

Executive Summary

2016 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d)

(August 6, 2019)

Background

The Texas Commission on Environmental Quality (TCEQ) in keeping with its mission to protect the state's natural resources regularly monitors the condition of the state's surface waters and assesses water quality. The *Texas Integrated Report for Clean Water Act, Sections 305(b) and 303(d)* is a statewide report on the status of state surface waters and is prepared and submitted to the U.S. Environmental Protection Agency (EPA) every two years. The report is also published on the TCEQ Web site.

The report describes the condition of the surface water bodies of the state that were evaluated for the given assessment period. The data are gathered by many different organizations that all operate according to approved quality assurance guidelines and sample collection procedures. The quality of waters described in the Integrated Report represents a periodic snapshot of conditions over 7-10 years.

Requirements for the Integrated Report are codified in the Federal Clean Water Act, Sections 305(b) and 303(d). Further requirements are set out in state law in Chapter 26 of the Texas Water Code, Title 30 of the Texas Administrative Code (30 TAC), and guidance established by the TCEQ.

The guidance used to prepare the Integrated Report is based on a set of methods that apply the Texas Surface Water Quality Standards (30 TAC §307) to ambient water quality data. These methods are developed by the TCEQ with the advice of a diverse group of stakeholders, and are detailed in the *Guidance for Assessing and Reporting Surface Water Quality in Texas*.

TCEQ will accept public comment on the 2016 Integrated Report from May 4th, 2018 through June 5th, 2018. Following review of the documentation, the Commission adopts the draft report and submits the information to EPA for approval. Summaries of the comments and the TCEQ's responses will be included with the submittal of the Integrated Report and available on the Agency's website.

Focus for the 2016 Assessment

The TCEQ has prepared a comprehensive assessment in 2016 by evaluating 1,453 water bodies (1,071 of these water bodies had sufficient data to provide an evaluation of the use attainment status). The Commission relied on cooperators such as, local, state, or federal agencies, and water program staff who provided additional information for this assessment. The TCEQ included data collected during the most recent seven-year period (December 1, 2007 to November 30, 2014). If needed, up to ten years of data were included to attain a minimum number of samples for assessment.

Categories Indicate Water Quality Status

The Integrated Report describes the water quality status of Texas surface water management strategies to the public, EPA, and internal agency programs. The five-part categorization of waters (see table below) is an important tool for water quality management throughout the State. Within this framework, higher category numbers correspond to the increased levels of effort required to manage water quality.

Water bodies in Category 1 are meeting all their uses, and simply require routine monitoring and preventive action. Water bodies identified in Category 5, called the 303(d) List, represent situations where water quality criteria are not attained and water quality management actions are needed to address the issue. Alternatively, these could also represent situations where water quality standards revisions may be needed in a specific area to better reflect ambient water quality conditions.

Categories included in the Texas Integrated Report

Category	Definition
1	Attaining the water quality standard and no use is threatened.
2	Attaining some of the designated uses; no use is threatened; and insufficient or no data and information are available to determine if the remaining uses are attained or threatened.
3	Insufficient or no data and information to determine if any designated use is attained. Many of these water bodies are intermittent streams and small reservoirs.
4	Standard is not supported or is threatened for one or more designated uses but does not require the development of a Total Maximum Daily Load (TMDL). All TMDLs have been completed and approved by EPA. Other control requirements are reasonably expected to result in the attainment of all standards. Nonattainment is shown to be caused by pollution , not by pollutants and that the water quality conditions cannot be changed by the allocation and control of pollutants through the TMDL process.
5	The water body does not meet applicable water quality standards or is threatened for one or more designated uses by one or more pollutants. TMDLs are underway, scheduled, or will be scheduled for one or more parameters. A review of the standards for one or more parameters will be conducted before a management strategy is selected, including a possible revision to the water quality standards. Additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected.

Each water body is assigned uses and criteria (or parameters) consistent with the Texas Water Quality Standards that are evaluated against ambient water quality data for determining support or attainment of the use. When included in Categories 4 or 5, the combination of the water body, use, and the pollutant or condition of concern is called an *impairment*. For example, the concentration of dissolved oxygen is one of the criteria used to determine the support of the aquatic life use. If the assessment of dissolved oxygen data in a specific water body indicates that concentrations are lower than the assigned criteria, this would represent a single impairment of the aquatic life use.

Summary of the 2016 Integrated Report

The 2016 Integrated Report includes a comprehensive water quality evaluation of 1,453 classified and unclassified water bodies throughout the State (freshwater streams, reservoirs, tidal streams, bays, estuaries, and the Gulf of Mexico). All readily available data of known quality was evaluated.

The attachment summarizes the results for the impaired water bodies identified in Category 5

(303(d) List) of the 2016 Integrated Report. The number of impairments decreased in 2016 by 15 as compared to 2014. A total of 574 impairments are now included in Category 5. Recreational use impairments due to elevated bacteria represented the highest percentage (39%) included in Category 5. Dissolved oxygen and organics in fish tissue had the next highest percentages (17% and 19% respectively).

For More Information

The Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d) is compiled and published on the TCEQ Web site page at:

http://www.tceq.texas.gov/waterquality/assessment/305_303.html

The water quality management program and role of the Integrated Report in agency planning is described in the publication “Preserving and Improving Water Quality”, available on the TCEQ Web site at:

https://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/08twqi/pollution_control.pdf

Attachment

Summary 2016 Texas Integrated Report for Clean Water Act, §305(b) and §303(d)

		Water Bodies Evaluated	2014 1409 1065 (segments)	2016 1452 1071 (segments)	
Impairment Parameters by Type	Media	Use	2014 Total Number of Segment Impairments	2016 Total Number of Segment Impairments	Change
Bacteria	In water	Recreation	243	223	-20
		General Use	2	2	0
	In shellfish	Oyster Waters	8	10	2
	Beaches	Beach Use	2	2	0
Dissolved Oxygen	In water	Aquatic Life	96	95	-1
Toxicity	In ambient water	Aquatic Life	2	2	0
	In ambient sediment		6	6	0
Organics	In water	Fish Consumption, Aquatic Life	0	0	0
	Chlordane in edible tissue		3	0	-3
	DDE in edible tissue		1	0	-1
	Dieldrin in edible tissue		3	1	-2
	Dioxin in edible tissue		50	55	5
	Heptachlor epoxide in edible tissue		3	0	-3
	PCBs in edible tissue		54	54	0
Metals (except Mercury)	In water	Fish Consumption, Oyster Waters, Aquatic Life	6	12	6
	In fish/shellfish		0	0	0
Mercury	In water	Fish Consumption, Oyster Waters, Aquatic Life	1	1	0
	In fish/shellfish		24	24	0
Dissolved Solids	Chloride	General	17	18	1
	Sulfate		12	16	4
	Total dissolved solids		18	17	-1
Temperature	In water	General	1	0	-1
pH	In water	General	17	16	-1
Nitrate	In water	Public Water Supply	0	0	0
Excessive Algal Growth	In water	General	0	2	2
Biological	Fish community	Aquatic Life	11	10	-1
	Macrobenthos community	Aquatic Life	9	8	-1
		Totals	589	574	-15
		Total AUs	986	987	1