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April 2014 Update to the Texas Water Quality Management Plan

Prepared by the: Office of Water, Water Quality Division

April 2014 Update to the Texas Water Quality Management Plan

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WQMP updates are also available on the TCEQ web site at:

 $< www.tceq.texas.gov/waterquality/assessment/WQmanagement_updates.html>$

Developed in accordance with Sections 205(j), 208, and 303 of the Federal Clean Water Act and applicable regulations thereto.



Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director

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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 effluent limitations of wastewater facilities, total maximum daily loads (TMDLs), 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 United States Environmental Protection Agency (EPA).

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.

The April 2014 WQMP update addresses the following topics:

- 1. Projected Effluent Limits Updates for water quality planning purposes
- 2. Service Area Population for Municipal Wastewater Facilities
- 3. Designation of Management Agencies for Municipal Wastewater Facilities
- 4. Total Maximum Daily Load Updates

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

² Fiscal Years 1974, 1975, 1977, 1978, 1979, 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, 01/2005, 10/2005, 10/2005, 01/2006, 04/2006, 07/2006, 10/2006, 01/2007, 04/2007, 07/2007, 01/2008, 04/2008, 07/2008, 10/2008, 01/2009, 04/2009, 07/2009, 10/2009, 01/2010, 04/2010, 07/2010, 10/2010, 01/2011, 04/2011, 07/2011, 10/2011, BPUB 2011, 01/2012, 04/2012, 07/2012, 10/2012, 01/2013, 04/2013, 07/2013, 10/2013, and 01/2014.

The Projected Effluent Limit Update section provides information compiled from February 1, 2014 through April 30, 2014, 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 Service Area Population and Designation of Management Agencies sections for municipal wastewater facilities has been developed and evaluated by the TCEQ in cooperation with the Texas Water Development Board (TWDB) and regional water quality management planning agencies.

The Total Maximum Daily Load (TMDL) Update section provides information on proposed waste load allocations for new dischargers and revisions to existing TMDLs and has been developed by the Water Quality Planning Division, TMDL Program.

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, $CBOD_5 - 5$ Day Carbonaceous Biochemical Oxygen Demand, NH_3-N – Ammonia-Nitrogen, $BOD_5 - 5$ 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 flow volumes and effluent sets may be modified at the time of permit action. These limits are based on water quality standards (WQS) effective at the time of the TCEQ production of this update. WQS are subject to revision on a triennial basis.

Table 1.	Projected	Effluent	Limit Updates
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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)	NH3-N (lbs/day)	BOD ₅ (mg/L)	BOD ₅ (lbs/day)	DO (mg/L)	Months/ Comments
			City of Lubbock		5	250.20	2	100.08			6	July-Oct
10353-011	1241	TX0135054	Lubbock	6.0	10	500.40	2	100.08			6	Nov-Apr
				0.245	5	250.20	1.7	85.07			6	May-June
10454-001	0211	TX0022306	City of Henrietta	0.245	10	20.43	3	0.15			4	Outrail 001
			Ciay	0.245	10	20.43	3	6.13			4	Outfall 002
10509-001	0212	TX0047686	City of Wichita Falls Clay	16.0	5	667.20	1	133.44			6	Outfall 002
11970-001	1008	TX0076538	Montgomery County MUD No. 19 Montgomery	0.79	10	65.89	3	19.77			4	
12716-001	1006	TX0092991	Harris County MUD No. 285 Harris	1.5	10	125.10	2	25.02			6	
12834-001	1014	TX009/307	Harris County MUD	0.49	7	28.61	2	8.17			6	Outfall 001
12054-001	1014	170074307	Harris	1.6	7	93.41	2	26.69			6	Outfall 002
14222-001	1108	TX0123633	Brazoria County MUD No. 21 Brazoria	1.2	10	100.08	3	30.02			6	
14259-001	0101	TX0053961	City of Canadian Hemphill	0.44	30	110.09	6	22.02			4	
14345-001	0610	TX0134449	Woden ISD Nacogdoches	0.016					20	2.67	2	MOA
14455-001	1014	TX0126004	Fort Bend County MUD No. 146 Fort Bend	1.2	10	100.08	2	20.02			6	
14659-002	1209	TX0135127	Leon ISD Leon	0.02					10	1.67	4	MOA

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
14711-001	1015	TX0128368	Quadvest L.P. Montgomery	0.50	10	41.70	3	12.51			4	
15218-001	1009	TX0135119	Ryland Homes of Texas, Inc. Harris	0.24	10	20.02	3	6.00			6	

Planning Information Summary

The Water Quality Planning Division 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 Service area population information. The table is organized in alphabetical order and includes the following 10 categories of information:

- 1. <u>*Planning Area*</u> 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. <u>Service Area</u> Area that receives the provided wastewater service.
- 3. <u>Needs</u> 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. <u>Needs Year</u> The year in which the needs were identified for the planning area.
- 5. <u>Basin Name</u> 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. <u>Segment</u> 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. <u>*County*</u> The county in which the facility planning area is located.
- 8. <u>Date</u> The date the planning information was reviewed by the TCEQ.

- 9. <u>*Comments*</u> Additional explanation or other information concerning the facility planning area.
- <u>Population</u> 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

Planning Agency	Service Area	Needs	Needs Year	Basin Name / COG	Segment	County	WQMP Date	Comments	Year	Population
Greater Texoma Utility Authority City of				Red River	0202		Reconstruct the plant's		2010	41,347
	City of Sherman	TIC	2014			Grayson	ayson 4/15/2014	sensors and control	2020	45,812
		1/C	2014					elements to upgrade the 10yr old UV disinfection system.	2030	50,940
									2040	56,025
		T/C		San Antonio River	1903	Bexar	2/5/2014	Rehabilitate sewer mains	2010	1,631,935
San Antonio			2014					by televised inspection to	2020	1,857,745
Water System	City of San Antonio		2014					be in very poor condition.	2030	2,059,112
									2040	2,222,887

Designated Management Agencies

In order to be designated as a management agency for wastewater collection or treatment, an entity must demonstrate the legal, institutional, managerial and financial capability necessary to carry out the entity's responsibilities in accordance with Section 208 (c) of the Clean Water Act (see below list of requirements). Before an entity can apply for a state revolving fund loan, it must be recommended for designation as the management agency in the approved WQMP. Designation as a management agency does not require the designated entity to provide wastewater services, but enables it to apply for grants and loans to provide the services. The facilities listed in Table 3 have submitted Designated Management Agencies (DMA) resolutions to the TCEQ. The TCEQ submits this DMA information to the EPA for approval as an update to the WQMP.

Section 208 (c) (2) Requirements for Management Agency:

208(c)(2)(A): to carry out portions of an area-wide waste treatment plan.
208(c)(2)(B): to manage waste treatment works.
208(c)(2)(C): directly or by contract to design and construct new works.
208(c)(2)(D): to accept and utilize grants.
208(c)(2)(E): to raise revenues, including assessment of waste treatment charges.
208(c)(2)(F): to incur short and long term indebtedness.
208(c)(2)(G): to assure community pays proportionate cost.
208(c)(2)(H): to refuse to receive waste from non-compliant dischargers.
208(c)(2)(I): to accept for treatment industrial wastes.

Planning Agency	Service Area	DMA Needs	DMA Date
City of San Antonio	San Antonio Water System	T/C	8/10/2013
City of Sherman	Greater Texoma Utility Authority	T/C	12/16/2013

 Table 3. Designated Management Agencies

Total Maximum Daily Load Updates

The Total Maximum Daily Load (TMDL) Program works to improve water quality in impaired or threatened waters bodies in Texas. The program is authorized by and created to fulfill the requirements of Section 303(d) of the federal Clean Water Act.

The goal of a TMDL is to restore the full use of a water body that has limited quality in relation to one or more of its uses. The TMDL defines an environmental target and based on that target, the State develops an implementation plan with waste load allocations for point source dischargers to mitigate anthropogenic (human-caused) sources of pollution within the watershed and restore full use of the water body.

The development of TMDLs is a process of intensive data collection and analysis. After adoption by the TCEQ, TMDLs are submitted to the EPA for review and approval.

The attached appendixes may reflect proposed waste load allocations for new dischargers and revisions to TMDLs. To be consistent, updates will be provided in the same units of measure used in the original TMDL document. Also note that for bacteria TMDLs, loads may be expressed in counts for day, organisms per day, colony forming units per day, or similar expressions. These typically reflect different lab methods, but for the purposes of the TMDL program, these terms are considered synonymous.

Appendix I. Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries For Segment Numbers 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E

TMDL Updates to the Water Quality Management Plan (WQMP): Buffalo and Whiteoak Bayous and Tributaries (Segments 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E)

The document *Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and White-oak Bayous and Tributaries For Segment Numbers 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E was adopted by the TCEQ on 04/08/09 and approved by EPA on 06/11/09, and became an update to the state's Water Quality Management Plan (WQMP). Nine subsequent WQMP updates prior to this one have updated the list of individual waste load allocations (WLAs) found in the original TMDL document. Additionally, an addendum to the original TMDL was submitted through the April 2013 WQMP update. This addendum added one new assessment unit (AU) to the original TMDL project.*

The purpose of this update is to make the following changes to the TMDL, presented in Table 1:

- update the WLA for one facility that has increased its permitted discharge; and
- update the WLA for one permit that will have two separate outfalls during the interim phase, but at the final phase will only have one combined outfall, with a higher discharge than the two separate outfalls had in total before the amendment.

The changes reflected in this update resulted in the shifting of allocations between the sum of the individual WLAs and the allowance for future growth (AFG) in two AUs. This was originally presented in Table 53 in the TMDL document, and the affected AUs are included here as Table 2.

In Table 54 of the TMDL, the WLAs for permitted facilities are the sum of the individual WLAs and the allowance for future growth within each assessment unit. Therefore, these overall numbers did not change, and Table 54 of the TMDL remains the same.

State Permit Number	Outfall	EPA Permit Number	Segment Number	Permittee Name	Flow (MGD)	Waste Load Allocation (WLA) - <i>E. coli</i> in Billion MPN/day	TMDL Comments
12834-001	001	TX0094307	1014A_01	HARRIS COUNTY MUD NO 167	N/A	N/A	Discharge being combined with Outfall 002 (see below)
12834-001	002	TX0094307	1014A_01	HARRIS COUNTY MUD NO 167	1.6	3.816	Final Phase - Combined discharge for Outfalls 001 and 002, now routed through 002 only; total flow increased to 1.6 MGD. (Interim phase - Outfalls 001 and 002 each permitted at 0.49 MGD.)
14455-001	001	TX0126004	1014B_01	FORT BEND COUNTY MUD NO 146	1.2	2.862	Increased flow

Table 1 – Change to Individual Waste Load Allocation (Updates Table 45, pp. 99-103 in the TMDL document.)

Table 2 - E. coli TMDL Summary Calculation (Updates Table 53, pp. 118-119 in the TMDL document.)

Assess- sess- ment Unit	TMDL (Billion MPN/day)	WLA _{WWTF} (Billion MPN/day)	WLA ^{StormWater} (Billion MPN/day)	LA (Billion MPN/day)	MOS (Billion MPN/day)	Upstream Load (Billion MPN/day)	Future Growth (Billion MPN/day)
1014A_01	195.04	27.12	141.2	15.69	0	0	11.03
1014B_01	626.91	90.27	482.44	38.6	0	0	15.60

Appendix II. Eight Total Maximum Daily Loads for Indicator Bacteria in Greens Bayou Above Tidal and Tributaries For Segment Numbers 1016, 1016A, 1016B, 1016C, and 1016D

TMDL Updates to the WQMP: Eight Total Maximum Daily Loads for Indicator Bacteria in Greens Bayou Above Tidal and Tributaries (Segments 1016, 1016A, 1016B, 1016C, and 1016D)

The document *Eight Total Maximum Daily Loads for Indicator Bacteria in Greens Bayou Above Tidal and Tributaries: Segments 1016, 1016A, 1016B, 1016C, and 1016D* was adopted by the TCEQ on 06/02/10 and approved by EPA on 08/12/10, and became an update to the state's Water Quality Management Plan (WQMP). It has had five subsequent WQMP updates prior to this one that provided individual Waste Load Allocations (WLAs) for permitted facilities.

The purpose of this update is to make the following change to the TMDL, presented in Table 1:

• remove two permits that have expired or canceled.

The changes reflected in this update resulted in the shifting of allocations between the sum of the individual WLAs and the allowance for future growth (AFG) in two assessment units (AUs). This was originally presented in Table 17 in the TMDL document, and the two affected AUs are included here as Table 2.

In Table 18 of the TMDL, the WLAs for permitted facilities are the sum of the individual WLAs and the allowance for future growth within each assessment unit. Therefore, these overall numbers did not change, and Table 18 of the TMDL remains the same.

State Permit Number	Outfall	EPA Permit Number	Segment Number	Permittee Name	Flow (MGD)	Waste Load Allo- cation (WLA) – <i>E. coli</i> in Billion MPN/day	TMDL Comments
10785-001	001	TX0021199	1016_02	SEQUOIA ID	N/A	N/A	Permit canceled
14703-001	001	TX0128694	1016_03	FRM MRA HOLDINGS 1 LTD	N/A	N/A	Permit expired

Table 1 - Change to Individual Waste Load Allocation (Updates Table 15, pp. 39-42 in the TMDL document.)

Table 2 - E. coli TMDL Summary Calculation (Updates Table 17, p. 46 in the TMDL document.)

Assess- sess- ment Unit	Sampling Location	Stream Name	TMDL (Billion MPN/ day)	WLA _{WWTF} (Billion MPN/ day)	WLA ^{StormWater} (Billion MPN/ day)	LA (Billion MPN/ day)	MOS (Billion MPN/ day)	Future Growth (Billion MPN/ day)
1016_02	11371	Greens Bayou Above Tidal	1,020	107	789	0	51.2	72.8
1016_03	11369	Greens Bayou Above Tidal	1,780	194	1,050	231	89.0	216.0

<u>Appendix III.</u> Fifteen Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston For Segment Numbers 1004E, 1008, 1008H, 1009, 1009C, 1009D, 1009E, 1010, and 1011

TMDL Updates to the Water Quality Management Plan (WQMP): Watersheds Upstream of Lake Houston (1004E, 1008, 1008H, 1009, 1009C, 1009D, 1009E, 1010, and 1011)

The document *Fifteen Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston For Segment Numbers 1004E, 1008, 1008H, 1009, 1009C, 1009D, 1009E, 1010, and 1011* was adopted by the TCEQ on 04/06/11 and approved by EPA on 06/29/11, and became an update to the state's Water Quality Management Plan (WQMP). Nine subsequent WQMP updates prior to this one have updated the list of individual waste load allocations (WLAs) found in the original TMDL document. Additionally, an addendum to the original TMDL was submitted through the October 2013 WQMP update. This addendum added six new assessment units (AUs) to the original TMDL project.

The purpose of this update is to make the following changes to the TMDL, presented in Tables 1 and 3:

- update the WLA for one facility that has increased its permitted discharge,
- update the information for a new permit that replaces an old permit, and
- remove two expired/canceled permits from the list.

The changes reflected in this update resulted in the shifting of allocations between the sum of the individual WLAs and the allowance for future growth (AFG) in four AUs. This was originally presented in Table 18 in the original TMDL document, and the four affected AUs are included here as Table 2.

In Table 19 of the original TMDL, the WLAs for permitted facilities are the sum of the individual WLAs and the allowance for future growth within each assessment unit. Therefore, these overall numbers did not change, and Table 19 of the TMDL remains the same.

State Permit Number	Outfall	EPA Permit Number	Segment Number	Permittee Name	Flow (MGD)	Waste Load Allocation (WLA) – <i>E. coli</i> in Billion MPN/day	TMDL Comments
11970-001	001	TX0076538	1008_04	MONTGOMERY COUNTY MUD #19	0.79	1.88	Increased flow
15218-001	001	TX0135119	1009E_01	RYLAND HOMES OF TEXAS, INC	0.24	0.57	Replaces permit 15140-001 TX0134767
13942-001	001	TX0117633	1008H_01	INLINE UTILITIES, LLC	N/A	N/A	Permit expired
11143-001	001	TX0082511	1011_01*	SPLENDORA ISD	N/A	N/A	Permit canceled

Table 1 - Changes to Individual Waste Load Allocations and Permittee Names (Updates Table 16, pp. 49-56 in the TMDL document.)

*Upstream contributor to listed AU (1011_02)

Table 2 - E. coli TMDL Summary Calculations for Lake Houston Assessment Units (Updates Table 18, pp. 61 in the TMDL document.)

Assessment Unit	Sampling Location	Stream Name	TMDL (Billion MPN/day)	MDLWLA WLA WWTFWLA StormWaterillion(BillionN/day)MPN/day)		LA (Billion MPN/day)	MOS (Billion MPN/day)	Future Growth (Billion MPN/day)
1008_03	11313	Spring Creek	1420	91.97	141	1050	70.9	63.7
1008_04	11312	Spring Creek	1510	127.61	146	1090	75.7	76.4
1008H_01	11185	Willow Creek	166	14.11	14.9	104	8.28	24.2
1011_02	17746	Peach Creek	422	16.98	0	383	21.1	0.385

In addition, Table 3 below provides updates to Table 11 found in the October 2013 addendum to this TMDL project (*Addendum One to Fifteen Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston: Six Additional Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston For Segments 1008B, 1008C, 1008E, and 1011 Assessment Units 1008B_01, 1008B_02, 1008C _01, 1008E_01, and 1011_01)*. One of the permits has been canceled since the completion of that addendum.

Table 4 below provides updates to Table 12 found in the October 2013 addendum to this TMDL project. The addendum added six AUs that were not included in the original TMDL. Five of these (1008B_01, 1008B_02, 1008C_01, 1008C_02, and 1008E_01) were lumped together as contributing loading to 1008_03 and 1008_04 in the original TMDL. The sixth additional AU (1011_01) was treated as an upstream contributing load to 1011_02 in the original TMDL. A new facility (15145-001/ TX0134805) that discharges to 1011_01 came online, affecting the loadings of both 1011_02 as well as the original TMDL AU 1011_01. This was covered in a previous WQMP update. In this case, the loading from this facility exceeds the allowance for future growth (AFG) indicated in the TMDL addendum. Following protocols established in earlier WQMP updates, additional AFG

loading (11.92 billion MPN/day) is effectively being "borrowed" from the downstream AU, 1011_02. The canceled permit described in Table 3 also affects the TMDL equation for 1011_01.

Table 3– Changes to Individual	Waste Load Allocations and Permittee	Names (Updates Table 11,	p. 23 in the TMDL Addendum document.)
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State Permit Number	Outfall	EPA Permit Number	Segment Number	Permittee Name	Flow (MGD)	Waste Load Allo- cation (WLA) - <i>E.</i> <i>coli</i> in Billion MPN/day	TMDL Comments	
11143-001	001	TX0082511	1011_01	SPLENDORA ISD	N/A	N/A	Permit canceled	

Table 4– E. coli TMDL Summary for Impaired AUs of the Addendum (Updates Table 12, p. 26 in the TMDL Addendum document.) Loads are in billion MPN/day.

AU	Stream Name	TMDL	MOS	WLA _{WWTF}	WLA _{SW}	LA _{AU}	LA _{RES}	LA _{TOTAL}	Future Growth
1011_01	Peach Creek	214.1	10.7	12.73*	3.05	198.1	0	198.1	1.43 (-10.49)*

*Since the development of the addendum, a new facility (15145-001/TX0134805) has been added to the watershed of 1011_01. It exceeds the AFG for this AU, but additional capacity is available in the downstream AU (1011_02), and is effectively being borrowed from it, leaving the 1.33 billion MPN/day for AFG from the original equation in the addendum. This "borrowing" is shown in Table 2 above. The canceled permit in this update added a small amount back to the future growth component of this AU. (To make the numbers add up to the TMDL for this AU in Table 4, use an AFG of -10.49 billion MPN/day. Again, this indicates future loading borrowed from downstream.)

In Table 13 of the TMDL addendum, the WLAs for permitted facilities are the sum of the individual WLAs and the allowance for future growth within each assessment unit. Therefore, these overall numbers did not change, and Table 13 of the TMDL remains the same.