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FINAL

January 2007 Update to the Texas Water Quality Management Plan

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Compiled and distributed by the
Water Quality Assessment Section
Water Quality Division
Texas Commission on Environmental Quality
P.O. Box 13087, MC-150
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Developed in accordance with Section 205(j)
and 208 of the Federal Clean Water Act
and applicable regulations thereto.



Kathleen Hartnett White, *Chairman*

Larry R. Soward, *Commissioner*

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Introduction

The Texas Water Quality Management Plan (WQMP) is the product of a wastewater treatment facility planning process developed and updated in accordance with provisions of Sections 205(j), 208, and 303 of the Federal Clean Water Act (CWA), as amended. The WQMP is an important part of the State's program for accomplishing its clean water goals.¹

The Texas Department of Water Resources, a predecessor agency of the Texas Commission on Environmental Quality (TCEQ), prepared the initial WQMP for waste treatment management during the late 1970s. The Clean Water Act mandates that the WQMP be updated as needed to fill information gaps and revise earlier certified and approved plans. Any updates to the plan need involve only the elements of the plan that require modification. The original plan and its subsequent updates are collectively referred to as the State of Texas Water Quality Management Plan.

The WQMP is tied to the State's water quality assessments that identify priority water quality problems. The WQMPs are used to direct planning for implementation measures that control and/or prevent water quality problems. Several elements may be contained in the WQMP, such as total maximum daily loads (TMDLs), effluent limitations of wastewater facilities, nonpoint source management controls, identification of designated management agencies, and ground water and source water protection planning. Some of these elements may be contained in separate documents which are prepared independently of the current WQMP update process, but may be referenced as needed to address planning for water quality control measures.

This document, as with previous updates², will become part of the WQMP after completion of its public participation process, certification by the TCEQ on behalf of the Governor of Texas, and approval by the Environmental Protection Agency (EPA).

The January 2007 WQMP update address the following topics:

1. Projected Effluent Limits Updates for water quality planning purposes
2. Service Area Population for Municipal Wastewater Facilities

¹A formal definition for a water quality management plan is found in 40 Code of Federal Regulations (CFR) 130.2(k).

²Fiscal Years 1980, 1981, 1982, 1983, 1984/85, 1986/88, 1989, 1990, 1991, 1992, 1993/94, 1995, 1996, 1997/98, 02/1999, 05/1999, 07/1999, 10/1999, 01/2000, 04/2000, 07/2000, 10/2000, 01/2001, 04/2001, 07/2001, 10/2001, 01/2002, 04/2002, 07/2002, 10/2002, 01/2003, 04/2003, 07/2003, 10/2003, 01/2004, 04/2004, 07/2004, 10/2004, 01/2005, 04/2005, 07/2005, 10/2005, 01/2006, 04/2006, 07/2006 and 10/2006.

The Projected Effluent Limit Updates section provides information compiled from November 1, 2006 through January 31, 2007 and is based on water quality standards, and may be used for water quality planning purposes in Texas Pollutant Discharge Elimination System (TPDES) permit actions.

The sections on the Service Area Population and Designation of Management Agencies for municipal wastewater facilities have been developed and evaluated by the TCEQ in cooperation with the Texas Water Development Board (TWDB) and regional water quality management planning agencies.

The materials presented in this document revise only the information specifically addressed in the following sections. Previously certified and approved water quality management plans remain in effect.

Projected Effluent Limit Updates

Table 1 reflects proposed effluent limits for new dischargers and preliminary revisions to original proposed effluent limits for preexisting dischargers (MGD–Million Gallons per Day, CBOD₅– 5 Day Carbonaceous Biochemical Oxygen Demand, NH₃-N– Ammonia-Nitrogen, BOD₅– 5 Day Biochemical Oxygen Demand and DO – Dissolved Oxygen).

Effluent flows indicated in Table 1 reflect future needs and do not reflect current permits for these facilities. These revisions may be useful for water quality management planning purposes. The effluent flows and constituent limits indicated in the table have been preliminarily determined to be appropriate to satisfy the stream standards for dissolved oxygen in their respective receiving waters. These volumes and effluent sets may be modified at the time of permit action. These limits are based on water quality standards effective at the time of the TCEQ production of this update. Water Quality Standards are subject to revision on a triennial basis.

Table 1. Projected Effluent Limit Updates

State Permit Number	Segment Number	EPA ID Number	Permittee Name/ County	Flow (MGD)	CBOD ₅ (mg/L)	CBOD ₅ (lbs/day)	NH ₃ -N (mg/L)	NH ₃ -N (lbs/day)	BOD ₅ (mg/L)	BOD ₅ (lbs/day)	DO (mg/L)	Months/ Comments
10221-001	0819	0047431	North Texas MWD Dallas	41.0	7	2,393.58	3	1,025.82			6	
10518-001	1006	0021261	Sunbelt FWSD Harris	0.45	7	26.27	3	11.26			6	
10746-001	1901	0027774	City of Kenedy Karnes	1.5	10	125.10	3	37.53			4	
11273-001	1017	0026352	Harris County MUD No. 6 Harris	0.75	10	62.55	3	18.77			4	Apr.-Oct.
				0.75	10	62.55	5	31.28			4	Nov.-Mar.
11290-001	1014	0046621	Jackrabbit Road PUD Harris	5.1	10	425.34	2	85.07			6	Apr.-Oct.
				5.1	10	425.34	3	127.60			4	Nov.-Mar.
11388-001	1001	0054151	Crosby MUD Harris	0.99	10	62.55	3	18.77			6	Apr.-Oct.
				0.99	10	62.55	5	31.28			6	Nov.-Mar.
11395-001	1004	0022055	Montgomery County MUD No. 15 Montgomery	0.90	10	75.06	3	22.52			6	
11538-001	1017	0057029	White Oak Bayou Joint Powers Board Harris	4.5	10	375.30	3	112.59			4	Apr.-Oct.
				4.5	10	375.30	5	187.65			4	Nov.-Mar.
11836-001	1014	0091626	Harris County MUD No. 149 Harris	0.645	10	53.79	2	10.76			6	Apr.-Oct.
				0.645	10	53.79	3	16.14			4	Nov.-Mar.
11883-001	1014	0071625	Castlewood MUD Harris	2.0	10	166.80	2	33.36			6	Apr.-Oct.
				2.0	10	166.80	3	50.04			4	Nov.-Mar.

State Permit Number	Segment Number	EPA ID Number	Permittee Name/ County	Flow (MGD)	CBOD ₅ (mg/L)	CBOD ₅ (lbs/day)	NH ₃ -N (mg/L)	NH ₃ -N (lbs/day)	BOD ₅ (mg/L)	BOD ₅ (lbs/day)	DO (mg/L)	Months/ Comments
11906-001	1014	0074896	Harris County MUD No. 157 Harris	2.3	10	191.82	2	38.36			6	Apr.-Oct.
				2.3	10	191.82	3	57.55			4	Nov.-Mar.
11935-001	1014	0075981	Northwest Harris County MUD No. 16 Harris	0.99	10	82.57	2	16.51			6	Apr.-Oct.
				0.99	10	82.57	3	24.77			6	Nov.-Mar.
12110-001	1014	0079201	Katy ISD Harris	0.10	7	5.84	2	1.67			6	Apr.-Oct.
				0.10	10	8.34	3	2.50			4	Nov.-Mar.
12140-001	1014	0079618	Harris County MUD No. 7 Harris	0.50	7	29.19	2	8.34			6	
12247-001	1014	0084468	West Harris County MUD No. 17 Harris	0.275	10	22.94	2	4.59			6	Apr.-Oct.
				0.275	10	22.94	3	6.88			6	Nov.-Mar.
12516-001	1014	0089907	West Houston Airport Corp. Harris	0.015	10	1.25	2	0.25			6	
12928-001	1006	0095451	Harris County MUD No. 285 Harris	0.60	10	50.04	3	15.01			4	Apr.-Oct.
				0.60	10	50.04	5	25.02			4	Nov.-Mar.
13021-001	1014	0096911	Big Oaks MUD Fort Bend	0.70	7	40.87	2	11.68			6	Apr.-Oct.
				0.70	10	58.38	3	17.51			4	Nov.-Mar.
13328-001	1014	0101371	Remington MUD No. 1 Harris	1.1	5	45.87	2	18.35			4	Apr.-Oct.
				1.1	5	45.87	3	27.52			4	Nov.-Mar.
13770-001	1006	0124257	William Donald Smith Harris	0.06	10	5.00	3	1.50			4	Apr.-Oct.
				0.06	10	5.00	5	2.50			4	Nov.-Mar.

State Permit Number	Segment Number	EPA ID Number	Permittee Name/ County	Flow (MGD)	CBOD ₅ (mg/L)	CBOD ₅ (lbs/day)	NH ₃ -N (mg/L)	NH ₃ -N (lbs/day)	BOD ₅ (mg/L)	BOD ₅ (lbs/day)	DO (mg/L)	Months/ Comments
13981-001	0814	0020567	Avalon Water Supply and Sewer Service Corp. Ellis	0.025					20	4.17	4	
14362-001	1014	0125164	Harris County MUD No. 287 Harris	0.90	7	52.54	2	15.01			6	Apr.-Oct.
				0.90	10	75.06	2	15.01			6	Nov.-Mar.
14372-003	0823	0129135	City of Sanger Denton	2	10	166.80	2	33.36			6	
14519-001	1014	0126527	Fort Bend County MUD No. 57 Fort Bend	0.90	10	75.06	2	15.01			6	
14604-001	1004	0127752	Montgomery County MUD No. 99 Montgomery	1.5	10	125.10	3	37.53			6	
14693-001	0610	0066753	Gordon Dean Rogers Angelina	0.0073					10	0.61	5	
14715-001	1245	0128791	Fort Bend County MUD No. 134 Fort Bend	0.300	7	17.51	2	5.00			4	
14734-001	2422	0128988	Trinity Bay Conservation District Chambers	0.100					30	25.02	4	
14738-001	1202	0129046	McMillian Investments, Ltd. Waller	0.193	10	16.10	3	4.83			4	
14739-001	1202	0129054	Marhaba Partners, L.P. Waller	1.012	10	84.40	3	25.32			6	

State Permit Number	Segment Number	EPA ID Number	Permittee Name/ County	Flow (MGD)	CBOD ₅ (mg/L)	CBOD ₅ (lbs/day)	NH ₃ -N (mg/L)	NH ₃ -N (lbs/day)	BOD ₅ (mg/L)	BOD ₅ (lbs/day)	DO (mg/L)	Months/ Comments
14746-001	0505	0129127	James Lewis Allen Harrison	0.019					20	3.17	2	
14753-001	0830	0129089	Julie Ann Thames Johnson	0.01					10	0.83	4	
14754-001	1205	0129151	Aqua Utilities, Inc. Hood	0.15	10	12.51	3	3.75			4	
14755-001	1004	0129160	Quadvest, L.P. Montgomery	0.15	10	12.51	3	3.75			6	
14757-001	1202	0129194	Fort Bend County MUD No. 5 Fort Bend	0.50	10	41.70	3	12.51			4	
14758-001	1245	0129216	Pederson 631, L.P. Fort Bend	0.60	10	50.04	2	10.01			6	
14759-001	1009	0129232	Northside Christian Church Harris	0.06	10	5.00	3	1.50			4	
14761-001	0203	0129241	Double Diamond Utilities, Co. Grayson	0.05					10	4.17	4	

Planning Information Summary

The Water Quality and Monitoring Operations Divisions of the TCEQ coordinated with the TWDB and regional planning agencies to compile the wastewater facility information in this section. Domestic facility financing decisions under the State Revolving Loan Fund (SRF) program must be consistent with the certified and approved WQMP.

The purpose of this section is to present data reflecting facility planning needs, including previous water quality management plan needs requiring revision. Data are also presented to update other plan information for the TWDB's SRF projects. Table 2 contains the updated information. The table is organized in alphabetical order and includes the following 10 categories of information:

1. Planning Area - Area for which facility needs are proposed. The facility planning areas are subject to change during the facility planning process and any such changes will be documented in a later water quality management plan update. All planning areas listed are also designated management agencies (DMAs) unless otherwise noted in the "Comments" column.
2. Service Area - Area that receives the provided wastewater service.
3. Needs - A "T" indicates a need for either initial construction of a wastewater treatment plant, additional treatment capacity, or the upgrading of a wastewater treatment plant to meet existing or more stringent effluent requirements. A "C" indicates a need for improvements to, expansion of, rehabilitation of, or the initial construction of a wastewater collection system in the facility planning area. "T/C" indicates a need for both treatment and collection system facilities. More detailed facility planning conducted during a construction project may define additional needs and those needs will be reflected in a future update to the WQMP.
4. Needs Year - The year in which the needs were identified for the planning area.
5. Basin Name - The river basin or designated planning area where the entity is located. The seven water quality management planning areas designated by the Governor are Corpus Christi [Coastal Bend Council of Governments (CBCOG)], Killeen-Temple [Central Texas Council of Governments (CTCOG)], Texarkana [Ark-Tex Council of Governments (ATCOG)], Southeast Texas [South East Texas Regional Planning Council (SETRPC)], Lower Rio Grande Valley [Lower Rio Grande Valley Development Council (LRGVDC)], Dallas-Fort Worth [North Central Texas Council of Governments (NCTCOG)] and Houston [Houston-Galveston Area Council (H-GAC)]. Basin names are shown for agencies outside one of these areas.

6. Segment - The classified stream segment or tributary into which any recommended facility may discharge existing or projected wastewater. In the case of no-discharge facilities, this is the classified stream segment drainage area in which the facilities are located.
7. County - The county in which the facility planning area is located.
8. Date - The date the planning information was reviewed by the TCEQ.
9. Comments - Additional explanation or other information concerning the facility planning area.
10. Population - The base year and projected populations for each facility planning area. Population projections presented are consistent with the latest available statewide population projections or represent the most current information obtained from facility planning analyses.

The facility information in this section is intended to be utilized in the preparation of facility plans and the subsequent design and construction of wastewater facilities. Design capacities of the treatment and collection systems will be based upon the population projections contained in this document plus any additional needed capacity established for commercial/industrial flows and documented infiltration/inflow volumes (treatment or rehabilitation). The probable needs shown under the "Needs" heading are preliminary findings; specific needs for an area shall be as established in the completed and certified detailed engineering studies conducted during facility planning under the SRF and other state loan programs.

Specific effluent quality for any wastewater discharges resulting from any of the facilities recommended in this document will be in accordance with the rule on the Texas Surface Water Quality Standards in effect at the time of permit issuance for the specific facility.

Table 2. Service Area Population Updates to the Water Quality Management Plan

Planning Agency	Service Area	Needs	Needs Year	Basin Name	Segment	County	WQMP Date	Comments	Year	Population
City of Groesbeck	City Limits	T/C	1978	Brazos River	1253	Limestone	01/25/07	Improvements to sludge handling, dewatering facilities and lift station.	2005	4,797
									2010	5,303
									2020	6,595
									2030	7,299
City of Palestine	City Limits	T/C	2005	Trinity River	0806	Anderson	01/05/07	Improvements to the collection system.	2000	17,598
									2010	20,025
									2020	24,410
									2025	26,951
City of Sonora	City Limits	T/C	1980	Rio Grande	2309	Sutton	01/19/07	Improvements to the collection system.	2005	3,068
									2010	3,212
									2020	3,397
									2030	3,428
City of Trinidad	City Limits	T/C	1978	Trinity River	0804	Henderson	01/05/07	Improvements to the collection system.	2005	1,091
									2010	1,101
									2020	1,112
									2025	1,145
City of Winters	City Limits	T/C	1978	Colorado River	1426	Runnels	01/19/07	Removing sludge and maintenance of the lagoons.	2005	2,916
									2010	2,951
									2020	3,056
									2030	3,136