landscape is a hill country demonstration site and we provide customer literature.
2. The District adopted the 2006 Uniform Plumbing Code and requires flow limiting fixtures.
3. The District has three separate pressure planes to prevent excessive water pressure.
4. The District reviews the water audit and trends.
5. The District requires that air conditioning condensate be directed (to a flower bed) outside the house. It may not be disposed in the wastewater collection system.

The District practices conservation by collecting and recycling 100% of all wastewater. Wastewater collected is treated and distributed to reuse customers. When reuse supply is exhausted, we provide supplemental lake water for system reliability.

6. Plumbing fixture replacement and retrofit programs – not applicable.
7. Reuse of water such as gray water and rainwater harvesting systems – not applicable.
8. Water conservation is monitored throughout the year and the plan is reviewed annually.

Recommended Landscape Conservation Measures

We encourage our customers to conserve and implement the following where feasible:

1. Landscape Irrigation
 - A. Landscape irrigation systems are not mandatory.
 - B. Landscape irrigation systems, if installed, are encouraged to include the following water conservation features:
 1. Rain and/or moisture sensors (required)
 2. Backflow prevention device installed in accordance with applicable state laws
 3. Pressure reducing valve and/or remote control valves for each station with flow control
 4. Pressure reducing valve where supply pressure exceeds 60 psi, for which pressure reducing valve installed in-line at the meter and serving house as well as irrigation system.
 5. Zoning of irrigation system based on plant water requirements.
 6. Multiple cycle controllers with an irrigation water budget feature.
 7. Minimization of overspray onto hardscapes by design, maintenance and scheduling practices. Due to overspray, subsurface drip irrigation is encouraged but not required.
 8. Low volume irrigation should be installed in areas less than 10 feet wide, such as median strips, and parking islands.
 9. Contractors installing irrigation systems should provide system design plans to the homeowner. Scheduling recommendations should be posted in or near the irrigation controller box.
2. Landscape Design
 - A. All irrigated and newly planted turf areas should have a minimum soil depth of 6 inches. Builders and owners will import soil if needed to achieve sufficient soil depth. Soil in these areas may be either native soil from the site or imported, improved soil. Improved soil will be a mix of no less than twenty percent compost blended with sand and loam. Caliche shall not be considered as soil.
 - B. Builders are encouraged to provide homeowners a conservation landscape option using only native or adapted trees, shrubs and flowers. The use of invasive plants will be avoided.
 - C. Maintain a minimum of two inches of mulch in all shrub and bed areas.

3. Other Landscape Specifications

- A. The homeowners or property owners' association documents (including declaration of covenants, articles of incorporation, bylaws, or any other document of the association which binds members of the association) shall not restrict the property owner from:
1. implementing measures promoting solid-waste composting of vegetation, including grass clippings, leaves or brush, or leaving grass clippings uncollected on grass;
 2. installing rain barrels or a rainwater harvesting system; or
 3. implementing efficient irrigation systems, including underground drip or other drip systems.
- B. The homeowners or property owners' association documents (including declaration of covenants, articles of incorporation, bylaws, or any other document of the association which binds members of the association) shall not require:
1. A defined irrigation schedule specified by the association except if that defined irrigation schedule is mandated by technical requirements of the supply.
 2. Maintenance of the landscape to a specified level that requires the property owner to irrigate his or her landscape.
 3. Installation or maintenance any specific variety or limited choice of varieties of turf grass.
 4. Installation of a minimum percentage of turf in the landscape.
- C. Encourage reuse/rain water/storm water systems to meet certain irrigation water needs, including common areas.

PASSED AND APPROVED this 13th day of May, 2009.

ATTEST:

Secretary, Board of Directors

President, Board of Directors

[SEAL]