# **INSTRUCTIONS**

Below is a presentation of the portions of the 2022 revisions to the Texas Surface Water Quality Standards (TSWQS) (30 TAC, §307) for which the EPA has taken action pursuant to its August 18, 2023 action letter. A key is provided to specify what portions of the 2022 TSWQS the EPA has approved, disapproved, taken no action, or is still reviewing.

Approved language represents 1) language that was not altered from the 2018 TSWQS and therefore remains approved and in effect for Clean Water Act (CWA) purposes or 2) language that was revised from the 2018 TSWQS and has subsequently been approved by the EPA and is in effect for CWA purposes. Many of the site-specific adjustment factors in Appendix E of the TSWQS have been previously approved for CWA purposes (see link below for record of approved water-effect ratios on EPA repository web site) on a permit-by-permit basis.

Disapproved language represents revisions to the TSWQS that the EPA subsequently reviewed and disapproved. All disapproved language will require revisions or removal during the next triennial revision. These portions of the rule are not in effect for CWA purposes. When a numeric criterion is disapproved, the approved criterion in the previously EPA approved revision of the TSWQS remains in effect for CWA purposes.

The term "no action" is not defined in either the CWA or EPA guidance. According to EPA's September 23, 2014 action letter related to the 2014 TSWQS revision, "no action" means EPA is not taking action on these provisions because they are not (1) legally binding provisions adopted or established pursuant to State law that (2) address designated uses, criteria, or antidegradation, and (3) describe the desired condition or level of protection of the water body. At this time the EPA has not requested that this language be removed from the TSWQS, and all language for which the EPA has taken "no action" remains part of the state adopted rule.

All other portions of the rule language and appendices are currently under EPA review. For these sections, the previously EPA approved revision of the TSWQS remain in effect for CWA purposes. This document will be updated as additional EPA action letters are received.

# KEY

EPA approved: text highlighted <mark>yellow</mark> and enclosed in [brackets] EPA disapproved: text highlighted **green** and enclosed in "quotation marks" EPA no action: text highlighted **blue** and enclosed in 'apostrophes' Language still under EPA review: not highlighted or enclosed in any fashion

NOTE: For the EPA's summary of actions taken regarding previous revisions of the TSWQS, please see the following link to the EPA repository of documents for Texas: <u>http://water.epa.gov/scitech/swguidance/standards/wgslibrary/tx\_index.cfm.</u>

# [§307.1. General Policy Statement.]

[It is the policy of this state and the purpose of this chapter to maintain the quality of water in the state consistent with public health and enjoyment, propagation and protection of terrestrial and aquatic life, operation of existing industries, and taking into consideration economic development of the state; to encourage and promote development and use of regional and area-wide wastewater collection, treatment, and disposal systems to serve the wastewater disposal needs of the citizens of the state; and to require the use of all reasonable methods to implement this policy.]

[§307.2. Description of Standards.]

[(a) Contents of the Texas Surface Water Quality Standards.]

[(1) Section 307.1 of this title (relating to General Policy Statement) contains the general standards policy of the commission.]

[(2) This section lists the major sections of the standards, defines basin classification categories, describes justifications for standards modifications, and provides the effective dates of the rules.]

[(3) Section 307.3 of this title (relating to Definitions and Abbreviations) defines terms and abbreviations used in the standards.]

[(4) Section 307.4 of this title (relating to General Criteria) lists the general criteria that are applicable to all surface waters of the state unless specifically excepted in §307.8 of this title (relating to Application of Standards) or §307.9 of this title (relating to Determination of Standards Attainment).]

[(5) Section 307.5 of this title (relating to Antidegradation) describes the antidegradation policy and implementation procedures.]

[(6) Section 307.6 of this title (relating to Toxic Materials) establishes criteria and control procedures for specific toxic substances and total toxicity.]

[(7) Section 307.7 of this title (relating to Site-Specific Uses and Criteria) defines appropriate water uses and supporting criteria for site-specific standards.]

[(8) Section 307.8 of this title sets forth conditions when portions of the standards do not apply - such as in mixing zones or below critical low-flows.]

[(9) Section 307.9 of this title describes sampling and analytical procedures to determine standards attainment.]

[(10) Section 307.10 of this title (relating to Appendices A - G) lists sitespecific standards and supporting information for classified segments (Appendices A and C), water bodies that are sole-source surface drinking water supplies (Appendix B),

site-specific uses and criteria for unclassified water bodies (Appendix D), site-specific toxic criteria that may be derived for any water in the state (Appendix E), chlorophyll *a* criteria for selected reservoirs (Appendix F), and site-specific recreational uses and criteria for unclassified water bodies (Appendix G). Specific appendices are as follows:]

[(A) Appendix A - Site-specific Uses and Criteria for Classified

Segments;]

[(B) Appendix B - Sole-source Surface Drinking Water Supplies;]

[(C) Appendix C - Segment Descriptions;]

[(D) Appendix D - Site-specific Uses and Criteria for Unclassified

Water Bodies;]

[(E) Appendix E - Site-specific Toxic Criteria;]

[(F) Appendix F - Site-specific Nutrient Criteria for Selected

Reservoirs; and]

(G) Appendix G - Site-specific Recreational Uses and Criteria for Unclassified Water Bodies.]

[(b) Applicability. The Texas Surface Water Quality Standards apply to surface waters in the state - including wetlands.]

[(c) Classification of surface waters. The major surface waters of the state are classified as segments for purposes of water quality management and designation of site-specific standards. Classified segments are aggregated by basin, and basins are categorized as follows:]

[(1) River basin waters. Surface inland waters comprising the major rivers and their tributaries, including listed impounded waters and the tidal portion of rivers to the extent that they are confined in channels.]

[(2) Coastal basin waters. Surface inland waters, including listed impounded waters but exclusive of paragraph (1) of this subsection, discharging, flowing, or otherwise communicating with bays or the gulf, including the tidal portion of streams to the extent that they are confined in channels.]

[(3) Bay waters. All tidal waters, exclusive of those included in river basin waters, coastal basin waters, and gulf waters.]

[(4) Gulf waters. Waters that are not included in or do not form a part of any bay or estuary but that are a part of the open waters of the Gulf of Mexico to the limit of the state's jurisdiction.]

# [(d) Modification of standards.]

[(1) The commission reserves the right to amend these standards following the completion of special studies.]

[(2) Any errors in water quality standards resulting from clerical errors or errors in data may be corrected by the commission through amendment of the affected standards. Water quality standards not affected by such clerical errors or errors in data remain valid until changed by the commission.]

[(3) The narrative provisions, presumed uses, designated uses, and numerical criteria of the Texas Surface Water Quality Standards may be amended for a specific water body to account for local conditions. A site-specific standard is an explicit amendment to this chapter, and adoption of a site-specific standard requires the procedures for public notice and hearing established under the Texas Water Code, §26.024 and §26.025. An amendment that establishes a site-specific standard requires a use-attainability analysis that demonstrates that reasonably attainable water-quality related uses are protected. Upon adoption, site-specific amendments to the standards will be listed in §307.10 of this title.]

[(4) Factors that may justify the development of site-specific standards are described in §307.4 and §§307.6 - 307.8 of this title.]

[(5) Temporary variance. When scientific information indicates that a sitespecific standards amendment is justified, the commission may allow a corresponding temporary variance to the water quality standards in a permit for a discharge of wastewater or stormwater.]

[(A) A temporary variance is only applicable to an existing permitted discharge.]

[(B) A permittee may apply for a temporary variance prior to or during the permit application process. The temporary variance request must be included in a public notice during the permit application process. An opportunity for public comment is provided, and the request may be considered in any public hearing on the permit application.]

[(C) A temporary variance for a Texas Pollutant Discharge Elimination System permit also requires review and approval by the United States Environmental Protection Agency (EPA) during the permitting process.]

[(D) The permit must contain effluent limitations that protect existing uses and preclude degradation of existing water quality, and the term of the permit must not exceed three years. Effluent limitations that are needed to meet the existing standards are listed in the permit and are effective immediately as final permit effluent limitations in the succeeding permit, unless the permittee fulfills the requirements of the conditions for the variance in the permit.]

[(E) When the permittee has complied with the terms of the conditions in the temporary variance, then the succeeding permit may include a permit schedule to meet standards in accordance with subsection (f) of this section. The succeeding permit may also extend the temporary variance in accordance with subsection (f) of this section in order to allow additional time for a site-specific standard to be adopted in this chapter. This extension can be approved by the commission only after a site-specific study that supports a standards change is completed and the commission agrees the completed study supports a change in the applicable standard(s).]

[(F) Site-specific standards that are developed under a temporary variance must be expeditiously proposed and publicly considered for adoption at the earliest opportunity.]

[(e) Standards implementation procedures. Provisions for implementing the water quality standards are described in a document entitled *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194) as amended and approved by the Texas Commission on Environmental Quality and EPA.]

[(f) Permit schedules to meet standards. Upon permit amendment or permit renewal, the commission may establish interim effluent limitations to allow a permittee time to modify effluent quality in order to attain final effluent limitations. The duration of any interim effluent limitations may not be longer than three years from the effective date of the permit issuance, except in accordance with a temporary variance as described in subsection (d)(5) of this section.]

[(g) Temporary standards. Where a criterion or designated use is not attained and cannot be attained for one or more of the reasons listed in 40 Code of Federal Regulations (CFR) §131.10(g), or to facilitate restoration or reconfiguration activities that preclude the attainment of the designated use or criterion, then a temporary standard for specific water bodies or permittees may be adopted in §307.10 of this title as an alternative to changing uses.]

[(1) A temporary standard identifies the interim numerical criteria or use that applies during the existence of the temporary standard. When a temporary standard is adopted for permittees or water bodies, the temporary standard must be expressed as one of the following:]

(A) The interim effluent condition that reflects the greatest pollutant reduction achievable;]

[(B) Or if no additional feasible pollutant control technology can be identified, the interim effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the temporary standard is adopted, and implementation of a remediation plan as specified in the *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194); or]

[(C) The highest attainable interim criterion.]

[(2) A temporary standard must be adopted in accordance with the provisions of subsection (d)(3) of this section. Once adopted by the commission and approved by EPA, a temporary standard is the applicable standard for the purposes of developing wastewater discharge permit limits and issuing certifications specified in the federal Clean Water Act, §401 and Chapter 279 of this title (relating to Water Quality Certification).]

[(3) Specific reasons and additional procedures for justifying a temporary standard are provided in the *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194). A temporary standard must identify the water body or permittee to which the temporary standard applies. A temporary standard does not exempt any discharge from compliance with applicable technology-based effluent limits.]

[(4) A temporary standard must be reevaluated every five years at a minimum, which may be conducted through the permit process or a triennial review of the Texas Surface Water Quality Standards. If the reevaluation is not submitted to EPA within 30 days of completion, subsequent federal Clean Water Act activities will be evaluated using the applicable existing underlying water quality standards.]

[(5) The term of a temporary standard is expressed as an interval of time from the date of EPA approval or a specific date cited in the temporary standard. If the continuance of a temporary standard is sufficiently justified, it can be renewed during revisions of the Texas Surface Water Quality Standards. When a temporary standard expires, subsequent discharge permits are issued to meet the applicable existing water quality standards.]

[(6) A temporary standard must preclude the degradation of existing water quality unless degradation is necessary to facilitate restoration or reconfiguration activities as specified in this section.]

[(h) Effective date of standards. Except as provided in 40 CFR §131.21 (EPA review and approval of water quality standards), this chapter becomes effective 20 days after the date the chapter is filed in the Office of the Secretary of State. As to actions covered by 40 CFR §131.21, the rules become effective upon approval by EPA.]

### [(i) Effect of conflict or invalidity of rule.]

[(1) If any provision of this chapter or its application to any person or circumstances is held invalid, the invalidity does not affect other provisions or applications of the provisions contained in this chapter that can be given effect without the invalid provision or application, and to this end the provisions of this chapter are severable.]

[(2) To the extent of any irreconcilable conflict between provisions of this chapter and other rules of the commission, the provisions of this chapter supersede.]

### [§307.3. Definitions and Abbreviations.]

[(a) Definitions. The following words and terms, when used in this chapter, have the defined meanings, unless the context clearly indicates otherwise.]

[(1) Acute toxicity--Toxicity that exerts a stimulus severe enough to rapidly induce an effect. The duration of exposure applicable to acute toxicity is typically 96 hours or less. Tests of total toxicity normally use lethality as the measure of acute impacts. (Direct thermal impacts are excluded from definitions of toxicity.)]

[(2) Ambient--Refers to the existing water quality in a particular water

body.]

[(3) Aquatic vegetation--Refers to aquatic organisms, i.e., plant life, found in the water and includes phytoplankton; algae, both attached and floating; and vascular and nonvascular plants, both rooted and floating.]

[(4) Attainable use--A use that can be reasonably achieved by a water body in accordance with its physical, biological, and chemical characteristics whether it is currently meeting that use or not. Guidelines for the determination and review of attainable uses are provided in the standards implementation procedures. The designated use, existing use, or presumed use of a water body may not necessarily be the attainable use.]

[(5) Background--Refers to the water quality in a particular water body [that would occur if that water body were relatively unaffected by human activities.]

[(6) Bedslope--Stream gradient, or the extent of the drop in elevation encountered as the stream flows downhill. One measure of bedslope is the elevation decline in meters over the stream distance in kilometers.]

[(7) Best management practices--Schedules of activities, maintenance procedures, and other management practices to prevent or reduce the pollution of

water in the state from point and nonpoint sources, to the maximum extent practicable. Best management practices also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.]

[(8) Bioaccumulative--Describes a chemical that is taken up by aquatic organisms from water directly or through the consumption of food containing the chemical.]

[(9) Bioaccumulation factor—A unitless value describing the degree to which a chemical can be concentrated in the tissues of an organism in the aquatic environment and that is absorbed through all routes of exposure, including the food chain. The bioaccumulation factor is the ratio of the concentration of a chemical in the tissue of an aquatic organism to the concentration of the chemical dissolved in ambient water at the site of sampling.]

[(10) Bioconcentration factor--A unitless value describing the degree to which a chemical can be concentrated in the tissues of an organism in the aquatic environment and that is absorbed directly from the water. The bioconcentration factor is the ratio of a chemical's concentration in the tissue of an organism compared to that chemical's average concentration in the surrounding water.]

[(11) Biological integrity--The species composition, diversity, and functional organization of a community of organisms in an environment relatively unaffected by pollution.]

[(12) Biotic ligand model--A metal bioavailability model that uses receiving water body characteristics to develop site-specific water quality criteria.]

[(13) Chronic toxicity--Toxicity that continues for a long-term period after exposure to toxic substances. Chronic exposure produces sub-lethal effects, such as growth impairment and reduced reproductive success, but it may also produce lethality. The duration of exposure applicable to the most common chronic toxicity test is seven days or more.]

[(14) Classified--Refers to a water body that is listed and described in Appendices A and C of §307.10 of this title (relating to Appendices A - G). Site-specific uses and criteria for classified water bodies are listed in Appendix A of §307.10 of this title.]

[(15) Coastal recreation waters--Marine coastal waters including oceans, coastal estuaries, and bays designated as primary contact recreation. Waters upstream of an unimpaired natural connection to the open sea or tidal inland waters are not considered coastal recreation waters (e.g., tidal rivers or streams).]

[(16) Commission--Texas Commission on Environmental Quality.]

[(17) Criteria--Water quality conditions that are to be met in order to support and protect desired uses, i.e., existing, designated, attainable, and presumed uses.]

[(18) Critical low-flow--Low-flow condition that consists of the seven-day, two-year low-flow or the alternative low-flows for spring-fed streams as discussed in §307.8(a)(2) of this title (relating to Application of Standards) and below which some standards do not apply.]

[(19) Designated use--A use that is assigned to specific water bodies in Appendix A, D, or G of §307.10 of this title (relating to Appendices A - G). Typical uses that may be designated for specific water bodies include domestic water supply, categories of aquatic life use, recreation categories, and aquifer protection.]

[(20) Discharge permit--A permit issued by the state or a federal agency to discharge treated effluent or cooling water into waters of the state.]

[(21) Dry weather flows--Sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather.]

[(22) EC<sub>50</sub>--The concentration of a toxicant that produces an adverse effect on 50% of the organisms tested in a specified time period.]

[(23) *E. coli--Escherichia coli*, a subgroup of fecal coliform bacteria that is present in the intestinal tracts and feces of warm-blooded animals. It is used as an indicator of the potential presence of pathogens.]

[(24) Effluent--Wastewater discharged from any point source prior to entering a water body.]

[(25) Enterococci-A subgroup of fecal streptococci bacteria (mainly *Streptococcus faecalis* and *Streptococcus faecium* that is present in the intestinal tracts and feces of warm-blooded animals. It is used as an indicator of the potential presence of pathogens.]

[(26) Epilimnion--The upper mixed layer of a lake (including impoundments, ponds, and reservoirs).]

[(27) Existing use--A use that is currently being supported by a specific water body or that was attained on or after November 28, 1975.]

[(28) Fecal coliform--A portion of the coliform bacteria group that is present in the intestinal tracts and feces of warm-blooded animals; heat tolerant bacteria from other sources can sometimes be included. It is used as an indicator of the potential presence of pathogens.]

[(29) Freshwaters--Inland waters that exhibit no measurable elevation changes due to normal tides.]

[(30) Halocline--A vertical gradient in salinity under conditions of density stratification that is usually recognized as the point where salinity exhibits the greatest difference in the vertical direction.]

[(31) Harmonic mean flow--A measure of mean flow in a water course that is calculated by summing the reciprocals of the individual flow measurements, dividing this sum by the number of measurements, and then calculating the reciprocal of the resulting number.]

[(32) Incidental fishery--A level of fishery that applies to water bodies that are not considered to have a sustainable fishery but] do [have an aquatic life use of limited, intermediate, high, or exceptional.]

[(33) Industrial cooling impoundment--An impoundment that is owned or operated by, or in conjunction with, the water rights permittee, and that is designed and constructed for the primary purpose of reducing the temperature and removing heat from an industrial effluent.]

[(34) Industrial cooling water area--A designated area associated with a permitted wastewater discharge where numerical temperature criteria are not applicable in accordance with conditions and requirements specified in §307.4(f) of this title (relating to General Criteria) and §307.8(b) of this title (relating to Application of Standards).]

[(35) Intermittent stream--A stream that has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a seven-day, two-year low-flow of less than 0.1 cubic feet per second is considered intermittent.]

[(36) Intermittent stream with perennial pools--An intermittent stream that maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.]

[(37) LC<sub>50</sub>--The concentration of a toxicant that is lethal (fatal) to 50% of the organisms tested in a specified time period.]

[(38) Main pool station--A monitoring station that is located in the main body of a reservoir near the dam and not located in a cove or in the riverine portion or transition zone of a reservoir.]

[(39) Method detection limit--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is distinguishable from the method blank results and is determined from analysis of a sample in a given matrix containing the analyte. The method detection limit is estimated in accordance with 40 Code of Federal Regulations Part 136, Appendix B.]

[(40) Minimum analytical level--The lowest concentration that a particular substance can be quantitatively measured with a defined accuracy and precision level using approved analytical methods. The minimum analytical level is not the published method detection limit for a United States Environmental Protection Agency-approved analytical method that is based on laboratory analysis of the substance in reagent (distilled) water. The minimum analytical level is based on analyses of the analyte in the matrix of concern (e.g., wastewater effluents). The commission establishes general minimum analytical levels that are applicable when information on matrix-specific minimum analytical levels is unavailable.]

[(41) Mixing zone--The area contiguous to a permitted discharge where mixing with receiving waters takes place and where specified criteria, as listed in §307.8(b)(1) of this title (relating to Application of Standards), can be exceeded. Acute toxicity to aquatic organisms is not allowed in a mixing zone, and chronic toxicity to aquatic organisms is not allowed beyond a mixing zone.]

[(42) Noncontact recreation--Activities that do not involve a significant risk of water ingestion, such as those with limited body contact incidental to shoreline activity, including birding, hiking, and biking. Noncontact recreation use may also be assigned where primary and secondary contact recreation activities should not occur because of unsafe conditions, such as ship and barge traffic.]

[(43) Nonpersistent--Describes a toxic substance that readily degrades in the aquatic environment, exhibits a half-life of less than 60 days, and does not have a tendency to accumulate in organisms.]

[(44) Nutrient criteria--Numeric and narrative criteria that are established to protect surface waters from excessive growth of aquatic vegetation. Nutrient numeric criteria for reservoirs are expressed in terms of chlorophyll *a* concentration per unit volume as a measure of phytoplankton density.]

[(45) Nutrient--A chemical constituent, most commonly a form of nitrogen or phosphorus, that in excess can contribute to the undesirable growth of aquatic vegetation and impact uses as defined in this title.]

# [(46) Oyster waters--Waters producing edible species of clams, oysters, or mussels.]

[(47) Persistent--Describes a toxic substance that is not readily degraded and exhibits a half-life of 60 days or more in an aquatic environment.]

[(48) Pollution--The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.]

[(49) Point source--Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants or wastes are or may be discharged into or adjacent to any water in the state.]

[(50) Presumed use--A use that is assigned to generic categories of water bodies (such as perennial streams). Presumed uses are superseded by designated uses for individual water bodies in Appendix A, D, or G of §307.10 of this title (relating to Appendices A - G).]

[(51) Primary contact recreation 1--Activities that are presumed to involve a significant risk of ingestion of water (e.g., wading by children, swimming, water skiing, diving, tubing, surfing, handfishing as defined by Texas Parks and Wildlife Code, §66.115, and the following whitewater activities: kayaking, canoeing, and rafting).]

[(52) Primary contact recreation 2--Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, handfishing as defined by Texas Parks and Wildlife Code, §66.115, and whitewater kayaking, canoeing, and rafting, that involve a significant risk of ingestion of water but that occur less frequently than for primary contact recreation 1 due to:]

[(A) physical characteristics of the water body; or]

[(B) limited public access.]

[(53) Protection zone--Any area within the watershed of a sole-source surface drinking water supply that is:]

[(A) within two miles of the normal pool elevation of a body of surface water that is a sole-source surface drinking water supply;]

[(B) within two miles of that part of a perennial stream that is:]

[(i) a tributary of a sole-source surface drinking water

supply; and]

[(ii) within three linear miles upstream of the normal pool elevation of a sole-source surface drinking water supply; or]

[(C) within two miles of that part of a stream that is a sole-source surface drinking water supply, extending three linear miles upstream from the water supply intake (Texas Water Code, §26.0286).]

[(54) Public drinking water supply--A water body designated to provide water to a public water system as defined in Chapter 290 of this title (relating to Public Drinking Water).]

[(55) Saltwater--A coastal water that has a measurable elevation change due to normal tides. In the absence of tidal information, saltwater is generally considered to be a coastal water that typically has a salinity of two parts per thousand or greater in a significant portion of the water column.]

[(56) Salinity--The total dissolved solids in water after all carbonates have been converted to oxides, all bromide and iodide have been replaced by chloride, and all organic matter has been oxidized. For most purposes, salinity is considered equivalent to total dissolved salt content. Salinity is usually expressed in parts per thousand.]

[(57) Seagrass propagation--A water-quality-related existing use that applies to saltwater with significant stands of submerged seagrass.]

[(58) Secondary contact recreation 1--Activities that commonly occur but have limited body contact incidental to shoreline activity (e.g. fishing, canoeing, kayaking, rafting, and motor boating). These activities are presumed to pose a less significant risk of water ingestion than primary contact recreation 1 or 2 but more than secondary contact recreation 2.]

[(59) Secondary contact recreation 2--Activities with limited body contact incidental to shoreline activity (e.g. fishing, canoeing, kayaking, rafting, and motor boating) that are presumed to pose a less significant risk of water ingestion than secondary contact recreation 1. These activities occur less frequently than secondary contact recreation 1 due to physical characteristics of the water body or limited public access.]

[(60) Segment--A water body or portion of a water body that is individually defined and classified in Appendices A and C of §307.10 of this title

(relating to Appendices A - G) in the Texas Surface Water Quality Standards. A segment is intended to have relatively homogeneous chemical, physical, and hydrological characteristics. A segment provides a basic unit for assigning site-specific standards and for applying water quality management programs of the agency. Classified segments may include streams, rivers, bays, estuaries, wetlands, lakes, or reservoirs.]

[(61) Settleable solids--The volume or weight of material that settles out of a water sample in a specified period of time.]

[(62) Seven-day, two-year low-flow (7Q2)--The lowest average stream flow for seven consecutive days with a recurrence interval of two years, as statistically determined from historical data. As specified in §307.8 of this title, some water quality standards do not apply at stream flows that are less than the 7Q2 flow.]

[(63) Shellfish--Clams, oysters, mussels, crabs, crayfish, lobsters, and

#### shrimp.]

[(64) Sole-source surface drinking water supply--A body of surface water that is identified as a public water supply in rules adopted by the commission under Texas Water Code, §26.023 and is the sole source of supply of a public water supply system, exclusive of emergency water connections (Texas Water Code, §26.0286).]

[(65) Standard Methods for the Examination of Water and Wastewater--A document describing sampling and analytical procedures that is published by the American Public Health Association, American Water Works Association, and Water Environment Federation. The most recent edition of this document is to be followed whenever its use is specified by this chapter.]

[(66) Standards--Desirable uses (i.e., existing, attainable, designated, or presumed uses as defined in this section) and the narrative and numerical criteria deemed necessary to protect those uses in surface waters.]

[(67) Standards implementation procedures--Methods and protocols in the guidance document *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194), as amended and approved by the commission and EPA.]

[(68) Stormwater--Rainfall runoff, snow melt runoff, surface runoff, and drainage.]

[(69) Stormwater discharge--A point source discharge that is composed entirely of stormwater associated with an industrial activity, a construction activity, a discharge from a municipal separate storm sewer system, or other discharge designated by the agency.]

[(70) Stream order--A classification of stream size, where the smallest, unbranched tributaries of a drainage basin are designated first order streams. Where two first order streams join, a second order stream is formed; where two second order streams join, a third order stream is formed, etc. For purposes of water quality standards application, stream order is determined from United States Geological Survey topographic maps with a scale of 1:24,000.]

'(71) Surface water in the state--Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state as defined in the Texas Water Code, §26.001, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems that are authorized by state or federal law, regulation, or permit, and that are created for the purpose of waste treatment are not considered to be water in the state.'

[(72) Sustainable Fisheries--Descriptive of water bodies that potentially have sufficient fish production or fishing activity to create significant long-term human consumption of fish. Sustainable fisheries include perennial streams and rivers with a stream order of three or greater; lakes and reservoirs greater than or equal to 150 acre-feet or 50 surface acres; all bays, estuaries, and tidal rivers. Water bodies that are presumed to have sustainable fisheries include all designated segments listed in Appendix A of §307.10 of this title (relating to Appendices A - G) unless specifically exempted.]

[(73) Thalweg--The deepest portion of a stream or river channel cross-

# section.]

[(74) Tidal--Descriptive of coastal waters that are subject to the ebb and flow of tides. For purposes of standards applicability, tidal waters are considered to be saltwater. Classified tidal waters include all bays and estuaries with a segment number that begins with 24xx, all streams with the word tidal in the segment name, and the Gulf of Mexico.]

[(75) To discharge--Includes to deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.]

[(76) Total dissolved solids--The amount of material (inorganic salts and small amounts of organic material) dissolved in water and commonly expressed as a concentration in terms of milligrams per liter. The term is equivalent to the term filterable residue, as used in 40 Code of Federal Regulations Part 136 and in previous

editions of the publication entitled, *Standard Methods for the Examination of Water* and Wastewater.]

[(77) Total maximum daily load (TMDL)--The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.]

[(78) Total suspended solids--Total suspended matter in water, which is commonly expressed as a concentration in terms of milligrams per liter. The term is equivalent to nonfilterable residue, as used in 40 Code of Federal Regulations Part 136 and in previous editions of the publication entitled, *Standard Methods for the Examination of Water and Wastewater.*]

[(79) Total toxicity--Toxicity as determined by exposing aquatic organisms to samples or dilutions of instream water or treated effluent. Also referred to as whole effluent toxicity or biomonitoring.]

[(80) Toxic equivalency factor--A factor to describe an order-of-magnitude consensus estimate of the toxicity of a compound relative to the toxicity of 2,3,7,8-tetraclorodibenzo-p-dioxin (2,3,7,8-TCDD). The factor is applied to transform various concentrations of dioxins and furans or dioxin-like polychlorinated biphenyls into equivalent concentrations of 2,3,7,8-TCDD, expressed as a toxic equivalency.]

[(81) Toxic equivalency--The sum of the products from the concentration of each dioxin and furan, or dioxin-like polychlorinated biphenyl congener, multiplied by its respective toxic equivalency factor to give a single 2,3,7,8-tetraclorodibenzo-pdioxin equivalent.]

[(82) Toxicity--The occurrence of adverse effects to living organisms due to exposure to toxic materials. Adverse effects caused by conditions of temperature and dissolved oxygen are excluded from the definition of toxicity. With respect to the provisions of §307.6(e) of this title (relating to Toxic Materials), which concerns total toxicity and biomonitoring requirements, adverse effects caused by concentrations of dissolved salts (such as sodium, potassium, calcium, chloride, carbonate) in source waters are excluded from the definition of toxicity. Source water is defined as surface water or groundwater that is used as a public water supply or industrial water supply (including a cooling-water supply). Source water does not include brine water that is produced during the extraction of oil and gas, or other sources of brine water that are substantially uncharacteristic of surface waters in the area of discharge. In addition, adverse effects caused by concentrations of dissolved salts that are added to source water by industrial processes are not excluded from the requirements of §307.6(e) of this title, except as specifically noted in §307.6(e)(2)(B) of this title, which concerns requirements for toxicity testing of 100% effluent. This definition of toxicity does not affect the standards for dissolved salts in this chapter other than \$307.6(e) of this title. The standards implementation procedures contain provisions to protect surface

waters from adverse effects of dissolved salts and methods to address the effects of dissolved salts on total toxicity tests.]

[(83) Toxicity biomonitoring--The process or act of determining total toxicity. Documents that describe procedures for toxicity biomonitoring are cited in §307.6 of this title (relating to Toxic Materials). Also referred to simply as biomonitoring.]

[(84) Water-effect ratio (WER)--The WER is calculated as the toxic concentration ( $LC_{50}$ ) of a substance in water at a particular site, divided by the toxic concentration of that substance as reported in laboratory dilution water. The WER can be used to establish site-specific acute and chronic criteria to protect aquatic life. The site-specific criterion is equal to the WER times the statewide aquatic life criterion in §307.6(c) of this title.]

[(85) Water quality management program--The agency's overall program for attaining and maintaining water quality consistent with state standards, as authorized under the Texas Water Code, the Texas Administrative Code, and the <u>federal</u> Clean Water Act, §§106, 205(j), 208, 303(e) and 314 (33 United States Code, §§1251 *et seq.)*]

[(86) Wetland--An area (including a swamp, marsh, bog, prairie pothole, or similar area) having a predominance of hydric soils that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and that under normal circumstances supports the growth and regeneration of hydrophytic vegetation. The term "hydric soil" means soil that, in its undrained condition, is saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation. The term "hydrophytic vegetation" means a plant growing in: water or a substrate that is at least periodically deficient in oxygen during a growing season as a result of excessive water content. The term "wetland" does not include irrigated acreage used as farmland; a man-made wetland of less than one acre; or a man-made wetland where construction or creation commenced on or after August 28, 1989, and that was not constructed with wetland creation as a stated objective, including but not limited to an impoundment made for the purpose of soil and water conservation that has been approved or requested by soil and water conservation districts. If this definition of wetland conflicts with the federal definition in any manner, the federal definition prevails.

[(87) Wetland water quality functions--Attributes of wetlands that protect and maintain the quality of water in the state, which include stormwater storage and retention and the moderation of extreme water level fluctuations; shoreline protection against erosion through the dissipation of wave energy and water velocity, and anchoring of sediments; habitat for aquatic life; and removal, transformation, and retention of nutrients and toxic substances.]

[(88) Zone of initial dilution--The small area at the immediate point of a permitted discharge where initial dilution with receiving waters occurs and that may not meet certain criteria applicable to the receiving water. A zone of initial dilution is substantially smaller than a mixing zone.]

[(b) Abbreviations. The following abbreviations apply to this chapter:]

[(1) ALU--aquatic life use.]

[(2) AP--aquifer protection.]

[(3) AS--agricultural water supply.]

[(4) ASTER--Assessment Tools for the Evaluation of Risk.]

[(5) BAF--Bioaccumulation factor.]

[(6) BCF--bioconcentration factor.]

[(7) CASRN--Chemical Abstracts Service Registry number.]

[(8) CFR--Code of Federal Regulations.]

[(9) cfs--cubic feet per second.]

[(10) Cl<sup>-1</sup>--chloride.]

[(11) CR--county road.]

[(12) DO--dissolved oxygen.]

[(13) E--exceptional aquatic life use.]

[(14) EPA--United States Environmental Protection Agency.]

[(15) degrees F--degrees Fahrenheit.]

[(16) FM--Farm to Market Road.]

[(17) ft<sup>3</sup>/s--cubic feet per second.]

[(18) H--high aquatic life use.]

[(19) HEAST--Health Effects Assessment Summary Tables.]

[(20) I--intermediate aquatic life use.]

[(21) IBWC--International Boundary and Water Commission.]

[(22) IH--Interstate Highway.]

[(23) IRIS--Integrated Risk Information System.]

[(24) IS--industrial water supply.]

[(25) km--kilometer.]

[(26) L--limited aquatic life use.]

[(27) M--minimal aquatic life use.]

[(28) m--multiplier.]

[(29) m/km--meters per kilometer.]

[(30) MCL--maximum contaminant level (for public drinking water

supplies).]

[(31) MDL--method detection limit.]

[(32) mg/L--milligrams per liter.]

<mark>[(33) mi--mile.]</mark>

[(34) mL--milliliter.]

[(35) MUD--municipal utility district.]

[(36) N--navigation.]

[(37) NCR--noncontact recreation.]

[(38) O--oyster waters.]

[(39) PCR--primary contact recreation.]

[(40) PS--public water supply.]

[(41) RfD--reference dose.]

[(42) RR--ranch road.]

- [(43) 7Q2--seven-day, two-year low-flow.]
- [(44) SCR--secondary contact recreation.]

[(45) SH--state highway.]

[(46) SO<sub>4</sub>-<sup>2</sup> --sulfate.]

[(47) SU--standard units.]

[(48) TCEQ--Texas Commission on Environmental Quality.]

[(49) TDS--total dissolved solids.]

[(50) TEF--toxic equivalency factor.]

[(51) TMDL--total maximum daily load.]

[(52) TPDES--Texas Pollutant Discharge Elimination System.]

[(53) TRE--toxicity reduction evaluation.]

[(54) TSS--total suspended solids.]

[(55) US--United States.]

[(56) USFDA--United States Food and Drug Administration.]

[(57) USGS--United States Geological Survey.]

[(58) WER--Water-effect ratio.]

[(59) WF--waterfowl habitat.]

[(60) WQM--water quality management.]

[(61) µg/L--micrograms per liter.]

[(62) ZID--zone of initial dilution.]

### [§307.4. General Criteria.]

[(a) Application. The general criteria set forth in this section apply to surface water in the state and specifically apply to substances attributed to waste discharges or human activities. General criteria do not apply to those instances when surface water, as a result of natural phenomena, exhibit characteristics beyond the limits established by this section. General criteria are superseded by specific exemptions stated in this section or in §307.8 of this title (relating to the Application of Standards), or by site-specific water quality standards for classified segments. Provisions of the general criteria remain in effect in mixing zones or below critical lowflow conditions unless specifically exempted in §307.8 of this title.]

#### [(b) Aesthetic parameters.]

[(1) Concentrations of taste and odor producing substances must not interfere with the production of potable water by reasonable water treatment methods, impart unpalatable flavor to food fish including shellfish, result in offensive odors arising from the waters, or otherwise interfere with the reasonable use of the water in the state.]

[(2) Surface water must be essentially free of floating debris and suspended solids that are conducive to producing adverse responses in aquatic organisms or putrescible sludge deposits or sediment layers that adversely affect benthic biota or any lawful uses.]

[(3) Surface waters must be essentially free of settleable solids conducive to changes in flow characteristics of stream channels or the untimely filling of surface water in the state. This provision does not prohibit dredge and fill activities that are permitted in accordance with the Federal Clean Water Act.]

[(4) Surface waters must be maintained in an aesthetically attractive condition.]

[(5) Waste discharges must not cause substantial and persistent changes from ambient conditions of turbidity or color.]

[(6) No foaming or frothing of a persistent nature is permissible.]

[(7) Surface waters must be maintained so that oil, grease, or related residue do not produce a visible film or sheen of oil or globules of grease on the surface or coat the banks or bottoms of the watercourse; or cause toxicity to man, aquatic life, or terrestrial life in accordance with subsection (d) of this section.]

#### [(c) Radiological substances. Radioactive materials must not be discharged in excess of the amount regulated by Chapter 336 of this title (relating to Radioactive Substance Rules).]

[(d) Toxic substances. Surface waters must not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life. Additional requirements and criteria for toxic substances are specified in §307.6 of this title (relating to Toxic Materials). Criteria to protect aquatic life from acute toxicity apply to all surface waters in the state except as specified in §307.8(a)(3) of this title. Criteria to protect aquatic life from chronic toxicity apply to surface waters with an aquatic life use of limited, intermediate, high, or exceptional as designated in §307.10 of this title (relating to Appendices A - G) or as determined on a case-by-case basis in accordance with subsection (l) of this section. Toxic criteria to protect human health for consumption of fish apply to waters with a sustainable or incidental fishery, as described in §307.6(d) of this title. Additional criteria apply to water in the state with a public drinking water supply use, as described in §307.6(d) of this title. The general provisions of this subsection do not change specific provisions in §307.8 of this title for applying toxic criteria.]

[(e) Nutrients. Nutrients from permitted discharges or other controllable sources must not cause excessive growth of aquatic vegetation that impairs an existing, designated, presumed, or attainable use. Site-specific nutrient criteria, nutrient permit limitations, or separate rules to control nutrients in individual watersheds are established where appropriate after notice and opportunity for public participation and proper hearing. Site-specific numeric criteria related to chlorophyll *a* are listed in Appendix F of §307.10 of this title.]

[(f) Temperature. Consistent with §307.1 of this title (relating to General Policy Statement) and in accordance with state water rights permits, temperature in industrial cooling impoundments, industrial cooling water areas, and all other surface water in the state must be maintained so as to not interfere with the reasonable use of such waters. Numerical temperature criteria have not been specifically established for industrial cooling impoundments, which in most areas of the state contribute to water conservation and water quality objectives. In addition, numerical criteria for temperature are not applicable in designated industrial cooling water areas, as defined in §307.3 of this title (relating to Definitions and Abbreviations). The horizontal boundaries of an industrial cooling water area must be defined in the applicable wastewater permit. The following temperature criteria, expressed as a maximum temperature differential (rise over ambient) are established except for industrial cooling impoundments, temperature elevations due to discharges of treated domestic (sanitary) effluent, and temperature elevations within designated mixing zones or industrial cooling water areas. The maximum temperature differentials are:]

[(1) freshwater streams: 5 degrees Fahrenheit (degrees F);]

[(2) freshwater lakes and impoundments: 3 degrees F; and]

[(3) tidal river reaches, bay, and gulf waters: 4 degrees F in fall, winter, and spring, and 1.5 degrees F in summer (June, July, and August).]

[(4) Additional temperature criteria (expressed as maximum temperatures) for classified segments are specified in Appendix A of §307.10 of this title. These criteria are not applicable within industrial cooling water areas.]

#### [(g) Salinity.]

[(1) Concentrations and the relative ratios of dissolved minerals such as chloride, sulfate, and total dissolved solids must be maintained such that existing, designated, presumed, and attainable uses are not impaired.]

[(2) Criteria for chloride, sulfate, and total dissolved solids for classified freshwater segments are specified in Appendix A of §307.10 of this title.]

[(3) Salinity gradients in estuaries must be maintained to support attainable estuarine dependent aquatic life uses. Numerical salinity criteria for Texas estuaries have not been established because of the high natural variability of salinity in estuarine systems, and because long-term studies by state agencies to assess estuarine salinities are still ongoing. Absence of numerical criteria must not preclude evaluations and regulatory actions based on estuarine salinity, and careful consideration must be given to all activities that may detrimentally affect salinity gradients.]

[(h) Aquatic life uses and dissolved oxygen.]

[(1) Dissolved oxygen concentrations must be sufficient to support existing, designated, presumed, and attainable aquatic life uses. Aquatic-life use categories and corresponding dissolved oxygen criteria are described in §307.7(b)(3) of this title (relating to Site-Specific Uses and Criteria).]

[(2) Aquatic life use categories and dissolved oxygen criteria for classified segments are specified in Appendix A of §307.10 of this title. Aquatic life use categories and dissolved oxygen criteria for other specific water bodies are specified in Appendix D of §307.10 of this title. Where justified by sufficient site-specific information, dissolved oxygen criteria that differ from §307.7(b)(3) of this title may be adopted for a particular water body in §307.10 of this title.]

[(3) Perennial streams, rivers, lakes, bays, estuaries, and other appropriate perennial waters that are not specifically listed in Appendix A or D of §307.10 of this title are presumed to have a high aquatic life use and corresponding dissolved oxygen criteria. Applicable dissolved oxygen criteria are described in §307.7(b)(3)(A) of this title. Higher uses are protected where they are attainable.]

[(4) When water is present in the streambed of intermittent streams, a 24hour dissolved oxygen mean of at least 2.0 mg/L and 24-hour minimum dissolved oxygen concentration of 1.5 mg/L must be maintained. Intermittent streams that are not specifically listed in Appendix A or D of §307.10 of this title are considered to have a minimal aquatic life use except as indicated below in this subsection. For intermittent streams with seasonal aquatic life uses, dissolved oxygen concentrations commensurate with the aquatic life uses must be maintained during the seasons when the aquatic life uses occur. Unclassified intermittent streams with perennial pools are presumed to have a limited aquatic life use and corresponding dissolved oxygen criteria. Higher uses are protected where they are attainable.]

[(i) Aquatic life uses and habitat. Vegetative and physical components of the aquatic environment must be maintained or mitigated to protect aquatic life uses. Procedures to protect habitat in permits for dredge and fill are specified in Federal Clean Water Act, §404 and in Chapter 279 of this title (relating to Water Quality Certification).]

#### [(j) Aquatic recreation.]

[(1) Existing, designated, presumed, and attainable uses of aquatic recreation must be maintained, as determined by criteria that indicate the potential presence of pathogens. Categories of recreation and applicable criteria are established in §307.7(b)(1) of this title.]

[(2) Recreational use categories and criteria for classified segments are specified in Appendix A of §307.10 of this title. Site-specific recreational use categories and criteria for selected unclassified water bodies are specified in Appendix G of §307.10 of this title. Where justified by sufficient site-specific information, recreational uses and criteria that differ from §307.7(b)(1) of this title may be adopted for a particular water body in §307.10 of this title. For water bodies not specifically listed in Appendix A or Appendix G of §307.10 of this title, the following recreational uses are presumed to apply.]

[(A) Primary contact recreation 1. Primary contact recreation 1 is presumed for lakes, reservoirs, and tidal water bodies. Primary contact recreation 1 is presumed to apply to intermittent streams, intermittent streams with perennial pools, nontidal wetlands, and perennial freshwater streams and rivers, except where sitespecific information indicates that recreational activities that involve a significant risk of ingestion have little to no likelihood of occurring, in accordance with subparagraph (C) of this paragraph.]

[(B) Primary contact recreation 2. No water body is presumed to have a use of primary contact recreation 2. This use is applicable when designated for an individual water body as listed in Appendix A or G in §307.10 of this title. Primary

contact recreation 2 applies to water bodies where water recreation activities that involve a significant risk of ingestion of water occur, but less frequently than for primary contact recreation 1 due to:]

# [(i) physical characteristics of the water body; or]

# [(ii) limited public access.]

[(C) Secondary contact recreation 1. Secondary contact recreation 1 applies to water bodies where water recreation can occur, but the nature of the recreation does not involve a significant risk of ingestion. Secondary contact recreation 1 applies to intermittent and perennial freshwaters where site-specific information demonstrates that primary contact recreation 1 or 2 have little to no likelihood of occurring. At a minimum, the following characteristics must be demonstrated for a presumed use of secondary contact recreation 1 to apply:]

(i) during dry weather flows, the average depth at the thalweg (mid-channel) is less than 0.5 meters and there are not substantial pools with a depth of 1 meter or greater; and]

[(ii) there are no existing recreational activities that create a significant risk of ingestion or uses for primary contact recreation 1 or 2.]

[(D) Secondary contact recreation 2. Secondary contact recreation 2 applies to water bodies where water recreation activities do not involve a significant risk of water ingestion and where activities occur less frequently than for secondary contact recreation 1 due to physical characteristics of the water body or limited public access. No water body is presumed to have a use of secondary contact recreation 2. This use is applicable when designated for an individual water body as listed in Appendix A or G in §307.10 of this title.]

[(E) Noncontact recreation. Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion and where primary and secondary contact recreation uses should not occur because of unsafe conditions. No water body is presumed to have a use of noncontact recreation. This use is applicable when designated for an individual water body as listed in Appendix A or G in §307.10 of this title.]

#### [(3) Assigning recreational uses to an unclassified water body.]

[(A) Applying presumed uses. Recreational uses and associated numerical criteria are assigned to an unclassified water body in accordance with the presumed uses and guidelines established in paragraph (2) of this subsection. To assign uses other than primary contact recreation 1, a reasonable level of inquiry is conducted to determine if a different presumed use is appropriate for a particular

# water body. A reasonable level of inquiry includes review of available relevant information or completed site surveys.]

[(B) Assigning presumed uses. Presumed uses of primary contact recreation 1 and secondary contact recreation 1 can be assigned to an individual water body for regulatory action without individually designating the recreational use and criteria in Appendix G in §307.10 of this title. Regulatory action may include issuing Texas Pollutant Discharge Elimination System permits, revising the list of impaired water bodies under federal Clean Water Act, §303(d), or setting and implementing a total maximum daily load. The presumed secondary contact recreation 1 use is included in the public notice of a regulatory action that could affect recreational water quality, and the assigned recreational uses are subject to applicable public comment and approval by the United States Environmental Protection Agency (EPA). For tracking purposes, presumed recreational uses that have been determined to be less stringent than primary contact recreation 1 are noted in a publicly available list such as the EPA's Water Quality Standards Repository prior to a water quality standards revision. Presumed uses that have been determined for particular water bodies are listed in Appendix G in §307.10 of this title when the water quality standards are revised.]

[(C) Assigning a use less stringent than presumed use. A recreational use that is less stringent than the applicable presumed use can only be assigned to an individual water body for a regulatory action after that use is approved by the EPA and designated in Appendix A or G in §307.10 of this title. Support for designating a use less stringent than an applicable presumed use requires a use-attainability analysis (UAA). 40 Code of Federal Regulations §131.10(g) lists six reasons for a change in use in a water body. At least one of these reasons must be included in the UAA.]

[(k) Antidegradation. Nothing in this section is intended to be construed or otherwise used to supersede the requirements of §307.5 of this title (relating to Antidegradation).]

[(1) Assessment of unclassified waters for aquatic life uses. Waters that are not specifically listed in Appendices A or D of §307.10 of this title are assigned the specific uses that are attainable or characteristic of those waters. Upon administrative or regulatory action by the commission that affects a particular unclassified water body, the characteristics of the affected water body must be reviewed by the commission to determine which aquatic life uses are appropriate. Additional uses so determined must be indicated in public notices for discharge applications. Uses that are not applicable throughout the year in a particular unclassified water body are assigned and protected for the seasons where such uses are attainable. Initial determinations of use are considered preliminary, and in no way preclude redeterminations of use in public hearings conducted under the provisions of the Texas Water Code. For unclassified waters where the presumed minimum uses or criteria specified in this section are inappropriate, site-specific standards may be

developed in accordance with §307.2(d) of this title (relating to Description of Standards). Uses and criteria are assigned in accordance with this section and with §307.7(b)(3) of this title. Procedures for assigning uses and criteria are described in the standards implementation procedures.]

[(m) pH. Consistent with §307.1 of this title, pH levels in all surface water in the state must be maintained so as to not interfere with the reasonable use of such waters.]

#### [§307.5. Antidegradation.]

[(a) Application. The antidegradation policy and implementation procedures set forth in this section apply to actions regulated under state and federal authority that would increase pollution of the water in the state. Such actions include authorized wastewater discharges, total maximum daily loads (TMDLs), waste load evaluations, and any other miscellaneous actions, such as those related to man-induced nonpoint sources of pollution, that may impact the water in the state.]

[(b) Antidegradation policy. In accordance with the Texas Water Code, §26.003, the following provisions establish the antidegradation policy of the commission.]

[(1) Tier 1. Existing uses and water quality sufficient to protect those existing uses must be maintained. Categories of existing uses are the same as for designated uses, as defined in §307.7 of this title (relating to Site-Specific Uses and Criteria).]

[(2) Tier 2. No activities subject to regulatory action that would cause degradation of waters that exceed fishable/swimmable quality are allowed unless it can be shown to the commission's satisfaction that the lowering of water quality is necessary for important economic or social development. Degradation is defined as a lowering of water quality by more than a de minimis extent, but not to the extent that an existing use is impaired. Water quality sufficient to protect existing uses must be maintained. Fishable/swimmable waters are defined as waters that have quality sufficient to support propagation of indigenous fish, shellfish, terrestrial life, and recreation in and on the water.]

[(3) Tier 3. Outstanding national resource waters are defined as high quality waters within or adjacent to national parks and wildlife refuges, state parks, wild and scenic rivers designated by law, and other designated areas of exceptional recreational or ecological significance. The quality of outstanding national resource waters must be maintained and protected.]

(4) Discharges that cause pollution that are authorized by the Texas Water Code, the Federal Clean Water Act, or other applicable laws must not lower

# water quality to the extent that the Texas Surface Water Quality Standards are not attained.]

[(5) Anyone discharging wastewater that would constitute a new source of pollution or an increased source of pollution from any industrial, public, or private project or development is required to provide a level of wastewater treatment consistent with the provisions of the Texas Water Code and the Clean Water Act (33 United States Code, §§1251 *et seq.).* As necessary, cost-effective and reasonable best management practices established through the Texas Water Quality Management Program are achieved for nonpoint sources of pollution.]

[(6) Application of antidegradation provisions does not preclude the commission from establishing modified thermal discharge limitations consistent with the Clean Water Act, §316(a) (33 United States Code, §1326).]

[(c) Antidegradation implementation procedures.]

[(1) Implementation for specific regulatory activities.]

[(A) For TPDES permits for wastewater, the process for the antidegradation review and public coordination is described in the standards implementation procedures.]

[(B) For federal permits relating to the discharge of fill or dredged material under Federal Clean Water Act, §404, the antidegradation policy and public coordination is implemented through the evaluation of alternatives and mitigation under Federal Clean Water Act, §404(b)(1). State review of alternatives, mitigation, and requirements to protect water quality may also be conducted for federal permits that are subject to state certification, as authorized by Federal Clean Water Act, §401 and conducted in accordance with Chapter 279 of this title (relating to Water Quality Certification).]

[(C) Other state and federal permitted and regulated activities that increase pollution of water in the state are also subject to the provisions of the antidegradation policy as established in subsections (a) and (b) of this section.]

[(2) General provisions for implementing the antidegradation policy.]

[(A) Tier 1 reviews must ensure that water quality is sufficiently maintained so that existing uses are protected. All pollution that could cause an impairment of water quality is subject to Tier 1 reviews. If the existing uses and criteria of a potentially affected water body have not been previously determined, then the antidegradation review must include a preliminary determination of existing uses and criteria. Existing uses must be maintained and protected.]

[(B) Tier 2 reviews apply to all pollution that could cause degradation of water quality where water quality exceeds levels necessary to support propagation of fish, shellfish, terrestrial life, and recreation in and on the water (fishable/swimmable quality). Guidance for determining water bodies that exceed fishable/swimmable quality is contained in the standards implementation procedures. For dissolved oxygen, analyses of degradation under Tier 2 must utilize the same critical conditions as are used to protect instream criteria. For other parameters, appropriate conditions may vary. Conditions for determining degradation are commensurate with conditions for determining existing uses. The highest water quality sustained since November 28, 1975 (in accordance with EPA Standards Regulation 40 Code of Federal Regulations Part 131) defines baseline conditions for determinations of degradation.]

[(C) Tier 3 reviews apply to all pollution that could cause degradation of outstanding national resource waters. Outstanding national resource waters are those specifically designated in this chapter.]

[(D) When degradation of waters exceeding fishable/swimmable quality is anticipated, a statement that the antidegradation policy is pertinent to the permit action must be included in the public notice for the permit application or amendment. If no degradation is anticipated, the public notice must so state.]

[(E) Evidence can be introduced in public hearings, or through the public comment process, concerning the determination of existing uses and criteria; the assessment of degradation under Tier 1, Tier 2, and Tier 3; the social and economic justification for lowering water quality; requirements and conditions necessary to preclude degradation; and any other issues that bear upon the implementation of the antidegradation policy.]

[(F) Interested parties are given the opportunity to provide comments and additional information concerning the determination of existing uses, anticipated impacts of the discharge, baseline conditions, and the necessity of the discharge for important economic or social development if degradation of water quality is expected under Tier 2.]

[(G) The antidegradation policy and the general provisions for implementing the antidegradation policy apply to the determination of TMDLs and to waste load evaluations that allow an increase in loading. If the TMDL or waste load evaluation indicates that degradation of waters exceeding fishable/swimmable quality is expected, the public hearing notice must so state. Permits that are consistent with an approved TMDL or waste load evaluation under this antidegradation policy are not

subjected to a separate antidegradation review for the specific parameters that are addressed by the TMDL or waste load evaluation.]

#### [§307.6. Toxic Materials.]

[(a) Application. The toxic criteria set forth in this section apply to surface water in the state and specifically apply to substances attributed to waste discharges or human activity. With the exception of numeric human health criteria, toxic criteria do not apply to those instances where surface water, solely as a result of natural phenomena, exhibit characteristics beyond the limits established by this section. Standards and procedures set forth in this section are applied in accordance with §307.8 of this title (relating to Application of Standards) and §307.9 of this title (relating to Determination of Standards Attainment).]

[(b) General provisions.]

[(1) Water in the state must not be acutely toxic to aquatic life in accordance with §307.8 of this title.]

[(2) Water in the state with designated or existing aquatic life uses of limited or greater must not be chronically toxic to aquatic life, in accordance with §307.8 of this title.]

[(3) Water in the state must be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water or any combination of the three. Water in the state with sustainable fisheries or public drinking water supply uses must not exceed applicable human health toxic criteria, in accordance with subsection (d) of this section and §307.8 of this title.]

[(4) Water in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, or domestic animals, resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three.]

[(c) Specific numerical aquatic life criteria.]

[(1) Numerical criteria are established in Table 1 of this paragraph for those specific toxic substances where adequate toxicity information is available and that have the potential for exerting adverse impacts on water in the state.]

# [TABLE 1] [Criteria in Water for Specific Toxic Materials] [AQUATIC LIFE PROTECTION]

[(All values are listed or calculated in micrograms per liter)]

[(Hardness concentrations are input as milligrams per liter)]

Parameter	CASRN	Freshwater Acute Criteria	Freshwater Chronic Criteria	Saltwater Acute Criteria	Saltwater Chronic Criteria
Acrolein	107-02-8	3.0	3.0		
[Aldrin]	<mark>[309-00-2]</mark>	[3.0]	[]	[1.3]	[]
[Aluminum (d)]	[7429-90-5]	[991w]	[]	[]	[]
[Arsenic (d)]	[7440-38-2]	[340w]	[150w]	[149w]	[78w]
[Cadmium (d)]	[7440-43-9]	(1.136672- $(\ln(hardness)(0.041838)))$ $(We^{(0.9789(\ln(hardness))-3.866)})$	(1.101672- (ln(hardness)(0.041838))) (we <sup>(0.7977(ln(hardness))-3.909)</sup> )	33w	7.9w
[Carbaryl]	[63-25-2]	[2.0]	2.0	[1.6]	[]

Parameter	CASRN	Freshwater Acute Criteria	Freshwater Chronic Criteria	Saltwater Acute Criteria	Saltwater Chronic Criteria
[Chlordane]	[57-74-9 and 12789- 03-6]	[2.4]	[0.004]	[0.09]	[0.004]
[Chlorpyrifos]	[2921-88-2]	[0.083]	[0.041]	[0.011]	[0.006]
[Chromium (Tri)(d)]	[16065-83- 1]	[0.316w <i>e</i> <sup>(0.8190(ln(hardness))+3.7256)</sup> ]	[0.860w <i>e</i> <sup>(0.8190(ln(hardness))+0.6848)</sup> ]	[]	[]
[Chromium (Hex)(d)]	[18540-29- 9]	[15.7w]	[10.6w]	[1,090w]	[49.6w]
[Copper (d) <sup>1</sup> ]	[7440-50-8]	[0.960me <sup>(0.9422(ln(hardness))-1.6448)</sup> ]	[0.960me <sup>(0.8545(ln(hardness))-1.6463)</sup> ]	[13.5w]	[3.6w]
[Cyanide <sup>2</sup> (free)]	[57-12-5]	[45.8]	[10.7]	<mark>[5.6]</mark>	[5.6]
[4,4'-DDT]	[50-29-3]	[1.1]	[0.001]	[0.13]	[0.001]
[Demeton]	[8065-48-3]	[]	[0.1]	[]	[0.1]
[Diazinon]	[333-41-5]	[0.17]	[0.17]	[0.819]	[0.819]
[Dicofol]	[115-32-2]	[59.3]	[19.8]	[]	[]

Parameter	CASRN	Freshwater Acute Criteria	Freshwater Chronic Criteria	Saltwater Acute Criteria	Saltwater Chronic Criteria
[Dieldrin]	[60-57-1]	[0.24]	[0.002]	[0.71]	[0.002]
[Diuron]	<mark>[330-54-1]</mark>	[210]	[70]	[]	[]
<mark>[Endosulfan I</mark> <i>(alpha)</i> ]	<mark>[959-98-8]</mark>	[0.22]	[0.056]	[0.034]	[0.009]
<mark>[Endosulfan II</mark> <i>(beta)</i> ]	<mark>[33213-65-</mark> 9]	[0.22]	[0.056]	[0.034]	[0.009]
<mark>[Endosulfan</mark> sulfate]	[1031-07-8]	[0.22]	[0.056]	[0.034]	[0.009]
[Endrin]	[72-20-8]	[0.086]	[0.002]	[0.037]	[0.002]
[Guthion]	[86-50-0]	[]	[0.01]	[]	[0.01]
[Heptachlor ]	[76-44-8]	[0.52]	[0.004]	[0.053]	[0.004]
[Hexachloro- cyclohexane <i>(gamma)</i> (Lindane)]	<mark>[58-89-9]</mark>	[1.126]	[0.08]	[0.16]	[]

Parameter	CASRN	Freshwater Acute Criteria	Freshwater Chronic Criteria	Saltwater Acute Criteria	Saltwater Chronic Criteria
[Lead (d)]	[7439-92-1]	$\frac{[(1.46203-(ln(hardness)(0.145712)))}{(we^{(1.273(ln(hardness))-1.460)})]}$	[(1.46203- (ln(hardness)(0.145712))) (we <sup>(1.273(ln(hardness))-4.705)</sup> )]	<mark>[133w]</mark>	[5.3w]
[Malathion]	<mark>[121-75-5]</mark>	[]	[0.01]	[]	[0.01]
[Mercury]	[7439-97-6]	[2.4]	[1.3]	[2.1]	[1.1]
[Methoxychlor]	<mark>[72-43-5]</mark>	[]	[0.03]	[]	[0.03]
[Mirex]	[2385-85-5]	[]	[0.001]	[]	[0.001]
[Nickel (d)]	[7440-02-0]	$[0.998 W e^{(0.8460(\ln(hardness))+2.255)}]$	[0.997w <i>e</i> <sup>(0.8460(ln(hardness))+0.0584)</sup> ]	[118w]	[13.1w]
[Nonylphenol]	[84852-15-3 and 25154-52-3]	[28]	[6.6]	[7]	[1.7]
[Parathion (ethyl)]	[56-38-2]	[0.065]	[0.013]	[]	[]
[Pentachloropheno ]]	<mark>[87-86-5]</mark>	[ <i>e</i> <sup>(1.005(pH)-4.869)</sup> ]	[ <i>e</i> <sup>(1.005(pH)-5.134)</sup> ]	[15.1]	[9.6]

Parameter	CASRN	Freshwater Acute Criteria	Freshwater Chronic Criteria	Saltwater Acute Criteria	Saltwater Chronic Criteria
[Phenanthrene]	<mark>[85-01-8]</mark>	[30]	[30]	[7.7]	[4.6]
[Polychlorinated Biphenyls (PCBs) <sup>3</sup> ]	[1336-36-3]	[2.0]	[0.014]	[10]	[0.03]
[Selenium]	[7782-49-2]	[20]	[5]	[564]	<b>[136]</b>
[Silver, as free ion]	<mark>[7440-22-4]</mark>	[0.8w]	[]	[2w]	[]
[Toxaphene]	[8001-35-2]	[0.78]	[0.0002]	[0.21]	[0.0002]
[Tributyltin (TBT)]	<mark>[688-73-3]</mark>	[0.13]	[0.024]	[0.24]	[0.0074]
[2,4,5 Trichlorophenol]	<mark>[95-95-4]</mark>	[136]	[64]	[259]	[12]
[Zinc (d)]	[7440-66-6]	$[0.978 w e^{(0.8473(\ln(hardness))+0.884)}]$	[0.986we <sup>(0.8473(ln(hardness))+0.884)</sup> ]	[92.7w]	<mark>84.2w]</mark>

[1 In designated oyster waters, an acute saltwater copper criterion of 3.6w micrograms per liter applies outside of the mixing zone of permitted discharges and specified mixing zones for copper do not encompass oyster reefs containing live oysters.]

[2 Compliance will be determined using an analytical method for free or available cyanide.]

[3 These criteria apply to the sum of all congener or all isomer or homolog or Aroclor analysis.]

- [(d) Indicates that the criteria for a specific parameter are for the dissolved portion in water. All other criteria are for total recoverable concentration, except where noted.]
- [*e*] The mathematical constant that is the basis of the natural logarithm. When rounded to four decimal points, *e* is equal to 2.7183.]
- [m Indicates that a criterion may be multiplied by a water-effect ratio (WER) or based on a biotic ligand model result in order to incorporate the effects of local water chemistry on toxicity. The WER multiplier is equal to 1 except where sufficient data is available to establish a site-specific multiplier. WER multipliers and criteria based on biotic ligand models for individual water bodies are listed in Appendix E of §307.10 of this title when standards are revised. The number preceding the m in the freshwater equation is an EPA conversion factor. The biotic ligand model is based on the dissolved portion of copper, and the equation is not used in this case.]
- [w Indicates that a criterion is multiplied by a WER in order to incorporate the effects of local water chemistry on toxicity. The WER is equal to 1 except where sufficient data is available to establish a site-specific WER. WERs for individual water bodies are listed in Appendix E of §307.10 of this title when standards are revised. The number preceding the w in the freshwater criterion equation is an EPA conversion factor.]

[(2) Numerical criteria are based on ambient water quality criteria documents published by the EPA. EPA guidance criteria have been appropriately recalculated to eliminate the effects of toxicity data for aquatic organisms that are not native to Texas, in accordance with procedures in the EPA guidance documents entitled *Guidelines for Deriving Numerical Site-specific Water Quality Criteria* (EPA 600/3-84-099) and *Revised Deletion Process for the Site-Specific Recalculation Procedure for Aquatic Life Criteria* (EPA-823-R-13-001). Additional EPA guidelines that may be used to establish aquatic life criteria are detailed in the guidance documents.]

[(3) Specific numerical acute aquatic life criteria are applied as 24-hour averages, and specific numerical chronic aquatic life criteria are applied as seven-day averages.]

[(4) Ammonia and chlorine toxicity are addressed by total toxicity (biomonitoring) requirements in subsection (e) of this section.]

[(5) Specific numerical aquatic life criteria for metals and metalloids in Table 1 of paragraph (1) of this subsection apply to dissolved concentrations where noted. Dissolved concentrations can be estimated by filtration of samples prior to analysis, or by converting from total recoverable measurements in accordance with procedures approved by the commission in the standards implementation procedures (RG-194) as amended. Specific numerical aquatic life criteria for non-metallic substances in Table 1 of paragraph (1) of this subsection apply to total recoverable concentrations unless otherwise noted.]

[(6) Specific numerical acute criteria for toxic substances are applicable to all water in the state except for small zones of initial dilution (ZIDs) at discharge points. Acute criteria may be exceeded within a ZID and below extremely low streamflow conditions (one-fourth of critical low-flow conditions) in accordance with §307.8 of this title. There must be no lethality to aquatic organisms that move through a ZID, and the sizes of ZIDs are limited in accordance with §307.8 of this title. Specific numerical chronic criteria are applicable to all water in the state with designated or existing aquatic life uses of limited or greater, except inside mixing zones and below critical low-flow conditions, in accordance with §307.8 of this title.]

[(7) For toxic materials where specific numerical criteria are not listed in Table 1 of paragraph (1) of this subsection, the appropriate criteria for aquatic life protection may be derived in accordance with current EPA guidelines for deriving sitespecific water quality criteria. When insufficient data are available to use EPA guidelines, the following provisions are applied in accordance with this section and §307.8 of this title. The  $LC_{50}$  data used in the subsequent calculations are typically

obtained from traditional laboratory studies; however, if LC<sub>50</sub> data are unavailable or incomplete, other methodologies (such as quantitative structure-activity relationships) may be used:]

# [(A) acute criteria are calculated as 0.3 of the LC<sub>50</sub> of the most sensitive aquatic species; $LC_{50} \times (0.3) =$ acute criteria;]

[(B) concentrations of nonpersistent toxic materials must not exceed concentrations that are chronically toxic as determined from appropriate chronic toxicity data obtained in accordance with procedures in the EPA guidance document entitled *Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Life and Their Uses* (EPA 822-R-85-100) or calculated as 0.1 of acute  $LC_{50}$  values to the most sensitive aquatic species;  $LC_{50} \times (0.1) =$  chronic criteria;]

[(C) concentrations of persistent toxic materials that do not bioaccumulate shall not exceed concentrations that are chronically toxic as determined from appropriate chronic toxicity data obtained in accordance with procedures in the EPA guidance document entitled *Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Life and Their Uses* (EPA 822-R-85-100) or calculated as 0.05 of LC<sub>50</sub> values to the most sensitive aquatic species;  $LC_{50} \times (0.05) =$ chronic criteria; and]

[(D) concentrations of toxic materials that bioaccumulate must not exceed concentrations that are chronically toxic as determined from appropriate chronic toxicity data obtained in accordance with procedures in the EPA guidance document entitled *Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Life and Their Uses* (EPA 822-R-85-100) or calculated as 0.01 of LC<sub>50</sub> values to the most sensitive aquatic species; LC<sub>50</sub>× (0.01) = chronic criteria.]

[(8) For toxic substances where the relationship of toxicity is defined as a function of pH or hardness, numerical criteria are presented as an equation based on this relationship. Site-specific values for each segment are given in the standards implementation procedures (RG-194) as amended.]

[(9) Criteria for most metals are multiplied by a water-effect ratio (WER) in order to incorporate the effects of local water chemistry on toxicity. The WER is assumed to be equal to one except where sufficient site-specific data are available to determine the WER for a particular water body or portion of a water body. A WER is only applicable to those portions of a water body that are adequately addressed by site-specific data. WERs that have been determined for particular water bodies are listed in Appendix E of §307.10 of this title (relating to Appendices A - G) when standards are revised. A site-specific WER that affects an effluent limitation in a

wastewater discharge permit, and that has not been incorporated into Appendix E of §307.10 of this title, must be noted in a public notice during the permit application process. An opportunity for public comment must be provided, and the WER may be considered in any public hearing on the permit application.]

(10) Freshwater copper aquatic-life criteria include a multiplier (m) to incorporate effects of local water chemistry on toxicity. Site-specific criteria may be based on either a WER or a biotic ligand model. The WER multiplier is assumed to be equal to one except where sufficient site-specific data are available to determine the multiplier for a particular water body or portion of a water body. The WER multiplier or biotic ligand model result is only applicable to those portions of a water body that are adequately addressed by site-specific data. The biotic ligand model is based on the dissolved portion of copper, and the freshwater equation is not used in this case. As WER multipliers and criteria based on biotic ligand models are determined for particular water bodies, they are listed in Appendix E of §307.10 of this title when standards are revised. A site-specific WER multiplier or biotic ligand model result that affects an effluent limitation in a wastewater discharge permit, and that has not been incorporated into Appendix E of §307.10 of this title, is noted in a public notice during the permit application process. An opportunity for public comment must be provided, and the WER multiplier or biotic ligand model result may be considered in any public hearing on the permit application.]

[(11) Additional site-specific factors may indicate that the numerical criteria listed in Table 1 of paragraph (1) of this subsection are inappropriate for a particular water body. These factors are applied as a site-specific standards modification in accordance with §307.2(d) of this title (relating to Description of Standards). The application of a site-specific standard must not impair an existing, attainable, or designated use. Factors that may justify a temporary variance or site-specific standards amendment include the following:]

(A) background concentrations of specific toxics of concern in receiving waters, sediment, or indigenous biota;]

[(B) persistence and degradation rate of specific toxic materials;]

[(C) synergistic, additive, or antagonistic interactions of toxic substances with other toxic or nontoxic materials;]

[(D) measurements of total effluent toxicity;]

(E) indigenous aquatic organisms, which may have different responses to particular toxic materials;]

	[(F) technological or economic limits of treatability for specific
toxic materials;]	
1 11 14777	[(G) bioavailability of specific toxic substances of concern, as
determined by WEI	R tests or other analyses approved by the commission; and]
substance.]	[(H) new information concerning the toxicity of a particular
[(d) Specific	numerical human health criteria.
[(1) N paragraph.]	umerical human health criteria are established in Table 2 of this

# [TABLE 2] [Criteria in Water for Specific Toxic Materials] [HUMAN HEALTH PROTECTION]

# [(All values are listed or calculated in micrograms per liter unless otherwise noted)]

		А	В
Parameter	CASRN	Water and Fish	Fish Only
[Acrylonitrile]	[107-13-1]	[1.0]	[115]
[Aldrin]	<mark>[309-00-2]</mark>	[1.146E-05]	[1.147E-05]
[Anthracene]	<mark>[120-12-7]</mark>	[1,109]	<mark>[1,317]</mark>
[Antimony]	[7440-36-0]	[6 <sup>1</sup> ]	[1,071]
[Arsenic (d)]	[7440-38-2]	[10 <sup>1</sup> ]	[]
[Barium (d)]	<mark>[7440-39-3]</mark>	[2,000 <sup>1</sup> ]	[]
[Benzene]	<mark>[71-43-2]</mark>	[5 <sup>1</sup> ]	<mark>[581]</mark>
[Benzidine]	<mark>[92-87-5]</mark>	[0.0015]	[0.107]
[Benzo( <i>a</i> )anthracene]	<mark>[56-55-3]</mark>	0.100	0.103
[Benzo( <i>a</i> )pyrene]	<mark>[50-32-8]</mark>	0.0100	0.0103
[Bis(chloromethyl)ether]	<mark>[542-88-1]</mark>	[0.0024]	[0.2745]
[Bis(2-chloroethyl)ether]	<mark>[111-44-4]</mark>	<mark>[0.60]</mark>	<mark>[42.83]</mark>
[Bis(2-ethylhexyl)phthalate]	[117-81-7]	[6 <sup>1</sup> ]	<mark>[7.55]</mark>
[Bromodichloromethane]	<mark>[75-27-4]</mark>	[10.2]	[275]
[Bromoform]	<mark>[75-25-2]</mark>	<mark>[66.9]</mark>	<mark>[1,060]</mark>

		Α	В
Parameter	CASRN	Water and Fish	Fish Only
[Cadmium (d)]	<mark>[7440-43-9]</mark>	[5 <sup>1</sup> ]	[]
[Carbon Tetrachloride]	<mark>[56-23-5]</mark>	<mark>[4.5]</mark>	<mark>[46]</mark>
[Chlordane]	<mark>[12789-03-</mark> 6]	[0.0025]	[0.0025]
[Chlorobenzene]	<mark>[108-90-7]</mark>	[100 <sup>1</sup> ]	[2,737]
[Chlorodibromomethane]	<mark>[124-48-1]</mark>	[7.5]	<mark>[183]</mark>
[Chloroform]	<mark>[67-66-3]</mark>	[70 <sup>1</sup> ]	<mark>[7,697]</mark>
[Chromium (Hex) (d)]	<mark>[18540-29-</mark> 9]	[62]	[502]
[Chrysene]	<mark>[218-01-9]</mark>	9.96	10.26
[Cresols <sup>2</sup> ]		[1,041]	<mark>[9,301]</mark>
[ <i>m</i> -Cresol]	[108-39-4]		
[ <i>o</i> -Cresol]	<mark>[95-48-7]</mark>		
[p-Cresol]	[106-44-5]		
[Cyanide (free) <sup>3</sup> ]	[57-12-5]	[200 <sup>1</sup> ]	[]
[4,4'-DDD]	[72-54-8]	[0.002]	[0.002]
[4,4'-DDE]	[72-55-9]	[0.00013]	[0.00013]
[4,4'-DDT]	[50-29-3]	[0.0004]	[0.0004]
[2,4-D]	<mark>[94-75-7]</mark>	[70 <sup>1</sup> ]	[]

		А	В		
Parameter	CASRN	Water and Fish	Fish Only		
[Danitol]	[39515-41- <mark>8</mark> ]	[262]	[473]		
[1,2-Dibromoethane]	[106-93-4]	[0.17]	[4.24]		
[ <i>m</i> -Dichlorobenzene]	[541-73-1]	[322]	[595]		
[ <i>o</i> -Dichlorobenzene]	<mark>[95-50-1]</mark>	[600 <sup>1</sup> ]	<mark>[3,299]</mark>		
[ <i>p</i> -Dichlorobenzene]	[106-46-7]	[75 <sup>1</sup> ]	[]		
[3,3'-Dichlorobenzidine]	[91-94-1]	[0.79]	[2.24]		
[1,2-Dichloroethane]	[107-06-2]	[5 <sup>1</sup> ]	<mark>[364]</mark>		
[1,1-Dichloroethylene]	<mark>[75-35-4]</mark>	[7 <sup>1</sup> ]	[55,114]		
[Dichloromethane]	[75-09-2]	[5 <sup>1</sup> ]	10,714		
[1,2-Dichloropropane]	[78-87-5]	[5 <sup>1</sup> ]	301.98		
[1,3-Dichloropropene]	[542-75-6]	3.4	145		
[Dicofol]	[115-32-2]	0.35	0.35		
[Dieldrin]	[60-57-1]	[2.0E-5]	[2.0E-5]		
[2,4-Dimethylphenol]	[105-67-9]	[444]	<mark>[8,436]</mark>		
[Di- <i>n</i> -Butyl Phthalate]	<b>[84-74-2]</b>	<mark>[88.9]</mark>	<mark>[92.4]</mark>		
[Dioxins/Furans (TCDD Equivalents)]	[1746-01-6]	[7.80E-8]	[7.97E-8]		
[Congener/Isomer]	[Congener/Isomer]				
[2,3,7,8 TCDD]		[1]	[1]		

		Α	В
Parameter	CASRN	Water and Fish	Fish Only
[1,2,3,7,8 PeCDD]		[1]	[1]
[2,3,7,8 HxCDDs]		[0.1]	<mark>[0.1]</mark>
[1,2,3,4,6,7,8 HpCDD]		[0.01]	[0.01]
[2,3,7,8 TCDF]		<mark>[0.1]</mark>	[0.1]
[1,2,3,7,8 PeCDF]		[0.03]	<mark>[0.03]</mark>
[2,3,4,7,8 PeCDF]		<mark>[0.3]</mark>	[0.3]
[2,3,7,8 HxCDFs]		<mark>[0.1]</mark>	[0.1]
[2,3,4,7,8 HpCDFs]		[0.01]	[0.01]
[OCDD]		[0.0003]	[0.0003]
[OCDF]		[0.0003]	[0.0003]
[PCB 77]		[0.0001]	[0.0001]
[PCB 81]		[0.0003]	[0.0003]
[PCB126]		[0.1]	[0.1]
[PCB 169]		[0.03]	[0.03]
[Endrin]	[72-20-8]	[0.02]	[0.02]
[Epichlorohydrin]	[106-89-8]	[53.5]	[2,013]
[Ethylbenzene]	[100-41-4]	[700 <sup>1</sup> ]	[1,867]
[Ethylene Glycol]	[107-21-1]	<mark>[46,744]</mark>	[1.68E7]

		Α	В
Parameter	CASRN	Water and Fish	Fish Only
[Fluoride]	<mark>[16984-48-</mark> 8]	[4,000 <sup>1</sup> ]	[]
[Heptachlor]	[76-44-8	[8.0E-5]	[0.0001]
[Heptachlor Epoxide]	[1024-57-3	[0.00029]	[0.00029]
[Hexachlorobenzene]	[118-74-1	[0.00068]	[0.00068]
[Hexachlorobutadiene]	<mark>[87-68-3</mark>	[0.21]	[0.22]
[Hexachlorocyclohexane ( <i>alpha</i> )]	<mark>[319-84-6</mark>	[0.0078]	[0.0084]
[Hexachlorocyclohexane ( <i>beta</i> )]	<mark>[319-85-7</mark>	[0.15]	<mark>[0.26]</mark>
[Hexachlorocyclohexane (gamma) (Lindane)]	<mark>[58-89-9</mark>	[0.2 <sup>1</sup> ]	[0.341]
[Hexachlorocyclopentadiene]	<mark>[77-47-4</mark>	[10.7]	[11.6]
[Hexachloroethane]	[67-72-1	[1.84]	[2.33
[Hexachlorophene]	[70-30-4	[2.05]	[2.90]
[4,4'-Isopropylidenediphenol (bisphenol A)]	[80-05-7	[1,092]	[15,982]
[Lead (d)]	[7439-92-1	[1.15]	<mark>[3.83]</mark>
[Mercury in freshwater <sup>4</sup> ]	[7439-97-6	[0.0122]	[0.0122]
[Mercury in saltwater <sup>5</sup> ]	[7439-97-6	[]	[0.0250]
[Methoxychlor]	[72-43-5	[2.92]	[3.0]
[Methyl Ethyl Ketone]	<mark>[78-93-3</mark>	<mark>[13,865]</mark>	[9.92E+5]

		Α	В
Parameter	CASRN	Water and Fish	Fish Only
[Methyl <i>tert</i> -butyl ether (MTBE)]	[1634-04-4]	[15 <sup>7</sup> ]	[10,482]
[Nickel (d)]	[7440-02-0]	[332]	[1140]
[Nitrate-Nitrogen as total Nitrogen]	<mark>[14797-55-</mark> 8]	[10,000 <sup>1</sup> ]	[]
[Nitrobenzene]	<mark>[98-95-3]</mark>	<mark>[45.7]</mark>	<mark>[1,873]</mark>
[N-Nitrosodiethylamine]	<mark>[55-18-5]</mark>	[0.0037]	[2.1]
[N-Nitroso-di-n-Butylamine]	<mark>[924-16-3]</mark>	[0.119]	[4.2]
[Pentachlorobenzene]	<mark>[608-93-5]</mark>	<mark>[0.348]</mark>	[0.355]
[Pentachlorophenol]	<mark>[87-86-5]</mark>	[0.22]	<mark>[0.29]</mark>
[Polychlorinated Biphenyls (PCBs) <sup>6</sup> ]	<mark>[1336-36-3]</mark>	[6.4E-4]	[6.4E-4]
[Pyridine]	<mark>[110-86-1]</mark>	[23]	<mark>[947]</mark>
[Selenium]	[7782-49-2]	[50 <sup>1</sup> ]	[]
[1,2,4,5-Tetrachlorobenzene]	<mark>[95-94-3]</mark>	[0.23]	[0.24]
[1,1,2,2-Tetrachloroethane]	<mark>[79-34-5]</mark>	[1.64]	[26.35]
[Tetrachloroethylene]	<mark>[127-18-4]</mark>	[5 <sup>1</sup> ]	237
[Thallium]	<mark>[7440-28-0]</mark>	[0.12]	[0.23]
[Toluene]	[108-88-3]	[1,000 <sup>1</sup> ]	[]
[Toxaphene]	[8001-35-2]	[0.011]	[0.011]
[2,4,5-TP (Silvex)]	<mark>[93-72-1]</mark>	[50 <sup>1</sup> ]	<mark>[369]</mark>

		Α	B
Parameter	CASRN	Water and Fish	Fish Only
[1,1,1-Trichloroethane]	[71-55-6]	[200 <sup>1</sup> ]	[784,354]
[1,1,2-Trichloroethane]	<mark>[79-00-5]</mark>	[5 <sup>1</sup> ]	<mark>[166]</mark>
[Trichloroethylene]	[79-01-6]	[5 <sup>1</sup> ]	<mark>[71.9]</mark>
[2,4,5 Trichlorophenol]	<mark>[95-95-4]</mark>	[1,039]	<mark>[1,867]</mark>
[TTHM (Sum of total trihalomethanes)]	<mark>[]</mark>	[80 <sup>1</sup> ]	[]
[bromodichloromethane]	[75-27-4]		[]
[dibromochloromethane]	[124-48-1]		[]
[tribromomethane (bromoform)]	<mark>[75-25-2]</mark>		[]
[trichloromethane (chloroform)]	<mark>[67-66-3]</mark>		[]
[Vinyl Chloride]	<b>[75-01-4]</b>	[0.23]	<mark>[16.5]</mark>

- [1 Based on Maximum Contaminant Levels (MCLs) specified in 30 TAC Chapter290 (relating to Public Drinking Water).]
- [2 The criteria are identical and independently applied to *m*-, *o*-, and *p*-Cresol.]
- [3 Compliance will be determined using an analytical method for free or available cyanide.]
- [4 Consumption rate for fish and shellfish was estimated as 10 grams per person per day.]
- [5 Consumption rate for fish and shellfish was estimated as 15 grams per person per day.]
- [6 Until Method 1668 or equivalent method to measure PCB congeners is approved in 40 Code of Federal Regulations Part 136, compliance with PCB criteria is determined using Aroclor data or any alternate method listed in a TCEQapproved Quality Assurance Plan.]

- [7 Based on aesthetics criteria in the 1998 Oxygenated Fuels Association study Taste and Odor Properties of Methyl Tertiary-Butyl Ether and Implications for Setting a Secondary MCL.]
- [(d) Indicates that the criteria for a specific parameter are for the dissolved fraction in water. All other criteria are for total recoverable concentrations, except where noted.]

#### [(2) Categories of human health criteria.]

[(A) Concentration criteria to prevent contamination of drinking water, fish, and other aquatic life to ensure that they are safe for human consumption. These criteria apply to surface waters that are designated or used for public drinking water supplies, including all water bodies identified as having a public drinking water supply use in Appendix A of §307.10 of this title or as a sole-source surface drinking water supply in Appendix B of §307.10 of this title. (Column A in Table 2 of paragraph (1) of this subsection.)]

[(B) Concentration criteria to prevent contamination of fish and other aquatic life to ensure that they are safe for human consumption. These criteria apply to surface waters that have sustainable fisheries and that are not designated or used for public water supply or as a sole-source surface drinking water supply (Column B in Table 2 of paragraph (1) of this subsection).]

[(3) Specific assumptions and procedures (except where noted in Table 2 of paragraph (1) of this subsection).]

[(A) Sources for the toxicity factors to calculate criteria were derived from EPA's IRIS database; EPA's *National Recommended Water Quality Criteria: 2002, Human Health Criteria Calculation Matrix* (EPA-822-R-02-012); EPA inputs for calculating the 2015 updated national recommended human health criteria; EPA Health Effects Assessment Summary Tables (HEAST); Assessment Tools for the Evaluation of Risk (ASTER); EPA's QSAR Toxicity Estimation Software Tool, version 4.1; and the computer program, CLOGP3.]

[(B) For known or suspected carcinogens (as identified in EPA's IRIS database), an incremental cancer risk level of  $10^{-5}$ (1 in 100,000) was used to derive criteria. An RfD (reference dose) was determined for carcinogens and noncarcinogens where the EPA has not derived cancer slope factors.]

[(C) Consumption rates of fish and shellfish were estimated as 17.5 grams per person per day, unless otherwise specified in Table 2 of paragraph (1) of this subsection.]

(D) Drinking water consumption rates were estimated as 2.0 liters per person per day.]

[(E) For carcinogens, a body-weight scaling factor of 3/4 power was used to convert data on laboratory test animals to human scale. Reported weights of laboratory test animals are used, and an average weight of 70 kilograms is assumed for humans.]

[(F) Childhood exposure was considered for all noncarcinogens. Consumption rates for fish and shellfish were estimated as 5.6 grams per child per day and drinking water consumption rates were estimated as 0.64 liters per child per day. A child body weight was estimated at 15 kilograms. Both the water consumption rate and body weight are age-adjusted for a six-year-old child. The consumption rate for fish and shellfish for children is from Table 10-61 of EPA's 1997 Exposure Factors Handbook (EPA/600/P-95/002Fa-c).]

[(G) Numerical human health criteria were derived in accordance with the general procedures and calculations in the EPA guidance documents entitled *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001); *Guidance Manual for Assessing Human Health Risks from Chemically Contaminated Fish and Shellfish* (EPA/503/8-89-002); and *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health* (2000) (EPA-822-B-00-004).]

[(H) If a calculated criterion to prevent contamination of drinking water and fish to ensure they are safe for human consumption (Column A in Table 2 of paragraph (1) of this subsection) was greater than the applicable maximum contaminant level (MCL) in Chapter 290 of this title (relating to Public Drinking Water), then the MCL was used as the criterion.]

[(I) If the concentration of a substance in fish tissue used for these calculations was greater than the applicable United States Food and Drug Administration Action Level for edible fish and shellfish tissue, then the acceptable concentration in fish tissue was lowered to the Action Level for calculation of criteria.]

[(4) Human health criteria for additional toxic materials are adopted by the commission as appropriate.]

[(5) Specific human health concentration criteria for water are applicable to water in the state that has sustainable fisheries or designation or use as a public drinking water supply or as a sole-source drinking water supply except within mixing zones and below stream flow conditions as specified in §307.8 of this title. The following waters are considered to have sustainable fisheries:]

[(A) all designated segments listed in Appendix A of §307.10 of this title, unless specifically exempted;]

[(B) perennial streams and rivers with a stream order of three or greater, as defined in §307.3 of this title (relating to Definitions and Abbreviations);]

50 surface acres;]

[(C) lakes and reservoirs greater than or equal to 150 acre-feet or

[(D) all bays, estuaries, and tidal rivers; and]

[(E) any other waters that potentially have sufficient fish production or fishing activity to create significant long-term human consumption of fish.]

[(6) Waters that are not considered to have a sustainable fishery, but that have an aquatic life use of limited or greater, are considered to have an incidental fishery. Consumption rates assumed for incidental fishery waters are 1.75 grams per person per day. Therefore, numerical criteria applicable to incidental fishery waters are ten times the criteria listed in Column B in Table 2 of paragraph (1) of this subsection.]

[(7) Specific human health criteria are applied as long term average exposure criteria designed to protect populations over a life time. Attainment measures for human health are addressed in §307.9 of this title.]

[(8) For toxic materials of concern where specific human health criteria are not listed in Table 2 of paragraph (1) of this subsection, the following provisions apply:]

[(A) For known or suspected carcinogens (as identified in EPA's IRIS database), a cancer risk of 10-5 (1 in 100,000) is applied to the most recent numerical criteria adopted by the EPA and published in the Federal Register. If an MCL or equivalent agency guideline for protection of drinking water sources is less than the resulting criterion, then the MCL applies to public drinking water supplies in accordance with paragraph (3)(H) of this subsection.]

[(B) For toxic materials not defined as carcinogens, the most recent numerical criteria adopted by the EPA and published in the Federal Register are applicable. If an MCL or equivalent agency guideline for protection of drinking water sources is less than the resulting criterion, then the MCL applies to public drinking water supplies in accordance with paragraph (3)(H) of this subsection.]

[(C) In the absence of available criteria, numerical criteria may be derived from technically valid information and calculated in accordance with the provisions of paragraph (3) of this subsection.]

[(9) Numerical criteria for bioconcentratable pollutants are derived in accordance with the general procedures in the EPA guidance document entitled Assessment and Control of Bioconcentratable Contaminants in Surface Water (March 1991). The commission may develop discharge permit limits in accordance with the provisions of this section.]

[(10) Numerical human health criteria are expressed as total recoverable concentrations for nonmetals and selenium and as dissolved concentrations for other metals and metalloids.]

[(11) Additional site-specific factors may indicate that the numerical human health criteria listed in Table 2 of paragraph (1) of this subsection are inappropriate for a particular water body. These factors are applied as a site-specific standards modification in accordance with §307.2(d) of this title. The application of site-specific criteria must not impair an existing, attainable, presumed, or designated use or affect human health. Factors that may justify a temporary variance or sitespecific standards amendment include the following:]

[(A) background concentrations of specific toxics of concern in receiving waters, sediment, or indigenous biota;]

[(B) persistence and degradation rate of specific toxic materials;]

[(C) synergistic or antagonistic interactions of toxic substances with other toxic or nontoxic materials;]

[(D) technological or economic limits of treatability for specific

toxic materials;]

[(E) bioavailability of specific toxic substances of concern;]

[(F) local water chemistry and other site-specific conditions that may alter the bioconcentration, bioaccumulation, or toxicity of specific toxic substances;]

[(G) site-specific differences in the bioaccumulation responses of indigenous, edible aquatic organisms to specific toxic materials;]

[(H) local differences in consumption patterns of fish and shellfish or drinking water, but only if any changes in assumed consumption rates are protective of the local population that frequently consumes fish, shellfish, or drinking water from a particular water body; and]

[(I) new information concerning the toxicity of a particular

substance.]

#### [(e) Total toxicity.]

[(1) Total (whole-effluent) toxicity of permitted discharges, as determined from biomonitoring of effluent samples at appropriate dilutions, must be sufficiently controlled to preclude acute total toxicity in all water in the state with the exception of small ZIDs at discharge points and at extremely low streamflow conditions (one-fourth of critical low-flow conditions) in accordance with §307.8 of this title. Acute total toxicity levels may be exceeded in a ZID, but there must be no significant lethality to aquatic organisms that move through a ZID, and the sizes of ZIDs are limited in accordance with §307.8 of this title. Chronic total toxicity, as determined from biomonitoring of effluent samples at appropriate dilutions, must be sufficiently controlled to preclude chronic toxicity in all water in the state with an existing or designated aquatic life use of limited or greater except in mixing zones at discharge points and at flows less than critical low-flows, in accordance with §307.8 of this title. Chronic toxicity levels may be exceeded in a mixing zone, but there must be no significant sublethal toxicity to aquatic organisms that move through the mixing zone.]

[(2) General provisions for controlling total toxicity.]

'(A) Dischargers whose effluent has a significant potential for exerting toxicity in receiving waters as described in the Procedures to Implement the Texas Surface Water Quality Standards (RG-194) as amended are required to conduct whole effluent toxicity biomonitoring at appropriate dilutions.'

'(B) In addition to the other requirements of this section, the effluent of discharges to water in the state must not be acutely toxic to sensitive species of aquatic life, as demonstrated by effluent toxicity tests. Toxicity testing for

this purpose is conducted on samples of 100% effluent, and the criterion for acute toxicity is mortality of 50% or more of the test organisms after 24 hours of exposure. This provision does not apply to mortality that is a result of an excess, deficiency, or imbalance of dissolved inorganic salts (such as sodium, calcium, potassium, chloride, or carbonate) that are in the effluent and are not listed in Table 1 of subsection (c)(1) of this section or that are in source waters.'

[(C) The latest revisions of the following EPA publications provide methods for appropriate biomonitoring procedures: Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Shortterm Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, and the Technical Support Document for Water Quality-based Toxics Control. The use of other procedures approved by the agency and the EPA is also acceptable. Toxicity tests must be conducted using representative, sensitive aquatic organisms as approved by the agency, and any such testing must adequately determine if toxicity standards are being attained.]

'(D) If toxicity biomonitoring results indicate that a discharge is not sufficiently controlled to preclude acute or chronic toxicity as described in this subsection, then the permittee will be required to eliminate sources of toxicity and may be required to conduct a toxicity reduction evaluation (TRE) in accordance with the permitting procedures of the commission. In accordance with the standards implementation procedures (RG-194), permits are amended to include appropriate provisions to eliminate toxicity. Such provisions may include total toxicity limits, chemical-specific limits, best management practices, or other actions (such as moving a discharge location) designed to reduce or eliminate toxicity. Where sufficient to attain and maintain applicable numeric and narrative state water quality standards, a chemical-specific limit, best management practices, or other actions designed to reduce or eliminate toxicity rather than a total toxicity limit may be established in the permit. Where conditions may be necessary to prevent or reduce effluent toxicity, permits must include a reasonable schedule for achieving compliance with such additional conditions.'

[(E) Discharge permit limits based on total toxicity may be established in consideration of site-specific factors, but the application of such factors must not result in impairment of an existing, attainable, presumed, or designated use. These factors are applied as a site-specific standards modification in accordance with §307.2(d) of this title. A demonstration that uses are protected may consist of additional effluent toxicity testing, instream monitoring requirements, or other

necessary information as determined by the agency. Factors that may justify a temporary variance or site-specific standards amendment include the following:]

[(i) background toxicity of receiving waters;]

[(ii) persistence and degradation rate of principal toxic materials that are contributing to the total toxicity of the discharge;]

[(iii) site-specific variables that may alter the impact of toxicity in the discharge;]

(iv) indigenous aquatic organisms that may have different levels of sensitivity than the species used for total toxicity testing; and]

(v) technological, economic, or legal limits of treatability or control for specific toxic material.]

#### [§307.7. Site-Specific Uses and Criteria.]

[(a) Uses and numerical criteria are established on a site-specific basis in Appendices A, B, D, E, F, and G of §307.10 of this title (relating to Appendices A - G). Site-specific uses and numerical criteria may also be applied to unclassified waters in accordance with §307.4 of this title (relating to General Criteria) and §307.5(c) of this title (relating to Antidegradation). Site-specific criteria apply specifically to substances attributed to waste discharges or human activity. Site-specific criteria do not apply to those instances when surface waters exceed criteria due to natural phenomena. The application of site-specific uses and criteria is described in §307.8 of this title (relating to the Application of Standards) and §307.9 of this title (relating to the Determination of Standards Attainment).]

[(b) Appropriate uses and criteria for site-specific standards are defined as follows.]

[(1) Recreation. Recreational use consists of five categories--primary contact recreation 1, primary contact recreation 2, secondary contact recreation 1, secondary contact recreation 2, and noncontact recreation waters. Classified segments are designated for primary contact recreation 1 unless sufficient site-specific information demonstrates that elevated concentrations of indicator bacteria frequently occur due to sources of pollution that cannot be reasonably controlled by existing regulations, wildlife sources of bacteria are unavoidably high and there is limited aquatic recreational potential, or primary or secondary contact recreation is considered unsafe for other reasons such as ship or barge traffic. In a classified segment where

contact recreation is considered unsafe for reasons unrelated to water quality, a designated use of noncontact recreation may be assigned either noncontact recreation criteria or criteria normally associated with primary contact recreation. A designation of primary or secondary contact recreation is not a guarantee that the water so designated is completely free of disease-causing organisms. Indicator bacteria, although not generally pathogenic, are indicative of potential contamination by feces of warm-blooded animals. Recreational criteria are based on these indicator bacteria rather than direct measurements of pathogens. Criteria are expressed as the number of bacteria per 100 milliliters (mL) of water (in terms of colony forming units, most probable number, or other applicable reporting measures). Even where the concentration of indicator bacteria is less than the criteria for primary or secondary contact recreation is less than the criteria for primary or secondary contact recreation, there is still some risk of contracting waterborne diseases. Additional guidelines on minimum data requirements and procedures for evaluating standards attainment are specified in the *TCEQ Guidance for Assessing and Reporting Surface Water Quality in Texas*, as amended.]

[(A) Freshwater.]

[(i) Primary contact recreation 1. The geometric mean criterion for *E. coli* is 126 per 100 mL. In addition, the single sample criterion for *E. coli* is 399 per 100 mL.]

[(ii) Primary contact recreation 2. The geometric mean criterion for *E. coli* is 206 per 100 mL.]

[(iii) Secondary contact recreation 1. The geometric mean criterion for *E. coli* is 630 per 100 mL.]

(iv) Secondary contact recreation 2. The geometric mean criterion for *E. coli* is 1,030 per 100 mL.]

[(v) Noncontact recreation. The geometric mean criterion for *E. coli* is 2,060 per 100 mL.]

[(vi) For high saline inland water bodies where Enterococci is the designated recreational indicator in Appendix A of §307.10 of this title, Enterococci is the applicable recreational indicator for instream bacteria sampling at all times for the classified water body and for the unclassified water bodies that are within the watershed of that classified segment, unless it is demonstrated that an unclassified water body is not high saline. *E. coli* is the applicable recreational indicator for instream bacteria sampling at all times for unclassified water bodies where conductivity values indicate that the water bodies are not high saline. For high saline

inland waters with primary contact recreation 1, the geometric mean criterion for Enterococci is 33 per 100 mL and the single sample criterion is 78 per 100 mL.] For high saline inland waters with primary contact recreation 2, the geometric mean criterion for Enterococci is 54 per 100 mL. [For high saline inland waters with secondary contact recreation 1, the geometric mean criterion for Enterococci is 165 per 100 mL. For high saline inland waters with secondary contact recreation 2, the geometric mean criterion for Enterococci is 270 per 100 mL. For high saline inland water bodies with noncontact recreation, the geometric mean criterion for Enterococci is 540 per 100 mL.]

[(B) Saltwater.]

(i) Primary contact recreation 1. The geometric mean criterion for Enterococci is 35 per 100 mL. In addition, the single sample criterion for Enterococci is 130 per 100 mL.]

[(ii) Secondary contact recreation 1. A secondary contact recreation 1 use for tidal streams and rivers can be established on a site-specific basis in §307.10 of this title if justified by a use-attainability analysis and the water body is not a coastal recreation water as defined in the Beaches Environmental Assessment and Coastal Health Act of 2000 (BEACH Act). The geometric mean criterion for Enterococci is 175 per 100 mL.]

[(iii) Noncontact recreation. A noncontact recreation use for tidal streams and rivers can be established on a site-specific basis in §307.10 of this title if justified by a use-attainability analysis and the water body is not a coastal recreation water, as defined in §307.3 of this title (relating to Definitions and Abbreviations). The geometric mean criterion for Enterococci is 350 per 100 mL.]

[(C) Swimming advisory programs. For areas where local jurisdictions or private property owners voluntarily provide public notice or closure based on water quality, the use of any single-sample or short-term indicators of recreational suitability are selected at the discretion of the local managers of aquatic recreation. Guidance for single-sample bacterial indicators is available in the EPA documents entitled *Recreational Water Quality Criteria* (EPA-820-F-12-058) and *Ambient Water Quality Criteria for Bacteria - 1986* (EPA 440/5-84-002). Other shortterm indicators to assess water quality suitability for recreation - such as measures of streamflow, turbidity, or rainfall - may also be appropriate.]

[(2) Domestic water supply.]

(A) Use categories. Domestic water supply consists of three use subcategories - public water supply, sole-source surface drinking water supply, and aquifer protection.]

[(i) Public water supply. Segments designated for public water supply are those known to be used or exhibit characteristics that would allow them to be used as the supply source for public water systems as defined by Chapter 290 of this title (relating to Public Drinking Water).]

[(ii) Sole-source surface drinking water supplies and their protection zones. Water bodies that are sole-source surface drinking water supplies are listed in Appendix B of §307.10 of this title. Sole-source surface drinking water supplies and their protection zones are addressed in Chapter 321, Subchapter B of this title (relating to Concentrated Animal Feeding Operations).]

[(iii) Aquifer protection. Segments designated for aquifer protection are capable of recharging the Edwards Aquifer. The principal purpose of this use designation is to protect the quality of water infiltrating into and recharging the aquifer. The designation for aquifer protection applies only to those portions of the segments so designated that are on the recharge zone, transition zone, or contributing zone as defined in Chapter 213 of this title (relating to the Edwards Aquifer). Chapter 213 of this title establishes provisions for activities in the watersheds of segments that are designated for aquifer protection.]

[(B) Use criteria. The following use criteria apply to all domestic water supply use subcategories.]

[(i) Radioactivity associated with dissolved minerals in the freshwater portions of river basin and coastal basin waters should not exceed levels established by drinking water standards as specified in Chapter 290 of this title unless the conditions are of natural origin.]

[(ii) Surface waters utilized for domestic water supply must not exceed toxic material concentrations that prevent them from being treated by conventional surface water treatment to meet drinking water standards as specified in Chapter 290 of this title.]

[(iii) Chemical and microbiological quality of surface waters used for domestic water supply should conform to drinking water standards as specified in Chapter 290 of this title.]

[(3) Aquatic life. The establishment of numerical criteria for aquatic life is highly dependent on desired use, sensitivities of aquatic communities, and local physical and chemical characteristics. Six subcategories of aquatic life use are established. They include minimal, limited, intermediate, high, and exceptional aquatic life and oyster waters. Aquatic life use subcategories designated for segments listed in Appendix A of §307.10 of this title recognize the natural variability of aquatic community requirements and local environmental conditions.]

#### [(A) Dissolved oxygen.]

[(i) The characteristics and associated dissolved oxygen criteria for limited, intermediate, high, and exceptional aquatic life use subcategories are indicated in Table 3 of this clause. This table also includes dissolved oxygen criteria for a minimal aquatic life use subcategory that applies to intermittent streams without perennial pools as indicated in §307.4(h)(4) of this title.]

	[Aquatic Life Use Subcategories]								
	[Dissolved Oxygen]	[Dissolved Oxygen] [Freshwater	[Dissolved Oxygen]	<mark>[Aquatic Life</mark> Attributes]	[Aquatic Life <mark>Attributes]</mark>	[Aquatic Life Attributes]	<mark>[Aquatic Life</mark> Attributes]	<mark>[Aquatic Life</mark> Attributes]	[Aquatic Life Attributes]
[Aquatic Life Use Subcategory]	[Freshwater mean/ minimum]	in Spring mean/ minimum]	[Saltwater mean/ minimum]	<mark>[Habitat</mark> Characteristics]	[Species Assemblage]	[Sensitive species]	[Diversity]	<mark>[Species</mark> Richness]	[Trophic Structure]
[Exceptional]	[6.0/4.0]	[6.0/5.0]	[5.0/4.0]	[Outstanding natural variability]	[Exceptional or unusual]	[Abundant]	[Exceptionally high]	[Exceptionally high]	[Balanced]
[High]	[5.0/3.0]	[5.5/4.5]	[4.0/3.0]	[Highly diverse]	[Usual association of regionally expected species]	[Present]	[High]	[High]	[Balanced to slightly imbalanced]
[Intermediate]	[4.0/3.0]	[5.0/4.0]	[3.0/2.0]	[Moderately diverse]	<mark>[Some</mark> expected species]	[Very low in abundance]	[Moderate]	[Moderate]	[Moderately imbalanced]

[TABLE 3] [Aquatic Life Use Subcategories

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		[Dissolved Oxygen] [Freshwater	[Dissolved Oxygen]	<mark>[Aquatic Life</mark> Attributes]	[Aquatic Life <mark>Attributes]</mark>	[Aquatic Life Attributes]	<mark>[Aquatic Life</mark> Attributes]	<mark>[Aquatic Life</mark> Attributes]	[Aquatic Life Attributes]
[Aquatic Life Use <mark>Subcategory]</mark>	[Freshwater mean/ minimum]	in Spring mean/ minimum]	[Saltwater mean/ minimum]	[Habitat Characteristics]	<mark>[Species</mark> Assemblage]	<mark>[Sensitive</mark> species]	[Diversity]	<mark>[Species</mark> Richness]	<mark>[Trophic</mark> Structure]
[Limited]	[3.0/2.0]	<mark>[4.0/3.0</mark>		[Uniform]	[Most regionally expected species absent]	<mark>[Absent]</mark>	[Low]	[Low]	<mark>[Severely</mark> imbalanced]
[Minimal]	[2.0/1.5]								

[Dissolved oxygen means are applied as a minimum average over a 24-hour period.]

[24-hour minimum dissolved oxygen concentrations are not to extend beyond eight hours per 24-hour day. Lower dissolved oxygen minima may apply on a site-specific basis, when natural daily fluctuations below the mean are greater than the difference between the mean and minima of the appropriate criteria.]

[Spring criteria to protect fish spawning periods are applied during that portion of the first half of the year when water temperatures are 63.0°F to 73.0°F.]

[Procedures to support aquatic life attributes are described in the standards implementation procedures (RG-194) chapter "Determining Water Quality Uses and Criteria" as amended.]

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- [Dissolved oxygen analyses and computer models to establish effluent limits for permitted discharges are normally applied to mean criteria at steady-state, critical conditions.]
- [Determination of standards attainment for dissolved oxygen criteria is specified in §307.9(e)(6) of this title (relating to Determination of Standards Attainment).]
- [Minimal aquatic life use has been historically known as no significant aquatic life use. Typically, the classification of a water body as supporting a minimal aquatic life use is based on flow characteristics (intermittent stream without perennial pools), as set forth in §304.4(h)(4) of this title, and not on aquatic life attributes.]

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(ii) Critical low-flow values associated with the bedslopes and dissolved oxygen criteria in Table 4 of this clause apply to streams that have limited, intermediate, high, or exceptional aquatic life uses and to streams that are specifically listed in Appendix A or D of §307.10 of this title. The critical low-flow values in Table 4 of this clause apply to streams in Texas that are east of a line defined by Interstate Highways 35 and 35W from the Red River to the community of Moore in Frio County, and by US Highway 57 from the community of Moore to the Rio Grande. Table 4 of this clause does not apply where specifically superseded by the equation that is listed in footnote 3 in the Cypress Creek Basin in Appendix A and in footnote 1 in Appendix D of §307.10 of this title. The critical low-flow values in Table 4 of this clause (at the appropriate stream bedslope) are utilized as headwater flows when the flows are larger than applicable seven-day, two-year low-flows in order to determine discharge effluent limits necessary to achieve dissolved oxygen criteria. For streams that have bedslopes less than the minimum bedslopes in Table 4 of this clause, the flows listed for the minimum bedslope of 0.1 meters per kilometer (m/km) are applicable. For streams that have bedslopes greater than the maximum bedslope in Table 4 of this clause, the flows listed for the maximum bedslope of 2.4 m/km are applicable. The required effluent limits are those necessary to achieve each level of dissolved oxygen (as defined in Table 3 of clause (i) of this subparagraph) at or below an assigned, designated, or presumed aquatic life use. Presumed aquatic life uses must be in accordance with those required by §307.4(h) of this title. The critical low-flow values in Table 4 of this clause do not apply to tidal streams.]

# [TABLE 4]

[Critical low-flow values for dissolved oxygen for the eastern and southern Texas ecoregions as described in §307.7(b)(3)(A)(ii).]

[Bedslope (m/km)]	[6.0 DO (cfs)]	[5.0 DO (cfs)]	<mark>[4.0 DO</mark> (cfs)]	[3.0 DO (cfs)]
[0.1]	[*]	[18.3]	[3.0]	[0.5]
[0.2]	[*]	[7.7]	[1.3]	[0.2]
[0.3]	[28.6]	<mark>[4.7]</mark>	[0.8]	[0.1]
[0.4]	[20.0]	[ <u>3.3]</u>	[0.5]	[0.1]
[0.5]	[15.2]	[2.5]	[0.4]	[0.1]
[0.6]	[12.1]	[2.0]	[0.3]	[0.1]
[0.7]	[10.0]	[1.6]	[0.3]	[0.0]
[0.8]	[8.4]	[1.4]	[0.2]	[0.0]
[0.9]	[7.3]	[1.2]	[0.2]	[0.0]
[1.0]	[6.4]	[1.0]	[0.2]	[0.0]
[1.1]	<mark>[5.7]</mark>	[0.9]	[0.2]	[0.0]
[1.2]	[5.1]	[0.8]	[0.1]	[0.0]
[1.3]	[4.6]	[0.8]	[0.1]	[0.0]
[1.4]	[4.2]	[0.7]	[0.1]	[0.0]
[1.5]	[ <u>3.9]</u>	[0.6]	[0.1]	[0.0]
[1.6]	[ <u>3.6]</u>	[0.6]	[0.1]	[0.0]
[1.7]	[ <mark>3.3</mark>	[0.5]	[0.1]	[0.0]

[Bedslope (m/km)]	[6.0 DO (cfs)]	[5.0 DO (cfs)]	[4.0 DO (cfs)]	[3.0 DO (cfs)]
[1.8]	[3.1]	[0.5]	[0.1]	<mark>[0.0]</mark>
[2.1]	[2.5]	[0.4]	[0.1]	[0.0]
[2.4]	[2.2]	[0.4]	[0.1]	[0.0]

[\* Flows are beyond the observed data used in the regression equation.]

[- Dissolved oxygen criteria in this table are in mg/L and apply as 24-hour averages; associated minimum criteria are listed in Table 3 of clause (i) of this subparagraph.]

[- Dissolved oxygen criteria in this table apply at all stream flows at or above the indicated stream flow for each category.]

[(iii) The critical low-flow values in Table 4 of clause (ii) of this subparagraph for limited, intermediate, high, and exceptional aquatic life uses are based upon data from the commission's least impacted stream study (Texas Aquatic Ecoregion Project). Results of this study indicate a strong dependent relationship for average summertime background dissolved oxygen concentrations and several hydrologic and physical stream characteristics - particularly bedslope (stream gradient) and stream flow. The critical low-flow values in Table 4 of clause (ii) of this subparagraph are derived from a multiple regression equation for the eastern portion of Texas as defined in clause (ii) of this subparagraph. Further explanation of the development of the regression equation and its application are contained in the standards implementation procedures as amended.]

[(iv) The critical low-flow values in Table 4 of clause (ii) of this subparagraph may be adjusted based on site-specific data relating dissolved oxygen concentrations to factors such as flow, temperature, or hydraulic conditions in accordance with the standards implementation procedures as amended. Site-specific, critical low-flow values require approval by the commission. The EPA must review any site-specific, critical low-flow values that could affect permits or other regulatory actions that are subject to approval by EPA. Critical low-flow values that have been determined for particular streams are listed in the standards implementation procedures.]

[(i) A 1,000 foot buffer zone, measured from the shoreline at ordinary high tide, is established for all bay and gulf waters except those contained in river or coastal basins as defined in §307.2 of this title (relating to Description of Standards). Recreational criteria for indicator bacteria, as specified in §307.7(b)(1) of this title (relating to Site-Specific Uses and Criteria), are applicable within buffer zones.]

(ii) The criteria for median fecal coliform concentration in bay and gulf waters, exclusive of buffer zones, are 14 colonies per 100 mL with not more than 10% of all samples exceeding 43 colonies per 100 mL.]

'(iii) Oyster waters should be maintained so that concentrations of toxic materials do not cause edible species of clams, oysters, and mussels to exceed accepted guidelines for the protection of public health. Guidelines are provided by the United States Food and Drug Administration Action Levels for molluscan shellfish, but additional information related to human health protection may also be considered in determining acceptable toxic concentrations.'

#### [(4) Additional criteria.

[(A) Chemical parameters. Site-specific criteria for chloride, sulfate, and total dissolved solids are established as averages over an annual period for either a single sampling point or multiple sampling points.]

[(B) pH. Site-specific numerical criteria for pH are established as absolute minima and maxima.]

[(C) Temperature. Site-specific temperature criteria are established as absolute maxima.]

[(D) Toxic materials. Criteria for toxic materials are established in §307.6 of this title (relating to Toxic Materials).]

[(E) Nutrient criteria. Numeric and narrative criteria to preclude excessive growth of aquatic vegetation are intended to protect multiple uses such as primary, secondary, and noncontact recreation, aquatic life, and public water supplies. Nutrient numeric criteria for specific reservoirs, expressed as concentrations of chlorophyll a in water, are listed in Appendix F of §307.10 of this title.]

[(5) Additional uses. Other basic uses, such as navigation, agricultural water supply, industrial water supply, seagrass propagation, and wetland water quality functions must be maintained and protected for all water in the state where these uses can be achieved.]

#### [§307.8. Application of Standards.]

[(a) Flow conditions.]

[(1) The following standards do not apply below critical low-flows:]

[(A) site-specific criteria for dissolved oxygen, pH, temperature, and numerical chronic criteria for toxic materials, as listed in Appendices A, D, and E of §307.10 of this title (relating to Appendices A - G);]

[(B) numerical chronic criteria for toxic materials as established in §307.6 of this title (relating to Toxic Materials);]

[(C) total chronic toxicity restrictions as established in §307.6 of

this title;]

[(D) maximum temperature differentials as established in §307.4(f) of this title (relating to General Criteria); and]

[(E) dissolved oxygen criteria for unclassified waters, as established in §307.4(h) of this title and §307.7(b)(3) of this title (relating to Site-Specific Uses and Criteria).]

[(2) Critical low-flows for streams or rivers that are dominated by springflow are listed in the standards implementation procedures as amended and are calculated as follows:]

[(A) for springflow-dominated streams or rivers that contain federally listed endangered or threatened aquatic or aquatic dependent species, the critical low-flow value is the 0.1 percentile value derived from a lognormal distribution for the period of record at the nearest United States Geological Survey (USGS) or International Boundary and Water Commission (IBWC) gauging station;]

[(B) for springflow-dominated streams or rivers that do not contain federally listed endangered or threatened species, the critical low-flow value is the 5th percentile value of the flow data for the period of record at the nearest USGS or IBWC gauging station.]

[(3) Numerical acute criteria for toxic materials and preclusion of total acute toxicity as established in §307.6 of this title are applicable at stream flows that are equal to or greater than one-fourth of critical low-flows.]

[(4) Harmonic mean flow is the applicable upstream flow when calculating wastewater permit limits for criteria that are assessed as long-term means, such as criteria for total dissolved solids, chloride, sulfate in Appendix A of §307.10 of this title, and human health toxic criteria in Table 2 of §307.6(d)(1) of this title. These criteria are applicable at all flow conditions except as specified for the applicability of assessment data in §307.9 of this title (relating to Determination of Standards and Attainment).]

[(5) Critical low-flows and harmonic mean flows for some classified segments are listed in the standards implementation procedures as amended. These critical low-flows are not for the purpose of regulating flows in water bodies in any manner or requiring that minimum flows be maintained in classified segments.]

[(6) Critical low-flows and harmonic mean flows listed in the standards implementation procedures as amended apply only to river basin and coastal basin waters. They do not apply to bay waters, gulf waters, reservoirs, or estuaries.]

[(7) Critical low-flows and harmonic mean flows in the standards implementation procedures as amended were calculated from historical USGS or IBWC daily streamflow records. If the calculated critical low-flow or harmonic mean flow value was equal to or less than 0.1 cubic foot per second (cfs), it was rounded up to 0.1 cfs.]

[(8) Flow values are periodically recomputed to reflect alterations in the hydrologic characteristics of a segment, including reservoir construction, climatological trends, and other phenomena.]

[(9) The general criteria are applicable at all flow conditions except as specified in this section or in §307.4 of this title.]

[(b) Mixing zones. A reasonable mixing zone is allowed at the discharge point of permitted discharges into surface water in the state, in accordance with the following provisions.]

[(1) The following portions of the standards do not apply within mixing zones:]

[(A) site-specific criteria, as defined in §307.7 of this title and listed in Appendices A, D, E, F, and G of §307.10 of this title;]

[(B) numerical chronic aquatic life criteria for toxic materials as established in §307.6 of this title;]

[(C) total chronic toxicity restrictions as established in §307.6 of

this title;]

[(D) maximum temperature differentials as established in §307.4(f)

of this title;]

[(E) dissolved oxygen criteria for unclassified waters, as established in §307.4(h) of this title;]

[(F) dissolved oxygen criteria for intermittent streams, as established in §307.4(h)(4) of this title;]

(G) aquatic recreation criteria for unclassified waters, as established in §307.4(j) of this title and in §307.7(b)(1) of this title;]

[(H) specific human health criteria for concentrations in water to prevent contamination of drinking water, fish and shellfish so as to ensure safety for human consumption, as established in §307.6 of this title.]

[(2) Numerical acute aquatic life criteria for toxic materials and preclusion of total acute toxicity as established in §307.6 of this title are applicable in mixing zones. Acute criteria and acute total toxicity levels may be exceeded in small zones of initial dilution (ZIDs) at discharge points of permitted discharges, but there must be no lethality to aquatic organisms that move through a ZID. ZIDs must not exceed the following sizes:]

[(A) 60 feet downstream and 20 feet upstream from a discharge point in a stream and river. In addition, ZIDs in streams and rivers must not encompass more than 25% of the volume of stream flow at or above seven-day, twoyear low-flow conditions;]

[(B) a 25-foot radius in all directions (or equivalent volume or area for diffuser systems) from a discharge point in a lake or reservoir; and]

[(C) a 50-foot radius in all directions (or equivalent volume or area for diffuser systems) from a discharge point in a bay, a tidal river, an estuary, or the Gulf of Mexico.]

[(3) Provisions of the general criteria in §307.4 of this title remain in effect in mixing zones unless specifically exempted in this section.]

[(4) Water quality standards do not apply to treated effluent at the immediate point of discharge prior to any contact with either ambient waters or a dry streambed. However, effluent total toxicity requirements may be specified to preclude acute lethality near discharge points, or to preclude acute and chronic instream toxicity.]

[(5) Where a mixing zone is defined in a valid permit of the Texas Commission on Environmental Quality, the Railroad Commission of Texas, or the United States Environmental Protection Agency, the mixing zone defined in the permit must apply.]

[(6) Mixing zones must not preclude passage of free-swimming or drifting aquatic organisms to the extent that aquatic life use is significantly affected, in accordance with guidelines specified in the standards implementation procedures as amended.]

[(7) Mixing zones must not overlap unless it can be demonstrated that no applicable standards will be violated in the area of overlap. Existing and designated uses must not be impaired by the combined impact of a series of contiguous mixing zones.]

[(8) Mixing zones must not encompass an intake for a domestic drinking water supply. Thermal mixing zones are excepted from this provision unless elevated temperatures adversely affect drinking water treatment.]

[(9) Mixing zones must be individually specified for all permitted domestic discharges with a permitted monthly average flow equal to or exceeding one million gallons per day and for all permitted industrial discharges to water in the state (excepting discharges that consist entirely of stormwater runoff). For domestic discharges with permitted monthly average flows less than one million gallons per day, a small mixing zone must be assumed in accordance with guidelines for mixing zone sizes specified in the standards implementation procedures as amended; and the commission may require specified mixing zones as appropriate.]

[(10) Different mixing zone sizes for specific numeric criteria, such as for the protection of human health, aquatic life, and temperature, may be specified in a wastewater permit.]

'(c) Minimum analytical levels. The specified definition of permit compliance for a specific toxic material must not be lower than established minimum analytical levels, unless that toxic material is of particular concern in the receiving waters, or unless an effluent specific method detection limit has been developed in accordance with 40 Code of Federal Regulations Part 136. Minimum analytical levels are listed in the standards implementation procedures as amended.'

'(d) Once-through cooling water discharges. When a discharge of once-through cooling water does not measurably alter intake concentrations of a pollutant, then water-quality based effluent limits for that pollutant are not required. For facilities that intake and discharge cooling water into different water bodies, this provision only applies if water quality and applicable water quality standards in the receiving water are maintained and protected.'

'(e) Stormwater discharges. Pollution in stormwater must not impair existing or designated uses. Controls on the quality of stormwater discharges must be based on best management practices, technology-based limits, or both in combination with instream monitoring to assess standards attainment and to determine if additional controls on stormwater quality are needed. The standards implementation procedures as amended describe how water quality standards are applied to Texas Pollutant

Discharge Elimination System stormwater discharges. The evaluation of instream monitoring data for standards attainment includes the effects of stormwater, as described in §307.9 of this title.'

#### [§307.9. Determination of Standards Attainment.]

'(a) General standards attainment sampling and assessment procedures. The procedures listed in this section are solely for the purposes of assessing water quality monitoring data to determine if water quality standards are attained in individual water bodies. Unless otherwise stated in this chapter, additional details concerning sampling procedures for the measurement, collection, preservation and laboratory analysis of water quality samples are provided in the Texas Commission on Environmental Quality (TCEQ) Surface Water Quality Monitoring Procedures, Volume 1: *Physical and Chemical Monitoring Methods* (RG-415) as amended, the most recently published edition of the book entitled Standard Methods for the Examination of Water and Wastewater, 40 Code of Federal Regulations (CFR) Part 136, or other reliable sources acceptable to the commission. Laboratory accreditation requirements are specified in Chapter 25 of this title (relating to Environmental Testing Laboratory Accreditation and Certification). Unless otherwise stated in this chapter, additional details concerning how sampling data are evaluated to assess standards compliance are provided in the TCEQ Guidance for Assessing and Reporting Surface Water Quality *in Texas* as amended.'

'(b) Samples to determine standards attainment are collected at locations approved by the commission. Samples collected at non-approved locations may be accepted at the discretion of the commission. Samples to determine standards attainment in ambient water must be representative in terms of location, seasonal variations, and hydrologic conditions. Locations must be typical of significant areas of a water body. Temporal sampling must be sufficient to appropriately address seasonal variations of concern. Sample results that are used to assess standards attainment must not include samples that are collected during extreme hydrologic conditions such as high-flows and flooding immediately after heavy rains. Further guidance on representative sampling, both spatially, temporally, and hydrologically, can be found in the TCEQ *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods* (RG-415), *Surface Water Quality Monitoring Procedures, Volume 2: Methods for Collecting and Analyzing Biological Assemblage and Habitat* (RG-416), and the TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended.'

[(c) Collection and preservation of water samples.]

'(1) For the purposes of assessing standards attainment, samples are collected and preserved in accordance with procedures set forth in the most recently published edition of the book entitled *Standard Methods for the Examination of Water and Wastewater*, the TCEQ *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods* (RG-415) as amended, 40 CFR Part 136, or other reliable procedures acceptable to the commission.'

'(2) Bacterial and temperature determinations must be conducted on samples or measurements taken at or near the surface in accordance with the TCEQ *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods* (RG-415) as amended. Depth collection procedures for chloride, sulfate, total dissolved solids, dissolved oxygen, chlorophyll *a*, and pH to determine standards attainment may vary depending on the water body being sampled.' [Standards for chloride, sulfate, total dissolved solids, dissolved oxygen, chlorophyll *a*, pH are applicable to the mixed surface layer, but a single sample taken near the surface normally provides an adequate representation of these parameters.] 'When the water column is entirely mixed according to determinations described in TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended, standards may apply to any sample taken in the water column for parameters indicated in this section.'

[(3) For toxic materials, numerical aquatic life criteria are applicable to water samples collected at any depth. Numerical human health criteria are applicable to the average (arithmetic) concentration from the surface to the bottom.] 'For the purposes of standards attainment for aquatic life protection and human health protection, samples that are collected at approximately one foot below the water surface are acceptable for assessing standards attainment of numerical criteria.'

#### '(d) Sample analysis.'

'(1) Numerical criteria. Procedures for laboratory analysis must be in accordance with the most recently published edition of the book entitled *Standard Methods for the Examination of Water and Wastewater*, the TCEQ *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods* (RG-415) as amended, 40 CFR Part 136, or other reliable procedures acceptable to the commission, and in accordance with Chapter 25 of this title.'

'(2) Radioactivity. Measurements must be made on filtered samples to determine radioactivity associated with dissolved minerals in accordance with current analytical methodology approved by the EPA.'

'(3) Toxicity. Bioassay techniques must be selected as testing situations dictate but are generally conducted using representative sensitive organisms in accordance with §307.6 of this title (relating to Toxic Materials).'

[(e) Sampling periodicity and evaluation.]

(1) Chloride, sulfate, total dissolved solids. Standards attainment determinations to demonstrate compliance with the annual average may be based on the long term mean in accordance with TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended. 'Results from all monitoring stations within the segment are used to allow for reasonable parametric gradients. Total dissolved solids determinations may be based on measurements of specific conductance.'

'(2) Radioactivity. The impact of radioactive sources on surface waters must be evaluated in accordance with Chapter 336 of this title (relating to Radioactive Substance Rules), and in accordance with Chapter 290 of this title (relating to Public Drinking Water).'

### [(3) Bacteria.]

[(A) For coastal recreation waters, as defined in §307.3 of this title (relating to Definitions and Abbreviations), standards attainment must be based on a geometric mean or a single sample criterion. Data are evaluated in accordance with §307.7(b)(1) of this title (relating to Site-Specific Uses and Criteria).]

[(B) For inland waters (tidal rivers, high saline inland waters, and freshwater), and other non-coastal recreation waters, standards attainment must be based on a long-term geometric mean of applicable samples in accordance with the TCEQ's *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended. Data are evaluated in accordance with §307.7(b)(1) of this title.]

[(C) Samples may be evaluated with the single sample criterion for the purposes of swimmer safety notification programs and wastewater permit compliance.]

'(D) Determination of attainment may account for statistical variability to reduce uncertainty in evaluations in accordance with the TCEQ's *Guidance for Assessing and Reporting Surface Water Quality in Texas.*'

[(4) Toxic materials. Standards attainment must be evaluated in accordance with §307.6 of this title, and in accordance with §307.8 of this title

(relating to Application of Standards). To protect aquatic life, specific numerical acute toxic criteria are applied as 24-hour averages, and specific numerical chronic toxic criteria are applied as seven-day averages. Human health criteria are applied as longterm average exposure criteria designed to protect populations over a life time.] 'Standards attainment for acute and chronic toxic criteria for aquatic life and human health criteria must be in accordance with the TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended. Standards attainment for human health criteria must be based on the mean of samples collected in accordance with the TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended.'

'(5) Temperature and pH. Standards attainment must be in accordance with the TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended.'

'(6) Dissolved oxygen.

(A) Criteria for daily (24-hour) average concentrations must be compared to a time-weighted average of measurements taken over a 24-hour period in accordance with TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended.'

'(B) Criteria for minimum concentrations must be compared to individual measurements in accordance with TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended. When data are collected over a 24-hour period, the lowest measurement observed during that 24-hour period is compared to the applicable minimum criterion.'

[(7) Assessment of chlorophyll *a* criteria in reservoirs.] Procedures to determine standards attainment for chlorophyll *a* criteria in reservoirs must be in accordance with the TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended', including the evaluation of multiple uses as indicated in §307.7(b)(4) of this title. [Chlorophyll *a* criteria in individual reservoirs are found in Appendix F of §307.10 of this title (relating to Appendices A - G). The data for the assessment must be collected at the sampling stations used for calculating the criteria, as listed in Appendix F of §307.10 of this title, or from comparable stations in the main pool of the reservoir.] Assessment values indicated in the TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* are to be used for assessment purposes only and are not to be used as water quality-based effluent limits in wastewater discharge permits for wastewater permitting.

[(8) Site-specific criteria for aquatic recreation (geometric mean), total dissolved solids, chloride, and sulfate as established in Appendix A of §307.10 of this title, and human health criteria as established in Table 2 of §307.6(d)(1) of this title do not apply in the following stream types and flow conditions:]

#### [(A) perennial streams when flows are below 0.1 cubic feet per

#### second;]

[(B) intermittent streams when less than 20% of the stream bed of a 500 meter sampling reach is covered by pools; or when extremely dry conditions are indicated by comparable observations of flow severity.]

[(f) Biological integrity. Biological integrity, which is an essential component of the aquatic life categories defined in §307.7(b)(3) of this title, is assessed by sampling the aquatic community. Attainment of biological integrity is assessed by indices of biotic integrity that are described in the TCEQ *Surface Water Quality Monitoring Procedures, Volume 2: Methods for Collecting and Analyzing Biological Assemblage and Habitat Data* (RG-416) as amended.] 'Determination of attainment may account for statistical variability to reduce uncertainty in evaluations in accordance with TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended.' [Primary criteria associated with assessing the attainment of aquatic life uses are indices of biotic integrity and criteria for dissolved oxygen. When the appropriate aquatic life use as determined by the use-attainability study is less stringent than the presumed high use, then the appropriate aquatic life use and dissolved oxygen criteria are listed in Appendix D of §307.10 of this title after approval by EPA.]

[(g) Additional parameters. Assessment of narrative criteria parameters must be performed in accordance with the TCEQ *Guidance for Assessing and Reporting Surface Water Quality in Texas* as amended.]

#### [§307.10. Appendices A - G.]

[The following appendices are integral components of this chapter of the Texas Surface Water Quality Standards.]

- [(1) Appendix A Site-specific Uses and Criteria for Classified Segments]
- [(2) Appendix B Sole-source Surface Drinking Water Supplies]
- [(3) Appendix C Segment Descriptions]
- [(4) Appendix D Site-specific Uses and Criteria for Unclassified Water Bodies]
- [(5) Appendix E Site-specific Toxic Criteria]
- [(6) Appendix F Site-specific Nutrient Criteria for Selected Reservoirs]

[(7) Appendix G - Site-specific Recreational Uses and Criteria for Unclassified Water Bodies]

### [Appendix A - Site-specific Uses and Criteria for Classified Segments

[The following tables identify the water uses and supporting numerical criteria for each of the state's classified segments. The tables are ordered by basin with the segment number and segment name given for each classified segment. Marine segments are those that are specifically titled as "tidal" in the segment name, plus all bays, estuaries and the Gulf of Mexico. The following descriptions denote how each numerical criterion is used subject to the provisions in §307.7 of this title (relating to Site-Specific Uses and Criteria), §307.8 of this title (relating to Application of Standards), and §307.9 of this title (relating to Determination of Standards Attainment).]

[Segments that include reaches that are dominated by springflow are footnoted in this appendix and have critical low-flows calculated according to §307.8(a)(2) of this title. These critical low-flows apply at or downstream of the spring(s) providing the flows. Critical low-flows upstream of these springs may be considerably smaller. Critical low-flows used in conjunction with TCEQ regulatory actions (such as discharge permits) may be adjusted based on the relative location of a discharge to a gauging station.]

[The criteria for Cl<sup>-1</sup> (chloride), SO<sub>4</sub><sup>-2</sup> (sulfate), and TDS (total dissolved solids) are listed in this appendix as maximum annual averages for the segment.]

[Dissolved oxygen criteria are listed as minimum 24-hour means at any site within the segment. Absolute minima and seasonal criteria are listed in §307.7 of this title unless otherwise specified in this appendix. Dissolved oxygen criteria of 1.0 mg/L in this appendix will be considered minimum values at any time.]

[The pH criteria are listed as minimum and maximum values expressed in standard units at any site within the segment.]

[The freshwater indicator bacteria for recreation is *E. coli.* Enterococci is the indicator bacteria for recreation in saltwater and certain high saline inland water bodies with typical high conductivity values. The appropriate bacterial criteria are listed in the appendix under the Indicator Bacteria column and are applied as specified in §307.7(b)(1) of this title. The indicator bacteria for suitability for oyster waters is fecal coliform. The fecal coliform criteria for oyster waters is 14 colonies per 100 mL as specified in §307.7(b)(3)(B) of this title.]

[The criteria for temperature are listed as maximum values at any site within the segment except as noted in §307.4(h) of this title (relating to General Criteria) and §307.8(b) of this title.]

[Footnotes are defined at the end of each basin or bay and estuary table, as appropriate.]

[Segment No.]	<mark>[Canadian River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	<mark>[pH</mark> Range (SU)]	[Indicator Bacteria1 #/100 mL]	[Temperature (degrees F)]
[0101]	<mark>[Canadian River Below Lake</mark> Meredith]	[PCR1]	[H]			[1,975]	[760]	<mark>[5,000]</mark>	[5.0]	[6.5-9.0]	[126]	<mark>[95]</mark>
[0102]	[Lake Meredith]	[PCR1]	<mark>[E]</mark>	[PS]		<mark>[400]</mark>	[350]	<mark>[1,300]</mark>	<mark>[6.0]</mark>	[6.5-9.0]	<mark>[126]</mark>	[85]
[0103]	[Canadian River Above Lake Meredith]	[PCR1]	<mark>[H]</mark>			<mark>[1,050]</mark>	[540]	<mark>[4,500]</mark>	[5.0]	[6.5-9.0]	<mark>[126]</mark>	<mark>[95]</mark>
<mark>[0104]</mark>	[Wolf Creek]	[PCR1]	[H]			<mark>[420]</mark>	[125]	<mark>[1,125]</mark>	[5.0]	[6.5-9.0]	<mark>[126]</mark>	<mark>[93]</mark>
<mark>[0105]</mark>	[Rita Blanca Lake]	[NCR]	[L]		[WF <sup>2</sup> ]	[200]	[200]	[1,000]	[3.0]	[6.5-9.0]	[126]	<mark>[85]</mark>

# [Canadian River Basin Designated Uses and Numeric Criteria]

The indicator bacteria for freshwater is *E. coli*.]

[1

[2 The segment is designated as high quality waterfowl habitat.]

<mark>[Segment</mark> No.]	<mark>[Red River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO <sub>4</sub> -2 (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	<mark>[pH</mark> Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0201]	Lower Red River	PCR1	H	PS		<mark>375</mark>	<mark>250</mark>	<mark>1,100</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>93</mark>
[0202]	Red River Below Lake Texoma	PCR1	H	<b>PS</b>		<mark>375</mark>	<mark>250</mark>	<mark>1,100</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>93</mark>
<mark>[0203]</mark>	Lake Texoma	PCR1	H	<b>PS</b>		<mark>600</mark>	<mark>300</mark>	<mark>1,500</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>92</mark>
<mark>[0204]</mark>	Red River Above Lake Texoma	PCR1	H			<mark>2,000</mark>	<mark>1,200</mark>	<mark>6,000</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>33</mark>	<mark>93</mark>
<mark>[0205]</mark>	Red River Below Pease River	PCR1	H			<mark>5,000</mark>	<mark>2,000</mark>	<mark>10,000</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>33</mark>	<mark>93</mark>
<mark>[0206]</mark>	Red River Above Pease River	PCR1	H			<mark>12,000</mark>	<mark>4,000</mark>	<mark>25,000</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>33</mark>	<mark>93</mark>
[0207]	Lower Prairie Dog Town Fork Red <mark>River</mark>	PCR1	H			<mark>37,000</mark>	<mark>5,300</mark>	<mark>46,200</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>33</mark>	<mark>93</mark>
[0208]	Lake Crook	PCR1	H	<b>PS</b>		<mark>75</mark>	<mark>150</mark>	<mark>350</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>90</mark>
[0209]	Pat Mayse Lake	PCR1	H	<b>PS</b>		<mark>100</mark>	<mark>175</mark>	<mark>350</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>90</mark>
[0210]	Farmers Creek Reservoir	PCR1	H	<b>PS</b>		<mark>200</mark>	<mark>60</mark>	<mark>550</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>93</mark>
[0211]	[Little Wichita River]	[PCR1]	[H]	[PS]		450	250	<mark>500</mark>	3.0 <sup>2</sup>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>91</mark>
<mark>[0212]</mark>	Lake Arrowhead	PCR1	H	<b>PS</b>		<mark>250</mark>	<mark>50</mark>	<mark>500</mark>	<mark>5.0</mark>	<mark>6.5-9.0</mark>	<mark>126</mark>	<mark>93</mark>

# [Red River Basin Designated Uses and Numeric Criteria]

[Segment No.]	<mark>[Red River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0213]	[Lake Kickapoo]	[PCR1]	<mark>[H]</mark>	[PS]		[100]	<mark>[50]</mark>	<mark>[400]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[0214]	[Wichita River Below Diversion Lake]	[PCR1]	<mark>[H]</mark>			<mark>[1,800]</mark>	<mark>[800]</mark>	<mark>[5,000]</mark>	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	[90]
[0215]	[Diversion Lake]	[PCR1]	[H]			<mark>[1,800]</mark>	<mark>[1,100]</mark>	<mark>[5,000]</mark>	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	[90]
[0216]	[Wichita River Below Lake Kemp]	[PCR1]	[H]			[1,925]	<mark>[960]</mark>	<mark>[5,000]</mark>	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	[90]
[0217]	[Lake Kemp <sup>3</sup> ]	[PCR1]	[H]			<mark>[7,000]</mark>	[2,500]	[15,000]	[5.0]	[ <mark>6.5-</mark> 9.0]	[33]	<mark>[93]</mark>
[0218]	[Wichita/North Fork Wichita River <sup>4</sup> ]	[PCR1]	[H]			<mark>[7,500]</mark>	[2,800]	[16,250]	[5.0]	[ <mark>6.5-</mark> 9.0]	[33]	<mark>[93]</mark>
[0219]	[Lake Wichita]	[PCR1]	[H]			[1,000]	[400]	[1,800]	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[0220]	[Upper Pease/North Fork Pease River]	[PCR1]	[H]			[12,000]	<mark>[3,500]</mark>	[30,000]	[5.0]	[ <mark>6.5-</mark> 9.0]	[33]	[91]
[0221]	[Middle Fork Pease River]	[PCR1]	[H]			[870]	[1,400]	[2,800]	[5.0]	[6.5- 9.0]	[126]	[91]

[pH [Domestic [Dissolved [Indicator **Oxygen** Range [Segment [Red River Basin [Aquatic Water [Cl<sup>-1</sup>  $[SO_4^{-2}]$ [TDS Bacteria<sup>1</sup> [Temperature [Other [Recreation No.] Segment Names] Life Usel Supply Use] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mL] (degrees F)] Use] Uses] <mark>[6.5-</mark> [0222][Salt Fork Red River] [H] [400] [5.0]<mark>[93]</mark> [PCR1] [1,400]<mark>[3,000]</mark> [126]9.0] <mark>[6.5-</mark> 9.0] [0223][Greenbelt Lake] [H] [PS] [250] [200] [5.0]<mark>[93]</mark> [PCR1] [750] [126]<mark>[6.5-</mark> [0224][North Fork Red River] [PCR1] [H] [1,200][2,500] [5.0][126][91] [800] <mark>9.01</mark> <mark>[6.0-</mark> [McKinney Bayou] [L] [PS] [60] [90] [400][3.0] [126]<mark>[93]</mark> [0225][PCR1] 8.51 [<u>6.5</u>-[0226][PCR1] [H][12,000][3,650] [31,000] [5.0]<mark>[93]</mark> [South Fork Wichita River<sup>3</sup>] [33] <mark>9.01</mark> [<u>6.5</u>-[0227][South Fork Pease River] [PCR1] [H] [270] [200] [126] [91] [1,000][5.0]. 9.0] [<u>6.5</u>-[Mackenzie Reservoir] [H] [PS] [126] <mark>[90]</mark> [0228] [PCR1] **[50]** [200][500] [5.0]9.01 [<u>6.5</u>-[Upper Prairie Dog Town Fork Red [0229][PCR1] [H] [350] [675] [2,000][5.0] [126] <mark>[93]</mark> River] 9.01 [6.5-[0230] [Pease River] [PCR1] [I] [12,000][3,500][30,000] [4.0]<mark>[33]</mark> [91] 9.01

- [1 The indicator bacteria for freshwater is *E. coli*. The indicator bacteria for Segments 0204, 0205, 0206, 0207, 0217, 0218, 0220, 0226, and 0230 is Enterococci.]
- [2 The 24-hour minimum dissolved oxygen criterion is 2.0 mg/L.]
- [3 It is anticipated that inorganic chemical quality should improve following completion and as a result of the operation of salinity control projects.]
- [4 The critical low-flow is calculated according to §307.8(a)(2)(B) of this title.]

[Domestic [Dissolved [Indicator [pH [Segment Sulphur River Basin [Recreation [Aquatic Water [Other [Cl-1 [SO4-2 [TDS <mark>Oxygen</mark> Bacteria1 [Temperature Range (mg/L)] (mg/L)] (mg/L)] No.l Segment Names] **Usel** Life Usel Supply Use] **Uses** (mg/L)] (SU)] #/100 mL(degrees F)] Sulphur River Below Wright Patman [<mark>6.0-</mark> [0301][PCR1] [H] [120][100]**[500]** [5.0][126]<mark>[90]</mark> 8.51 Lakel [<u>6.5</u>-[Wright Patman Lake] [PCR1] [PS] [75] [75] [5.0][126][0302][H][400][90] 9.51 [6.0-[0303] [Sulphur/South Sulphur River] [PCR1] [H] [80] [180][5.0] [126]<mark>[93]</mark> [600] 8.51 <mark>[6.0-</mark> [0304][Days Creek] [PCR1] [I] [525] [75] [850] [4.0][126]<mark>[90]</mark> 8.51 [6.0-[I]<sup>2</sup> [0305][North Sulphur River]<sup>2,[3]</sup> [PCR1] [190][475][1, 320][5.0][126]<mark>[93]</mark> 8.51 [6.5-[0306] [Upper South Sulphur River] [PCR1] [I] [80] [180][600] [4.0][126][93] 9.01 [6.5-[Jim L. Chapman Lake] [0307] [PCR1] [H] [PS] 50 50 225 **[5.0]** [126]<mark>[93]</mark> 9.01

[Sulphur River Basin Designated Uses and Numeric Criteria]

[1 The indicator bacteria for freshwater is *E. coli*.]

"2 For the purpose of assessment, the intermediate aquatic life use applies only to the fish community. The benthic community is to be assessed using a limited aquatic life use."

[3 The segment is an intermittent stream with perennial pools.]

[pH [Indicator [Domestic [Dissolved [Segment [Cypress Creek Basin [Recreation [Aquatic Water [Other [C]-1 [SO4-2 [TDS **Oxygen Range** Bacteria1 Temperature (mg/L)] (degrees F)] No.] Segment Names] **Usel** Life Usel Supply Use] Uses] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mLl [5.5-[0401][Caddo Lake] [H] [PS] **[50]** [50] [200] [5.0][90] [PCR1] [126]9.01 [Big Cypress Creek Below Lake O' the [5.5-[0402][PS] [5.0]<mark>[93]</mark> [PCR1] [H][100][50] [300] [126]**Pines 8.01** <mark>[6.0-</mark> [0403][Lake O' the Pines] [PCR1] [H] [PS] [80] [50] <mark>[300]</mark> [5.0] [93] [126]8.51 [Big Cypress Creek Below Lake Bob [<u>6.0-</u> [0404]SCR1 [I] [100][100][500] [4.0]630 <mark>[90]</mark> . 8.51 Sandlinl [6.0-[PS] [0405][Lake Cypress Springs] [PCR1] [H] [100][100]**[500]** [5.0][126] [93] 8.5] [5.5-[Black Bayou<sup>2</sup>] [0406][PCR1] [H] [PS] [80] [50] [300] [≤5.0<sup>3</sup>] [126] [90] 8.01 [5.5-[0407]James [Bayou<sup>2</sup>] [PCR1] [H] [PS] [100][50] <mark>[300]</mark> [≤5.0<sup>3</sup>] [126] <mark>[90]</mark> 8.0] [6.5-[0408] [Lake Bob Sandlin] [PCR1] [H] [PS] [50] **[65]** [150]**[5.0]** [126] <mark>[90]</mark> 9.01 [5.5-[0409][Little Cypress Bayou (Creek)] [PCR1] [H][PS] [100][50] [300] [≤5.0<sup>3</sup>] [126] [90] **8.5**]

[Cypress Creek Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	[Cypress Creek Basin Segment Names]	[Recreation Use]		<mark>[Domestic</mark> Water Supply Use]	<mark>[Other</mark> <mark>Uses]</mark>	[Cl-1 (mg/L)]	[SO4-2 (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria1 #/100 mL]	
[0410]	[Black Cypress Bayou (Creek)]	[PCR1]	[H]			50	50	200	≤5.0 <sup>3</sup>	<mark>[5.5-</mark> 8.0]	[126]	[90]

[1 The indicator bacteria for freshwater is *E. coli*.]

[3

[2 The segment is an intermittent stream with perennial pools.]

A 24-hour average dissolved oxygen criterion of 5.0 mg/L is the upper bounds if the following indicated dissolved oxygen equation predicts dissolved oxygen values that are higher than 5.0 mg/L. When the 24-hour average dissolved oxygen is predicted to be lower than 1.5 mg/L, then the dissolved oxygen criterion is set at 1.5 mg/L. When the 24-hour dissolved oxygen criterion is greater than 2.0 mg/L, the corresponding 24-hour minimum dissolved oxygen criterion is less than or equal to 2.0 mg/L, the corresponding 24-hour minimum dissolved oxygen criterion is less than the calculated 24-hour average. When the 24-hour dissolved oxygen criterion is less than the calculated 24-hour average. When the 24-hour dissolved oxygen criterion is less than the calculated 24-hour average.

When stream flow is below 0.1 cfs, then 0.1 cfs is the presumed flow that should be used in the equation. This equation supersedes Table 4 in §307.7(b)(3)(A) of this title.

DO = 12.11 - 0.309T + 1.05 logQ - 1.02 logWS where DO = 24-hour average dissolved oxygen criterion

T = temperature in degrees Celsius

<mark>Q = flow in cfs</mark>

WS = watershed size in square km (up to 1000 km)]

[pH [Indicator [Domestic [Dissolved [Cl<sup>-1</sup>  $[SO_4^{-2}]$ [Segment Sabine River Basin [Recreation [Aquatic Water [Other [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature Uses] (degrees F)] No.] Segment Names] Use] Life Usel Supply Use] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mLl <mark>[6.0-</mark> [0501][Sabine River Tidal] [H] [4.0][35] [95] [PCR1] **8.51** [<mark>6.0-</mark> [0502] [Sabine River Above Tidal] [PS] **[50]** [5.0][91][PCR1] [H][50] [200][126]8.51 [<mark>6.0-</mark> [0503][Sabine River Above Caney Creek] [PCR1] [PS] [50] [50] [5.0][91][H][200] [126]8.51 [<mark>6.0-</mark> [0504][Toledo Bend Reservoir] [PCR1] [H] [PS] [70] **[50]** [240]**[5.0]** [126][93] . 8.51 Sabine River Above Toledo Bend [6.0-[0505][PS] [PCR1] [H] [175][100][400][5.0][126][93] 8.51 Reservoir] [<u>6.0-</u> [PS] [0506][Sabine River Below Lake Tawakoni] [PCR1] [H] [200][100]**[500]** [5.0][126]<mark>[90]</mark> 8.5] [<mark>6.0-</mark> [0507] [Lake Tawakoni] [PCR1] [H] [PS] 75<sup>2</sup> 75<sup>2</sup>  $400^{2}$ [5.0] [126] <mark>[93]</mark> 9.01 <mark>[6.0-</mark> **[0508]** [Adams Bayou Tidal] [PCR1] [H] [4.0][35] [95] 8.51 [<mark>6.5-</mark> [0509][Murvaul Lake] [PCR1] [H] [PS] [150][75] [500] [5.0] [126][92] <mark>9.01</mark>

[Sabine River Basin Designated Uses and Numeric Criteria]

[Segment No.]	<mark>[Sabine River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO₄⁻² (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	<mark>[pH</mark> Range (SU)]	[Indicator Bacteria¹ #/100 mL]	[Temperature (degrees F)]
[0510]	[Lake Cherokee]	[PCR1]	<mark>[H]</mark>	[PS]		<mark>[75]</mark>	<mark>[50]</mark>	[250]	[5.0]	<mark>[6.0-</mark> 8.5]	[126]	[95]
[0511]	[Cow Bayou Tidal]	[PCR1]	[H]						[4.0]	<mark>[6.0-</mark> 8.5]	[35]	<mark>[95]</mark>
[0512]	[Lake Fork Reservoir]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	<mark>[50]</mark>	[200]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[95]
[0513]	[Big Cow Creek]	[PCR1]	[H]	[PS]		<mark>[75]</mark>	<mark>[50]</mark>	<mark>[300]</mark>	[5.0]	<mark>[5.5-</mark> 8.5]	[126]	[90]
[0514]	[Big Sandy Creek]	[PCR1]	[H]	[PS]		<mark>[75]</mark>	[50]	[300]	[5.0]	<mark>[6.0-</mark> 8.5]	[126]	[90]
[0515]	[Lake Fork Creek]	[PCR1]	<mark>[H]</mark>	[PS]		[100]	[75]	<mark>[400]</mark>	[5.0]	[6.0- 8.5]	[126]	[90]

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

This criterion will be reviewed upon the next water quality standards revision and is contingent upon the continuation and progress of a water reuse project. The original criteria (TDS of 200, Cl<sup>-1</sup> of 50, and SO<sub>4</sub><sup>-2</sup> of 50) may be appropriate if the water reuse project is not pursued.

[pH [Indicator [Domestic [Dissolved [C]<sup>-1</sup>  $[SO_4^{-2}]$ [Segment [Neches River Basin [Recreation [Aquatic Water [Other [TDS **Oxygen** Bacteria<sup>1</sup> [Temperature Range (mg/L)] (mg/L)] (degrees F)] No.] Segment Names] Use] Life Usel Supply Use] Uses] (mg/L)] (mg/L)] (SU)] #/100 mLl [<mark>6.0-</mark> [I] [0601][Neches River Tidal] [PCR1] [3.0] **[95]** [<u>35</u>] . <mark>8.5</mark>] [Neches River Below B. A. Steinhagen <mark>[6.0-</mark> [0602] [5.0][PCR1] [PS] [126][H][50] [50] [200] [91]Lakel 8.5] [<mark>6.0-</mark> [B. A. Steinhagen Lake] [PS] [126] [0603][PCR1] [H] [50] [50] [200] [5.0]<mark>[93]</mark> 8.5] <mark>[6.0-</mark> [Neches River Below Lake Palestine] [PS] [0604][PCR1] [H] **[50] [50]** [200] [5.0] [126] [91] 8.5] [<mark>6.5-</mark> [Lake Palestine] [PCR1] [PS] **[50] [50]** [200] [5.0] [0605] [H] [126]<mark>[90]</mark> **9.0**] [6.0-[Neches River Above Lake Palestine] **[1]** [PS] [50] [4.0][0606][PCR1] [100][300] [126][95] 8.5] [6.0-[Pine Island Bayou] [PCR1] [H] [0607][PS] [150][50] [300] 3.0 [126][95] 8.5] [5.5-[0608][Village Creek] [H] [PS] [150][75] [5.0] [PCR1] [300] [126]**[90]** 8.01 Angelina River Below Sam Rayburn [<mark>6.0-</mark> [0609] [PCR1] [PS] [70] [50] [250] **[5.0]** [H] [126] <mark>[90]</mark> 8.5] Reservoir]

[Neches River Basin Designated Uses and Numeric Criteria]

[Segment No.]	<mark>[Neches River Basin]</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH <mark>Range</mark> (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0610]	[Sam Rayburn Reservoir]	[PCR1]	[H]	[PS]		[100]	[100]	[400]	[5.0]	<mark>[6.0-</mark> 8.5]	[126]	[93]
[0611]	[Angelina River Above Sam Rayburn Reservoir]	[PCR1]	[H]	[PS]		[125]	<mark>[50]</mark>	[250]	[5.0]	[6.0- 8.5]	[126]	[90]
[0612]	[Attoyac Bayou]	[PCR1]	[H]	[PS]		<mark>[75]</mark>	<mark>[50]</mark>	[200]	[5.0]	<mark>[6.0-</mark> 8.5]	[126]	[90]
[0613]	[Lake Tyler/Lake Tyler East]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	<mark>[50]</mark>	[200]	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	<mark>[93]</mark>
[0614]	[Lake Jacksonville]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	<mark>[75]</mark>	[750]	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	<mark>[93]</mark>
[0615]	[Angelina River/Sam Rayburn Reservoir]	[PCR1]	[H]	[PS]		[150]	[100]	[500]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[93]

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

## [Neches-Trinity Coastal Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	<mark>[Neches-Trinity Coastal Basin] Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	[Other Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0701]	[Taylor Bayou Above Tidal]	[PCR1]	[1]			<mark>[400]</mark>	[100]	[1,100]	[4.0]	<mark>[6.5-</mark> 9.0]	[126]	[95]
[0702]	[Intracoastal Waterway Tidal]	[PCR1]	<mark>[H]</mark>						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	[95]
[0703]	[Sabine-Neches Canal Tidal]	[PCR1]	<mark>[H]</mark>						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	[95]
[0704]	[Hillebrandt Bayou]	[PCR1]	[1]			<mark>[250]</mark>	<mark>[100]</mark>	<mark>[600]</mark>	[4.0 <sup>2</sup> ]	<mark>[6.5-</mark> 9.0]	[126]	[95]

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[2 The 24-hour minimum dissolved oxygen criterion is 2.5 mg/L.]

[pH [Dissolved [Indicator [Domestic  $[C]^{-1}$  $[SO_4^{-2}]$ [Segment [Trinity River Basin Recreation [Aquatic Water [Other [TDS **Oxygen** Bacteria<sup>1</sup> [Temperature Range (mg/L)] Segment Names] Uses] (degrees F)] No.] **Usel** Life Usel Supply Use] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mLl [<mark>6.5-</mark> [0801][Trinity River Tidal] [H] [4.0][35] [95] [PCR1] 9.01 [<mark>6.5-</mark> [0802] [Trinity River Below Lake Livingston] [PS] [125][5.0][PCR1] [H][100][600] [126]<mark>[93</mark>] 9.01 [<mark>6.5-</mark> [0803][Lake Livingston] [PCR1] [PS] [150][500] **[5.0]** [126][93] [H]60 9.0] [<mark>6.5-</mark> [0804][Trinity River Above Lake Livingston] [PCR1] [H] [150][150]<mark>[600]</mark> **[5.0]** [126][93] . 9.01 [<mark>6.5-</mark> [0805][Upper Trinity River] [PCR1] [H] [175][175][850]  $[5.0^{2}]$ [126][95] 9.01 West Fork Trinity River Below Lake [<u>6.5</u>-[0806][PCR1] [H] [PS] [100][100]**[500]** [5.0][126]<mark>[93]</mark> . 9.01 Worth] [<mark>6.5-</mark> [0807][Lake Worth] [PCR1] [H] [PS] [100][100]**[500] [5.0]** [126][91] 9.01 West Fork Trinity River Below Eagle <mark>[6.5-</mark> [0808] [PCR1] [H] [PS] [100][100]**[500] [5.0]** [126][91] Mountain Reservoir 9.01 [<mark>6.5-</mark> [0809][Eagle Mountain Reservoir] [PCR1] [H][PS] [75] [75] [300] [5.0] [126][94]<mark>9.01</mark>

### [Trinity River Basin Designated Uses and Numeric Criteria]

[ <mark>Segment</mark> No.]	<mark>[Trinity River Basin]</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH <mark>Range</mark> (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0810]	[West Fork Trinity River Below Bridgeport Reservoir]	[PCR1]	[H]	[PS]		[100]	[100]	<mark>[500]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[0811]	[Bridgeport Reservoir]	[PCR1]	[H]	[PS]		<mark>[75]</mark>	<mark>[75]</mark>	<mark>[300]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[0812]	[West Fork Trinity River Above Bridgeport Reservoir <sup>3</sup> ]	[PCR1]	[1]	[PS]		190	200	800	[3.0 <sup>4</sup> ]	<mark>[6.5-</mark> <mark>9.0]</mark>	[126]	[88]
<mark>[0813]</mark>	[Houston County Lake]	[PCR1]	<mark>[H]</mark>	[PS]		<mark>[75]</mark>	<mark>[75]</mark>	[300]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[93]
<mark>[0814]</mark>	[Chambers Creek Above Richland- Chambers Reservoir]	[PCR1]	[H]	[PS]		<mark>[90]</mark>	[160]	[500]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[0815]	[Bardwell Reservoir]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	<mark>[50]</mark>	[300]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[91]
[0816]	[Lake Waxahachie]	[PCR1]	[H]	[PS]		[50]	[50]	[300]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[91]
[0817]	[Navarro Mills Lake]	[PCR1]	[H]	[PS]		[50]	[75]	[300]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[0818]	[Cedar Creek Reservoir]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	[100]	[200]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[93]

[ <mark>Segment</mark> No.]	<mark>[Trinity River Basin] Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0819]	[East Fork Trinity River]	[PCR1]	[1]			[100]	[100]	<mark>[500]</mark>	[4.0]	<mark>[6.5-</mark> 9.0]	[126]	[91]
[0820]	[Lake Ray Hubbard]	PCR1	H	<b>PS</b>		<mark>100</mark>	<mark>100</mark>	<mark>500</mark>	<mark>5.0</mark>	[6.5- 9.0]	[126]	<mark>[93]</mark>
[0821]	[Lavon Lake	PCR1	H	<b>PS</b>		100	100	500	<mark>5.0</mark>	[6.5- 9.0]	[126]	<mark>[93]</mark>
[0822]	<mark>[Elm Fork Trinity River Below</mark> Lewisville Lake	PCR1	H	PS		<mark>80</mark>	<mark>60</mark>	<mark>500</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	[90]
[0823]	[Lewisville Lake	PCR1	H	PS		<mark>80</mark>	<mark>60</mark>	<mark>500</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	[90]
<mark>[0824]</mark>	<mark>[Elm Fork Trinity River Above Ray</mark> Roberts Lake	PCR1	H	<mark>PS⁵</mark>		<mark>110</mark>	<mark>90</mark>	<mark>700</mark>	<mark>5.0</mark>	[6.5- 9.0]	[126]	<mark>[90]</mark>
<mark>[0825]</mark>	[Denton Creek	PCR1	H	PS		<mark>80</mark>	<mark>60</mark>	<mark>500</mark>	<mark>5.0</mark>	[6.5- 9.0]	[126]	<mark>[90]</mark>
<mark>[0826]</mark>	[Grapevine Lake	PCR1	H	PS		<mark>80</mark>	<mark>60</mark>	<mark>500</mark>	<mark>5.0</mark>	[6.5- 9.0]	[126]	<mark>[93]</mark>
[0827]	White Rock Lake	PCR1	H			<mark>100</mark>	<mark>100</mark>	<mark>400</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	[93]

[ <mark>Segment</mark> No.]	<mark>[Trinity River Basin]</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH <mark>Range</mark> (SU)]	[Indicator Bacteria¹ #/100 mL]	[Temperature (degrees F)]
[0828]	[Lake Arlington	PCR1	H	<b>PS</b>		<mark>100</mark>	<mark>100</mark>	<mark>300</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	[95]
<mark>[0829</mark>	Clear Fork Trinity River Below Benbrook Lake	PCR1	H	<b>PS</b>		<mark>100</mark>	<mark>100</mark>	<mark>500</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	[93]
<mark>[0830</mark>	Benbrook Lake	PCR1	H	PS PS		<mark>75</mark>	<mark>75</mark>	<mark>300</mark>	<mark>5.0</mark>	[ <mark>6.5-</mark> 9.0]	[126]	[93]
<mark>[0831</mark>	Clear Fork Trinity River Below Lake Weatherford	PCR1	H	<b>PS</b>		<mark>100</mark>	<mark>100</mark>	<mark>500</mark>	5.0 <sup>6</sup>	<mark>[6.5-</mark> 9.0]	[126]	[90]
[ <u>0832</u>	Lake Weatherford	PCR1	H	PS		100	<mark>100</mark>	<mark>500</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	<mark>[93]</mark>
[0833	Clear Fork Trinity River Above Lake Weatherford <sup>7</sup>	PCR1	I	PS		<mark>125</mark>	<mark>125</mark>	<mark>750</mark>	$4.0^{8}$	<mark>[6.5-</mark> 9.0]	[126]	[95]
[0834	Lake Amon G. Carter	PCR1	H	PS		<mark>150</mark>	<mark>150</mark>	<mark>400</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	[93]
[0835	Richland Creek Below Richland- Chambers Reservoir	PCR1	H	PS		<mark>145</mark>	<mark>170</mark>	<mark>500</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	[90]
<mark>[0836</mark>	Richland-Chambers Reservoir	PCR1	H	PS		<mark>75</mark>	<mark>110</mark>	<mark>400</mark>	<mark>5.0</mark>	[ <mark>6.5-</mark> 9.0]	[126]	[91]

<mark>[Segment</mark> No.]	<mark>[Trinity River Basin] Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]		<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH <mark>Range</mark> (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0837	Richland Creek Above Richland- Chambers Reservoir	PCR1	H	PS		<mark>145</mark>	<mark>170</mark>	<mark>500</mark>	<mark>5.0</mark>	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
<mark>[0838</mark>	Joe Pool Lake	PCR1	H	<b>PS</b>		<mark>100</mark>	<mark>250</mark>	<mark>500</mark>	<mark>5.0</mark>	[6.5- 9.0]	[126]	<mark>[90]</mark>
<mark>[0839</mark>	<mark>Elm Fork Trinity River Below Ray</mark> Roberts Lake	PCR1	H	<b>PS</b>		<mark>80</mark>	<mark>60</mark>	<mark>500</mark>	<mark>5.0</mark>	[6.5- 9.0]	[126]	<mark>[90]</mark>
<mark>[0840</mark>	Ray Roberts Lake	PCR1	H	<b>PS</b>		<mark>80</mark>	<mark>60</mark>	<mark>500</mark>	<mark>5.0</mark>	[ <mark>6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
<mark>[0841</mark>	Lower West Fork Trinity River	PCR1	I			<mark>175</mark>	<mark>175</mark>	<mark>850</mark>	$4.0^{9}$	[ <mark>6.5-</mark> 9.0]	[126]	<mark>[95]</mark>

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[2 The dissolved oxygen criterion is 3.5 mg/L when headwater flow at USGS Gaging Station 08048000 (located on the West Fork Trinity River in Fort Worth) is less than 80 cfs.]

[3 The segment is an intermittent stream with perennial pools.]

[4 The 24-hour minimum dissolved oxygen criterion is 2.0 mg/L.]

[5 The public water supply use does not apply from a point 9.5 km (5.9 mi) downstream of the confluence of Pecan Creek in Cooke County up to FM 373 in Cooke County.]

- [6 A 24-hour average dissolved oxygen criterion of 3.0 mg/L and minimum dissolved oxygen criterion of 2.0 mg/L applies from the confluence with an unnamed tributary approximately 1.0 mi downstream of Weatherford Dam upstream to Weatherford Dam.]
- [7 The segment is an intermittent stream with perennial pools.]
- [8 The 24-hour minimum dissolved oxygen criterion is 2.0 mg/L. A 24-hour average dissolved oxygen criterion of 2.0 mg/L and a 24-hour minimum dissolved oxygen criterion of 1.0 mg/L apply when flows are less than 1.0 cfs.]
- [9 The dissolved oxygen criterion is 2.5 mg/L when headwater flow at USGS Gaging Station 08048000 (located on the West Fork Trinity River in Fort Worth) is less than 80.0 cfs.]

[1

### [Trinity-San Jacinto Coastal Basin Designated Uses and Numeric Criteria]

[Segment No.]	[Trinity-San Jacinto Coastal Basin <mark>Segment Names]</mark>	[Recreation Use]		[Other Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	<mark>[pH</mark> Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[0901]	[Cedar Bayou Tidal]	[PCR1]	[H]					[4.0]	[6.5- 9.0]	[35]	[95]
[0902]	[Cedar Bayou Above Tidal]	[PCR1]	[H]		<mark>[200]</mark>	[150]	<mark>[700]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]

The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[pH [Indicator [Domestic [Dissolved  $[Cl^{-1}]$  $[SO_4^{-2}]$ [Segment [San Jacinto River Basin [Recreation [Aquatic Water [Other [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature (mg/L)] Segment Names] (degrees F)] No.] **Usel** Life Usel Supply Use] Uses] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mLl [6.5-[1001][San Jacinto River Tidal] [PCR1] [H] [4.0][35] [95] 9.01 [6.5-[Lake Houston] [PS] [400][5.0][90] [1002][PCR1] [H][100][50] [126]9.01 <mark>[6.0-</mark> [1003][East Fork San Jacinto River] [PCR1] [H] [PS] [80] [50] [400][5.0][126][91] 8.51 [6.5-[1004][West Fork San Jacinto River] [PCR1] [H] [PS] [100][50] [400]**[5.0]** [126]**[95]** <mark>9.01</mark> [Houston Ship Channel/San Jacinto [6.5-[1005][NCR] [H] [4.0] [35] [95] 9.01 River Tidal] [<u>6.5</u>- $[1006^2]$ [Houston Ship Channel Tidal] [N/IS] [2.0] [168][95] . 9.0] [Houston Ship Channel/Buffalo [6.5- $[1007^2]$ [N/IS] [1.0][168][95] Bayou Tidal] 9.01 [6.5-[1008][Spring Creek] [PCR1] [H] [PS] [100][50] [450] [5.0<sup>3</sup>] [126] <mark>[90]</mark> 9.01 [<mark>6.5-</mark> [1009][Cypress Creek] [PCR1] [H][PS] [100][50] [600] **[5.0]** [126] [90] 9.0]

[San Jacinto River Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	<mark>[San Jacinto River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria¹ #/100 mL]	[Temperature (degrees F)]
[1010]	[Caney Creek]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	[50]	[300]	[5.0]	<mark>[6.0-</mark> 8.5]	[126]	[90]
[1011]	[Peach Creek]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	<mark>[50]</mark>	[300]	[5.0]	<mark>[6.0-</mark> 8.5]	[126]	[90]
[1012]	[Lake Conroe]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	<mark>[50]</mark>	[300]	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1013]	[Buffalo Bayou Tidal]	[PCR1]	[1]						[3.0]	<mark>[6.5-</mark> 9.0]	[35]	[92]
[1014]	[Buffalo Bayou Above Tidal]	[PCR1]	[L]			[110]	<mark>[65]</mark>	[600]	[3.0]	<mark>[6.5-</mark> 9.0]	[126]	[92]
[1015]	[Lake Creek]	[PCR1]	[H]	[PS]		<mark>[80]</mark>	<mark>[50]</mark>	[300]	[5.0]	<mark>[6.0-</mark> 8.5]	[126]	[90]
[1016]	[Greens Bayou Above Tidal]	[PCR1]	[L]			[150]	[150]	[1,000]	[3.0]	<mark>[6.5-</mark> 9.0]	[126]	[92]
[1017]	[Whiteoak Bayou Above Tidal]	[PCR1]	[L]			[110]	<mark>[65]</mark>	[600]	[3.0]	<mark>[6.5-</mark> 9.0]	[126]	[92]

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[2 Chronic numerical toxic criteria, chronic total toxicity requirements, and numerical toxic criteria applicable to sustainable fisheries apply to the segment.]

[3 A 24-hour average dissolved oxygen criterion of 4.0 mg/L and a 24-hour minimum dissolved oxygen criterion of 3.0 mg/L apply from the confluence with Mill Creek immediately downstream of Neidigk Lake, upstream to the confluence with Kickapoo Creek from July through September.]

[San Jacinto-Brazos Coastal Basin Designated Uses and Numeric Criteria]

[ <mark>Segment</mark> No.]	<mark>[San Jacinto-Brazos Coastal Basin</mark> <mark>Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[1101]	[Clear Creek Tidal]	[PCR1]	[H]						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	[95]
[1102]	[Clear Creek Above Tidal]	[PCR1]	[H]			[200]	[100]	<mark>[600]</mark>	[5.0]	[6.5- 9.0]	[126]	[95]
[1103]	[Dickinson Bayou Tidal]	[PCR1]	<mark>[H]</mark>						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	<mark>[95]</mark>
[1104]	[Dickinson Bayou Above Tidal]	[PCR1]	[1]			[200]	[100]	<mark>[600]</mark>	[4.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1105]	[Bastrop Bayou Tidal]	[PCR1]	<mark>[H]</mark>						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	<mark>[95]</mark>
[1107]	[Chocolate Bayou Tidal]	[PCR1]	<mark>[H]</mark>						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	<mark>[95]</mark>
[1108]	[Chocolate Bayou Above Tidal]	[PCR1]	[H]			[200]	[100]	<mark>[900]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1109]	[Oyster Creek Tidal]	[PCR1]	[H]						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	[95]
[1110]	Oyster Creek Above Tidal	[PCR1]	[H]			[300]	[150]	[750]	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	[90]

[Indicator [Domestic [Dissolved [pH [San Jacinto-Brazos Coastal Basin [Recreation Water [Segment [Aquatic [Other [Cl<sup>-1</sup>  $[SO_4^{-2}]$ [TDS <mark>Oxygen</mark> Range Bacteria<sup>1</sup> [Temperature No.] (mg/L)] (mg/L)] (mg/L)] <mark>#/100 mL</mark>] (degrees F)] Segment Names] Use] Life Use] Supply Use] Uses] (mg/L)] (SU)] <mark>[6.5-</mark> 9.0] [Old Brazos River Channel Tidal] [PCR1] [H] **[4.0]** <mark>[35]</mark> <mark>[95]</mark> [1111]<mark>[6.5-</mark> 9.0] [1113][Armand Bayou Tidal] [PCR1] [H] **[4.0]** <mark>[35]</mark> <mark>[95]</mark>

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[pH [Domestic [Dissolved [Indicator [C]<sup>-1</sup>  $[SO_4^{-2}]$ [Segment Brazos River Basin [Recreation [Aquatic Water [Other [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature (mg/L)] (mg/L)] (mg/L)] (degrees F)] No.] Segment Names] Use] Life Usel Supply Use] **Uses**l (mg/L)] (SU)] #/100 mLl [6.5-[1201][Brazos River Tidal] [PCR1] [H] [PS<sup>2</sup>] [4.0][35] [95] 9.01 [6.5-Brazos River Below Navasota [1202][H] [PS] **[750]** [5.0][PCR1] [300] [200] [126]**[95] River**l 9.01 [6.5-[1203] [Whitney Lake] [H] [PS] [670] [320] **[5.0]** [93] [PCR1] [1,500][126]9.0] [Brazos River Below Lake [6.5-[1204][PCR1] [H] [750] [380] [1,600]**[5.0]** [126][91] **Granbury** <mark>9.01</mark> [6.5-[1205][Lake Granbury] [PCR1] [H] [PS] [1,000][600] [2,500][5.0][126] <mark>[93</mark>] 9.01 [Brazos River Below Possum [6.5-[1206][PCR1] [H]1,036 595 2,325 [5.0][126] [90] 9.01 Kingdom Lake] [<u>6.5</u>-[1207] [Possum Kingdom Lake] [PCR1] [H] [PS] [1,200][500] [3,500] **[5.0]** [126] <mark>[93]</mark> 9.01 [Brazos River Above Possum [6.5-[1208] [PCR1] [H] [5,000] [2,000][12,000]**[5.0]** <mark>[33]</mark> [95] . Kingdom Lakel . 9.01 Navasota River Below Lake [<mark>6.5-</mark> [1209][PCR1] [H][PS] [140] [100][600] [5.0] [126] <mark>[93]</mark> Limestone] 9.0<sup>1</sup>

### [Brazos River Basin Designated Uses and Numeric Criteria]

[pH [Domestic [Dissolved [Indicator  $[C]^{-1}$ [Segment [Brazos River Basin Water  $[SO_4^{-2}]$ [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature [Aquatic [Other [Recreation Life Use] No.] Segment Names] **Uses**] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mL] (degrees F)] Use] Supply Use] [6.5-[Lake Mexia] [H] [PS] [100][50] [400]**[5.0]** [90] [1210][PCR1] [126]9.0] [6.5-[H] [140][5.0] [91][1211][Yegua Creek] [PCR1] [PS] [130][640] [126]9.0 [<mark>6.5-</mark> [Somerville Lake] [PCR1] [H] [PS] [5.0] [126]<mark>[93]</mark> [1212][100][100][400]9.01 [6.5-[Little River] [PCR1] [H] [PS] [75] [75] [5.0] [126][90] [1213][400]9.01 [<u>6.5</u>-[San Gabriel River] [PCR1] [H] [PS] [50] [45] [126] [91] [1214][5.0]550 . 9.0] [Lampasas River Below Stillhouse [<u>6.5</u>-[1215] [PCR1] [H] [100][75] [126] [91] [PS] [500] [5.0]Hollow Lake . 9.01 [<u>6.5</u>-[Stillhouse Hollow Lake] [PCR1] [E] [PS] [75] [126][1216][100][500] [6.0][93] 9.01 [Lampasas River Above Stillhouse [<u>6.5</u>-[1217] [PCR1] [H] [500] [100][1,200][5.0] [126] [91] Hollow Lake] 9.01 [6.5-[Nolan Creek/South Nolan Creek] [PCR1] [H] [100][75] **[500] [5.0]** [126] <mark>[93]</mark> [1218] 9.01

[pH [Indicator [Domestic [Dissolved  $[C]^{-1}$ [Segment [Brazos River Basin Water  $[SO_4^{-2}]$ [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature [Aquatic [Other [Recreation No.] Segment Names] Life Use] Supply Use] **Uses**] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] <mark>#/100 mL</mark>] (degrees F)] Use] [6.5-[Leon River Below Belton Lake] [H] [PS] [150][75] [500] **[5.0]** [91][1219][PCR1] [126]9.0] [6.5-[H] [100][75] **[5.0]** <mark>[93]</mark> [1220][Belton Lake] [PCR1] [PS] [500] [126]9.0 <mark>[6.5-</mark> [Leon River Below Proctor Lake] [PCR1] [H] [PS] [150][5.0] [126][1221][100][900] <mark>[90]</mark> 9.01 [6.5-[1222][Proctor Lake] [H] [PS] [200] [75] [500] [5.0][126]<mark>[93]</mark> [PCR1] 9.01 [<u>6.5</u>-[1223] [PCR1] [H] [480] [130][1, 240][126] <mark>[93]</mark> [Leon River Below Leon Reservoir] [PS] [5.0]. 9.0] [<u>6.5</u>-[Leon Reservoir] [PCR1] [H] [150] [75] [126] <mark>[93]</mark> [1224][PS] [500] [5.0]. 9.01 [<u>6.5</u>-[1225] [Waco Lake] [H] [PS] **[60]** [60] [126][PCR1] [400][5.0][93] 9.01 [<u>6.5</u>-[1226] [North Bosque River] [PCR1] [H] [PS] [100][100][540] [5.0] [126] [91] 9.01 [<u>6.5</u>-[Nolan River] [PCR1] [I] [4.0][126] <mark>[95]</mark> [1227] 372 320 1,383 9.01

[pH [Indicator [Domestic [Dissolved  $[C]^{-1}$ [Segment [Brazos River Basin Water  $[SO_4^{-2}]$ [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature [Aquatic [Other [Recreation No.] Segment Names] Life Use] Supply Use] **Uses**] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mL] (degrees F)] Use] [6.5-[Lake Pat Cleburne] [H] [PS] [100][100][300] **[5.0]** <mark>[93]</mark> [1228] [PCR1] [126]9.0] [6.5-[1229][Paluxy River/North Paluxy River] [H] [50] [500] **[5.0]** [91][PCR1] [PS] [100][126]9.0 [<mark>6.5-</mark> [Lake Palo Pinto] [PCR1] [H] [PS] [5.0] [126]<mark>[93]</mark> [1230][100][100][450]9.01 [6.5-[Lake Graham] [H] [PS] [200] [75] [500] [5.0] [126][95] [1231][PCR1] 9.01 [<u>6.5</u>-[1232] [Clear Fork Brazos River] [PCR1] [H] [1,250] [2,200] [4,900] [126] <mark>[93]</mark> [5.0]. 9.0] [<u>6.5</u>-[Hubbard Creek Reservoir] [PCR1] [H] [PS] [350] <mark>[900]</mark> [126] [1233][150][5.0][93] . 9.01 [<u>6.5</u>-[1234] [Lake Cisco] [H] [PS] [75] [75] [350] [126] [PCR1] [5.0][93] 9.01 [<u>6.5</u>-[1235] [Lake Stamford] [PCR1] [H] [PS] [580] **[400]** [2,100][5.0] [126] <mark>[93]</mark> <mark>9.0]</mark> [<u>6.5</u>-[Fort Phantom Hill Reservoir] [PCR1] [H] [PS] [130] [150][550] **[5.0]** [126] <mark>[93]</mark> [1236] 9.01

[pH [Indicator [Domestic [Dissolved  $[C]^{-1}$ [Segment [Brazos River Basin Water  $[SO_4^{-2}]$ [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature [Aquatic [Other [Recreation No.] Segment Names] Life Use] Supply Use] **Uses**] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mL] (degrees F)] Use] [6.5-[Lake Sweetwater] [H] [PS] [250] [225] [730] **[5.0]** <mark>[93]</mark> [1237][PCR1] [126]9.0] [6.5-[1238][Salt Fork Brazos River] [H] **[5.0]** [33] <mark>[93]</mark> [PCR1] 28,060 3,470 54,350 9.0] [<mark>6.5-</mark> [White River] [PCR1] [H] [PS] **[5.0]** [126][92] [1239][100][100]**[500]** 9.01 [6.5-[White River Lake] [PCR1] [H] [PS] [5.0] [126][89] [1240]190 90 780 9.01 [Double Mountain Fork Brazos [<u>6.5</u>-[1241][PCR1] [H] [2,400][5,500] [33] [95] [5.0]2,630 River] **9.0**] [Brazos River Above Navasota [<u>6.5</u>-[1242][PCR1] [H] [PS] [350] [200] [1,000][126] [95] [5.0]. 9.01 River] [<u>6.5</u>-[Salado Creek<sup>3</sup>] [50] [50] [126] <mark>[90]</mark> [1243][PCR1] [H][PS/AP<sup>4</sup>] [400][5.0]. 9.0] [<u>6.5</u>-[1244][Brushy Creek] [PCR1] [H] [PS<sup>5</sup>/AP<sup>4</sup>] [200] [150]**[800] [5.0]** [126] [91] <mark>9.0]</mark> [<u>6.5</u>-[Upper Oyster Creek] [PCR1] [I] [PS<sup>6</sup>] [140][75] [1,070] $[4.0^7]$ [126] <mark>[95]</mark> [1245] 9.01

[pH [Domestic [Dissolved [Indicator  $[C]^{-1}$ [Segment Brazos River Basin Water  $[SO_4^{-2}]$ [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature [Aquatic [Other [Recreation (mg/L)] (mg/L)] No.] Segment Names] Life Use] **Uses**] (mg/L)] (mg/L)] (SU)] #/100 mL] (degrees F)] Use] Supply Use] [Middle Bosque/South Bosque [6.5-[1246][H] [50] [260] [700] **[5.0]** [91][PCR1] [126]9.0] **River**] [6.5-[Granger Lake] [H] [PS] [50] [50] **[5.0]** [1247][PCR1] [400][126]<mark>[90]</mark> 9.01 [San Gabriel/North Fork San [6.5-[1248][PCR1] [H] [PS/AP<sup>4</sup>] [50] [5.0][126][95] **[50]** 400 Gabriel Riverl 9.01 [6.5-[Lake Georgetown] [H] [50] [50] [350] [5.0][126][90] [1249][PCR1]  $[PS/AP^4]$ 9.01 <mark>[6.5-</mark> [1250][South Fork San Gabriel River] [PCR1] [H] [PS/AP<sup>4</sup>] [50] [350] [126] [95] **[50]** [5.0]. <mark>9.0]</mark> [6.5-[North Fork San Gabriel River] [PCR1] [PS/AP<sup>4</sup>] [50] [50] [400][126] [91] [1251][H][5.0]. 9.0] [<u>6.5</u>-[Lake Limestone] [PS] [50] [50] [126] [1252][PCR1] [H][300] [5.0]<mark>[90]</mark> 9.01 [6.5-[1253] [Navasota River Below Lake Mexia] [PCR1] [H] [PS] [440] [150][1, 350]**[5.0]** [126] <mark>[93]</mark> 9.01 [<u>6.5</u>-[Aquilla Reservoir] [PCR1] [H] [PS] [110][600] **[5.0]** [126] <mark>[90]</mark> [1254] [310] 9.01

[Segment No.]	<mark>[Brazos River Basin</mark> <mark>Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria¹ #/100 mL]	[Temperature (degrees F)]
[1255]	[Upper North Bosque River <sup>8</sup> ]	[PCR1]	[1]			[200]	[150]	[1,000]	[4.0]	<mark>[6.5-</mark> 9.0]	[126]	[91]
[1256]	[Brazos River/Lake Brazos]	[PCR1]	<mark>[H]</mark>	[PS]		[400]	[200]	[1,150]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[95]
[1257]	[Brazos River Below Whitney Lake]	[PCR1]	[H]	[PS]		[450]	[250]	<mark>[1,450]</mark>	[5.0]	[6.5- 9.0]	[126]	<mark>[95]</mark>
[1258]	[Middle Oyster Creek]	[PCR1]	[H]			[300]	<mark>[150]</mark>	[750]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[95]</mark>
[1259]	[Leon River Above Belton Lake]	[PCR1]	[H]	[PS]		[150]	[100]	[900]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci. The indicator bacteria for Segments 1208, 1238, and 1241 is Enterococci.]

[2 The public water supply designation only applies from the upstream boundary to 300 meters (330 yards) downstream of SH 332 in Brazoria County.]

[3 The critical low-flow is calculated according to §307.8(a)(2)(B) of this title.]

[4 The aquifer protection use applies to the contributing, recharge, and transition zones of the Edwards Aquifer.]

[5 The public water supply use only applies within the contributing, recharge, and transition zones of the Edwards Aquifer.]

- [6 The public water supply use does not apply from Steep Bank Creek/Brazos River confluence upstream to Dam #3 approximately 0.4 mi downstream from the confluence of the American Canal.]
- [7 A 24-hour minimum dissolved oxygen criterion of 1.0 mg/L applies from the confluence with Steep Bank Creek/Brazos River upstream to Dam #3.]
- [8 The portion of the segment from the confluence with Dry Branch upstream to the confluence with the North/South Forks North Bosque River in Erath County is intermittent with perennial pools.]

### [Brazos-Colorado Coastal Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	<mark>[Brazos-Colorado Coastal Basin</mark> <mark>Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]		<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[1301]	[San Bernard River Tidal]	[PCR1]	[H]						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	[95]
[1302]	[San Bernard River Above Tidal]	[PCR1]	<mark>[H]</mark>	[PS]		[200]	[100]	<mark>[500]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1304]	[Caney Creek Tidal]	[PCR1]	<mark>[H]</mark>						<mark>[4.0]</mark>	<mark>[6.5-</mark> 9.0]	[35]	<mark>[95]</mark>
[1305]	[Caney Creek Above Tidal]	[PCR1]	<mark>[H]</mark>			[200]	<mark>[75]</mark>	<mark>[1,000]</mark>	[5.0 <sup>2</sup> ]	<mark>[6.5-</mark> 9.0]	[126]	[90]

1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.

A 24-hour average dissolved oxygen criterion of 4.0 mg/L and a 24-hour minimum dissolved oxygen criterion of 3.0 mg/L applies from the confluence with Hardeman Slough upstream to the confluence with Water Hole Creek. A 24-hour average dissolved oxygen criterion 2.5 mg/L and a 24-hour minimum dissolved oxygen criterion of 2.0 mg/L applies from the confluence with Hardeman Slough upstream to the confluence with Water Hole Creek from March 15 - October 31 when flows are less than 5.0 cfs.]

[pH [Indicator [Domestic [Dissolved  $[Cl^{-1}]$  $[SO_4^{-2}]$ [Segment [Colorado River Basin [Recreation [Aquatic Water [Other [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature Uses] (mg/L)(mg/L)] (degrees F)] No.] Segment Names] **Usel** Life Usel Supply Use] (mg/L)] (mg/L)] (SU)] #/100 mLl [6.5-[1401][Colorado River Tidal] [H] [4.0][35] [95] [PCR1] 9.01 [6.5-[1402][Colorado River Below La Grange] [PS] **[500] [5.0]** [PCR1] [H][100][100][126]**[95]** 9.01 [6.5-[1403][Lake Austin] [PCR1] [H] [PS] [75] [400][5.0] [126][90] [100]9.0] [<u>6.5</u>-[1404][Lake Travis] [PCR1] [E] [PS] [100][75] [400][6.0] [126]<mark>[90]</mark> <mark>9.01</mark> [<u>6.5</u>-[1405][PS] [Marble Falls Lake] [PCR1] [H] [125][75] [500] [5.0][126] **[94]** 9.01 [<u>6.5</u>-[PS] [1406][Lake Lyndon B. Johnson] [PCR1] [H] [125][75] [500] [5.0][126][94]9.01 [<u>6.5</u>-[PS] [1407][Inks Lake] [PCR1] [H] [150][100][<mark>600]</mark> [5.0] [126] <mark>[90]</mark> 9.01 [6.5-[Lake Buchanan] [1408] [PCR1] [H] [PS] [150][100][600] **[5.0]** [126] <mark>[90]</mark> . 9.0] Colorado River Above Lake [6.5-[1409][PCR1] [H][PS] [200] [200] **[900]** [5.0] [126] [91]**Buchanan**] 9.0]

## [Colorado River Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	<mark>[Colorado River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> <mark>Uses]</mark>	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[1410]	[Colorado River Below O. H. Ivie Reservoir]	[PCR1]	[H]	[PS]		<mark>[500]</mark>	<mark>[455]</mark>	<mark>[1,475]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[91</mark> ]
[1411]	[E. V. Spence Reservoir]	[PCR1]	<mark>[H]</mark>	[PS]		440	360	1,630	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	<mark>[93]</mark>
[1412]	[Colorado River Below Lake J. B. Thomas]	[PCR1]	<mark>[H]</mark>			4,740	1,570	9,210	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	<mark>[33]</mark>	<mark>[93]</mark>
[1413]	[Lake J. B. Thomas]	[PCR1]	[H]	[PS]		140	250	520	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1414]	[Pedernales River]	[PCR1]	[H]	[PS]		[125]	[75]	[525]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[91]
[1415]	[Llano River <sup>2</sup> ]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	[50]	[350]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[91]
[1416]	[San Saba River]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	[50]	[425]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1417]	[Lower Pecan Bayou]	[PCR1]	[H]			[310]	[120]	[1,025]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1418]	[Lake Brownwood]	[PCR1]	[H]	[PS]		[150]	[100]	[500]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]

<mark>[Segment</mark> No.]	<mark>[Colorado River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO₄⁻² (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[1419]	[Lake Coleman]	[PCR1]	[H]	[PS]		[150]	[100]	[500]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[93]
[1420]	<mark>[Pecan Bayou Above Lake</mark> Brownwood]	[PCR1]	[H]	[PS]		[500]	[500]	<mark>[1,500]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1421]	[Concho River]	[PCR1]	[H]	[PS]		610	420	1,730	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1422]	[Lake Nasworthy]	[PCR1]	[H]	[PS]		<mark>[450]</mark>	<mark>[400]</mark>	<mark>[1,500]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[93]
[1423]	[Twin Buttes Reservoir]	[PCR1]	[H]	[PS]		[200]	[100]	[700]	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[1424]	[Middle Concho/South Concho River³]	[PCR1]	[H]	[PS]		<mark>[150]</mark>	<mark>[150]</mark>	[700]	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[1425]	[O. C. Fisher Lake]	[PCR1]	[H]	[PS]		<mark>[150]</mark>	<mark>[150]</mark>	[700]	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1426]	[Colorado River Below E.V. Spence Reservoir]	[PCR1]	[H]	[PS]		1,000	1,100	1,770	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	[91]
[1427]	[Onion Creek]	[PCR1]	[H]	[PS/AP⁴]		[100 <sup>5</sup> ]	[100 <sup>5</sup> ]	<mark>[500⁵]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]

<mark>[Segment</mark> No.]	[Colorado River Basin Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH <mark>Range</mark> (SU)]	[Indicator Bacteria¹ #/100 mL]	[Temperature (degrees F)]
[1428]	[Colorado River Below Lady Bird Lake/Town Lake]	[PCR1]	[E]	[PS]		[100]	[100]	[500]	[6.0 <sup>6</sup> ]	<mark>[6.5-</mark> 9.0]	[126]	[95]
[1429]	[Lady Bird Lake/Town Lake <sup>7</sup> ]	[PCR1]	[H]	[PS]		<mark>[75]</mark>	<mark>[75]</mark>	<mark>[400]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1430]	[Barton Creek <sup>®</sup> ]	[PCR1]	[H]	<mark>[AP⁴]</mark>		<mark>[50]</mark>	<mark>[50]</mark>	<mark>[500]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1431]	[Mid Pecan Bayou]	[PCR1]				<mark>[410]</mark>	<mark>[120]</mark>	<mark>[1,100]</mark>	[2.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1432]	[Upper Pecan Bayou]	[PCR1]	<mark>[H]</mark>	[PS]		<mark>[200]</mark>	<mark>[150]</mark>	<mark>[800]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1433]	[O. H. Ivie Reservoir]	[PCR1]	<mark>[H]</mark>	[PS]		430	330	1,520	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[93]</mark>
[1434]	[Colorado River Above La Grange]	[PCR1]	[E]	[PS]		[100]	[100]	[500]	[6.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[95]</mark>

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci. The indicator bacteria for Segment [1412 is Enterococci.]

[2 The critical low-flow for the South Llano River portion of the segment is calculated according to §307.8(a)(2)(B) of this title.]

- [3 The critical low-flow for the South Concho River portion of the segment is calculated according to §307.8(a)(2)(B) of this title.]
- [4 The aquifer protection use applies to the contributing, recharge, and transition zones of the Edwards Aquifer.]
- [5 The aquifer protection reach is assigned the following criteria: 50 mg/L for Cl<sup>-1</sup>, 50 mg/L for SO₄<sup>-2</sup>, 400 mg/L for TDS.]
- [6 Dissolved oxygen criterion of 6.0 mg/L only applies at stream flows greater than or equal to 150 cfs as measured at USGS Gauging Station 08158000 located in Travis County upstream from US Highway 183. A dissolved oxygen criterion of 5.0 mg/L applies to stream flows less than 150 cfs and greater than or equal to the 7Q2 for the segment.]
- [7 While the segment exhibits quality characteristics that would make it suitable for primary recreation, the use is prohibited by local regulation for reasons unrelated to water quality.]
- [8 The critical low-flow is calculated according to §307.8(a)(2)(A) of this title.]

[1

[Colorado-Lavaca Coastal Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	<mark>[Colorado-Lavaca Coastal Basin</mark> <mark>Segment Names]</mark>	[Recreation Use]		[Domestic Water Supply Use]	[Other Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	<mark>[pH</mark> Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[1501]	[Tres Palacios Creek Tidal]	[PCR1]	<mark>[E]</mark>						[5.0]	[6.5- 9.0]	[35]	[95]
[1502]	[Tres Palacios Creek Above Tidal]	[PCR1]	[H]			<mark>[250]</mark>	<mark>[100]</mark>	<mark>[800]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]

The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[1

[Domestic [Dissolved [pH [Indicator [C]<sup>-1</sup>  $[SO_4^{-2}]$ [TDS [Segment [Lavaca River Basin [Recreation [Aquatic Water [Other **Oxygen** Range Bacteria<sup>1</sup> [Temperature No.] Segment Names] Uses] (mg/L)] (mg/L)] (mg/L)] #/100 mL] (degrees F)] Use] Life Usel Supply Use] (mg/L)] (SU)] [<mark>6.5-</mark> [1601][Lavaca River Tidal] [PCR1] [H] [4.0][35] [95] 9.01 [<mark>6.5-</mark> [1602][Lavaca River Above Tidal] [PCR1] [PS] [200][100]**[700]** [5.0][126][91] [H]. 9.01 [<mark>6.5-</mark> [1603][Navidad River Tidal] [PCR1] [H] [4.0][35] [91] 9.0] [<mark>6.5-</mark> [Lake Texana] [1604][PCR1] [H] [PS] [100][50] [500] [5.0] [126] <mark>[93]</mark> . <mark>9.0]</mark> [<mark>6.5-</mark> [Navidad River Above Lake Texana] [PS] [1605][PCR1] [H] [100][50] <mark>[550]</mark> **[5.0]** [126][91] **9.0**]

[Lavaca River Basin Designated Uses and Numeric Criteria]

The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[Lavaca-Guadalupe Coastal Basin Designated Uses and Numeric Criteria]

[ <mark>Segment</mark> No.]	[Lavaca-Guadalupe Coastal Basin <mark>Segment Names]</mark>			[Domestic Water Supply Use]	[Other Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH <mark>Range</mark> (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
<mark>[1701]</mark>	[Victoria Barge Canal Tidal]	[NCR]	[H]						[4.0]	<mark>[6.5-</mark> 9.0]	[35]	[95]

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[pH [Indicator [Domestic [Dissolved [C]<sup>-1</sup>  $[SO_4^{-2}]$ [Segment [Guadalupe River Basin [Recreation [Aquatic Water [Other **TDS Oxygen** Range Bacteria<sup>1</sup> [Temperature (mg/L)] Segment Names] No.] **Usel** Life Usel Supply Use] Uses] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mLl (degrees F)] [<mark>6.5-</mark> [1801][Guadalupe River Tidal] [PCR1] [E] [5.0][35] [95] 9.01 [<mark>6.5-</mark> Guadalupe River Below San Antonio [1802][PS] [5.0]<mark>[93]</mark> [PCR1] [H][150][100][700] [126]9.01 Riverl [Guadalupe River Below San Marcos [<mark>6.5-</mark> [1803][PCR1] [PS] [500] [5.0]<mark>[93]</mark> [H][100][100][126]9.0] **River**l [<mark>6.5-</mark> [1804][Guadalupe River Below Comal River] [PCR1] [H]  $[PS/AP^2]$ [100][50] [400][5.0][126]<mark>[90]</mark> . 9.01 [<mark>6.5-</mark> [1805][Canyon Lake] [PCR1] [E]  $[PS/AP^2]$ [50] [50] [400][6.0][126][90] 9.01 Guadalupe River Above Canyon [<u>6.5</u>-[1806][PCR1] [E]  $[PS/AP^2]$ [50] [50] [400][6.0][126][90] . 9.01 Lake] [<mark>6.5-</mark> [1807][Coleto Creek] [PCR1] [H] [PS] [250] [100]**[500]** [5.0] [126] <mark>[93]</mark> 9.01 <mark>[6.5-</mark> [1808][Lower San Marcos River<sup>3</sup>] [PCR1] [H] [PS] [<mark>60]</mark> **[50] [400] [5.0]** [126]<mark>[90]</mark> 9.01 [<mark>6.5-</mark> [1809][Lower Blanco River] [PCR1] [H]  $[PS/AP^2]$ [50] [50] [400][5.0] [126][<u>92</u>] <mark>9.01</mark>

#### [Guadalupe River Basin Designated Uses and Numeric Criteria]

[pH [Domestic [Dissolved [Indicator [Segment [Guadalupe River Basin [Aquatic Water  $[Cl^{-1}]$  $[SO_4^{-2}]$ **Oxygen** Range **Bacteria**<sup>1</sup> [Temperature [Recreation [Other [TDS (SU)] No.] Segment Names] Uses] (mg/L)] (mg/L)] (mg/L)] (mg/L)] #/100 mL (degrees F)] **Use**] Life Usel Supply Use] [<mark>6.5-</mark> [**350**] **[5.0]** [1810][Plum Creek] [PCR1] [H] [AP<sup>2</sup>] [150][1, 120][126]<mark>[90</mark>] 9.01 [<mark>6.5-</mark> [Comal River<sup>4</sup>] [50] [5.0][1811][PCR1] [H] [PS/AP<sup>2</sup>] [50] [400] [126]80<sup>5</sup> 9.01 [Guadalupe River Below Canyon [<mark>6.5-</mark> [1812][E]  $[PS/AP^2]$ [PCR1] **[50]** [50] [400] [6.0][126][90] 9.01 Daml [<mark>6.5-</mark> [Upper Blanco River<sup>3</sup>] [PCR1] [E]  $[PS/AP^2]$ [6.0][126][92] [1813]**[50]** [50] [400] 9.01 [<mark>6.5-</mark> [Upper San Marcos River<sup>4</sup>] [PCR1] [E] [126][1814] $[AP^2]$ [50] [50] [400][6.0] $80^{6}$ . 9.0] [<mark>6.5-</mark> [Cypress Creek] [PCR1] [E]  $[PS/AP^2]$ [50] [126][1815][50] [400] [6.0][86] . 9.01 [<u>6.5</u>-[Johnson Creek] [E] [1816][PCR1] [PS] [50] [50] [400] [6.0][126] [86] . 9.01 [<mark>6.5-</mark> [1817][North Fork Guadalupe River<sup>3</sup>] [E] [PS] [126][<mark>86</mark>] [PCR1] [50] [50] [400] [6.0]9.01 [<mark>6.5-</mark> [South Fork Guadalupe River] [PCR1] [E] [PS] **[50] [6.0]** [126] [1818] **[50]** [400] [<mark>86]</mark> 9.01

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

- [2 The aquifer protection use applies to the contributing, recharge, and transition zones of the Edwards Aquifer.]
- [3 The critical low-flow is calculated according to §307.8(a)(2)(B) of this title.]
- [4 The critical low-flow is calculated according to §307.8(a)(2)(A) of this title.]
- 5 A temperature criterion of 78°F applies from the Landa Lake Park Dam immediately upstream of Landa Park Drive upstream to Klingemann Street in New Braunfels in Comal County (excludes the western channel at Spring Island, the eastern channel at Pecan Island, and Blieders Creek arm of Landa Lake upstream of the springs in the upper spring run reach).
- 6 A temperature criterion of 78°F applies from the confluence with Sessom's Creek approximately 1.5 km (0.9 mi) upstream of Rio Vista Dam upstream to a point 0.7 km (0.4 mi) upstream of Loop 82 in San Marcos in Hays County (excludes the slough arm of Spring Lake).

			KIVEI Da	isin Designa		es anu i	vumeric		aj	-	-	-
<mark>[Segment</mark> No.]	<mark>[San Antonio River Basin</mark> Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water <mark>Supply Use]</mark>	<mark>[Other</mark> <mark>Uses]</mark>	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria¹ #/100 mL]	<mark>[Temperature</mark> (degrees F)]
[1901]	[Lower San Antonio River]	[PCR1]	[H]			[180]	[140]	<mark>[750]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1902]	[Lower Cibolo Creek]	[PCR1]	<mark>[H]</mark>			<mark>[170]</mark>	<mark>[275]</mark>	<mark>[900]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[1903]	[Medina River Below Medina Diversion Lake]	[PCR1]	<mark>[H]</mark>	[PS <sup>2</sup> /AP <sup>3</sup> ]		[120]	[120]	<mark>[700]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[1904]	[Medina Lake]	[PCR1]	[H]	[PS/AP <sup>3</sup> ]		<mark>[80]</mark>	<mark>[75]</mark>	<mark>[350]</mark>	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	[88]
[1905]	[Medina River Above Medina Lake4]	[PCR1]	<mark>[E]</mark>	[PS]		<mark>[50]</mark>	[150]	[400]	[6.0]	<mark>[6.5-</mark> 9.0]	[126]	[88]
[1906]	[Lower Leon Creek]	[PCR1]	[H]	[PS <sup>5</sup> ]		[120]	[120]	<mark>[700]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[95]</mark>
[1907]	[Upper Leon Creek]	[PCR1]	[H]	[PS/AP <sup>3</sup> ]		<mark>[55]</mark>	[240]	<mark>[550]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[95]</mark>
[1908]	[Upper Cibolo Creek]	[PCR1]	[H]	[PS/AP <sup>3</sup> ]		<mark>[50]</mark>	[100]	[600]	[5.0]	[6.5- 9.0]	[126]	[90]
[1909]	[Medina Diversion Lake]	[PCR1]	[H]	[PS/AP <sup>3</sup> ]		<mark>[50]</mark>	<mark>[75]</mark>	[400]	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	[90]

ISan Antonio River Basin Designated Uses and Numeric Criterial

<mark>[Segment</mark> No.]	<mark>[San Antonio River Basin</mark> <mark>Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]		<mark>[Other</mark> <mark>Uses]</mark>	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[ <mark>Dissolved</mark> Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria¹ #/100 mL]	[Temperature (degrees F)]
[1910]	[Salado Creek]	[PCR1]	[H]	[PS/AP <sup>3</sup> ]		[140]	[200]	<mark>[600]</mark>	<mark>[5.0]</mark>	<mark>[6.5-</mark> <mark>9.0]</mark>	[126]	[90]
[1911]	[Upper San Antonio River]	[PCR1]	[H]			[150]	[150]	<mark>[750]</mark>	[5.0]	[ <mark>6.5-</mark> 9.0]	[126]	[90]
[1912]	[Medio Creek]	[PCR1]	[1]			[150]	[150]	<mark>[750]</mark>	[4.0]	[6.5- 9.0]	[126]	[95]
[1913]	[Mid Cibolo Creek]	[PCR1]	[L]			[150]	[150]	[750]	[3.0]	[ <mark>6.5-</mark> 9.0]	[126]	[90]

[1 The indicator bacteria for freshwater is *E. coli*.]

[2 The public water supply designation does not apply from the confluence of the San Antonio River in Bexar County upstream to a point 2.5 km (1.5 mi) upstream of the confluence of Leon Creek.]

[3 The aquifer protection use applies to the contributing, recharge, and transition zones of the Edwards Aquifer.]

[4 The critical low-flow is calculated according to §307.8(a)(2)(B) of this title.]

[5 The public water supply designation does not apply from the confluence of the Medina River in Bexar County to a point 4.8 km (3.0 mi) upstream.]

### [San Antonio-Nueces Coastal Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	[San Antonio-Nueces Coastal Basin <mark>Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	<mark>[Other</mark> <mark>Uses]</mark>	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[2001]	[Mission River Tidal]	[PCR1]	<mark>[H]</mark>					[4.0]	<mark>[6.5-</mark> 9.0]	[35]	[95]
[2002]	[Mission River Above Tidal]	[PCR1]	<mark>[H]</mark>		<mark>[850]</mark>	[100]	<mark>[2,000]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[95]
[2003]	[Aransas River Tidal]	[PCR1]	<mark>[H]</mark>					[4.0]	<mark>[6.5-</mark> 9.0]	[35]	<mark>[95]</mark>
[2004]	[Aransas River Above Tidal]	[PCR1]	[H]		<mark>[450]</mark>	<mark>[100]</mark>	<mark>[1,700]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[95]</mark>

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

#### [Indicator [Dissolved [Domestic [pH $[SO_4^{-2}]$ $[Cl^{-1}]$ [Segment **[Nueces River Basin** [Recreation | [Aquatic Water [Other [TDS Oxygen Range Bacteria<sup>1</sup> [Temperature No.] Segment Names] Usel Life Use] Supply Use] Usesl (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mLl (degrees F)] [<u>6.5</u>-[2101][Nueces River Tidal] [PCR1] [H] [4.0][35] [95] 9.01 [Nueces River Below Lake Corpus [<u>6.5</u>-[2102][PCR1] [PS] [250][250][5.0][126][91][H]**[500]** Christil **9.01** [<u>6.5</u>-[Lake Corpus Christi] [PCR1] [H] [PS] [250][250] [5.0][126]<mark>[93]</mark> [2103] 750 9.0] [<u>6.5</u>-[2104][Nueces River Above Frio River] [PCR1] [H] [PS] [700] [300] [1,500][5.0][126]<mark>[90]</mark> 9.01 [<u>6.5</u>-[PS] [200][200][2105][Nueces River Above Holland Dam] [PCR1] [H] [900] [5.0][126][90] 9.01 [6.5-[2106][Nueces/Lower Frio River] [PCR1] [H] [PS] $285^{2}$ $145^{2}$ 735<sup>2</sup> [5.0][126][90] 9.01 [6.5-[2107] [Lower Atascosa River] [PCR1] [H] [PS] 400 300 1,650 [4.0][126]<mark>[90]</mark> 9.01 [<u>6.5</u>-[2108] [San Miguel Creek] [SCR 1] [H] [PS] **[700]** [700] [2,000]**[5.0]** [<mark>630</mark>] <mark>[95]</mark> **9.0**] [6.5-[Leona River<sup>3</sup>] [PCR1] [H] [PS/AP<sup>4</sup>] **[650]** [500] [2,000][5.0] [126]**[90]** [2109]<mark>9.0</mark>]

## [Nueces River Basin Designated Uses and Numeric Criteria]

[Segment No.]	[Nueces River Basin Segment Names]	[Recreation Use]	[Aquatic Life Use]	[Domestic Water Supply Use]	[Other Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[2110]	[Lower Sabinal River]	[PCR1]	[H]	[PS]		[200]	[100]	[700]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[2111]	[Upper Sabinal River]	[PCR1]	[H]	[PS/AP <sup>4</sup> ]		<mark>[50]</mark>	<mark>[75]</mark>	<mark>[500]</mark>	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[2112]	[Upper Nueces River]	[PCR1]	[H]	[PS/AP <sup>4</sup> ]		<mark>[50]</mark>	<mark>[50]</mark>	<mark>[400]</mark>	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[2113]	[Upper Frio River <sup>3</sup> ]	[PCR1]	[E]	[PS/AP <sup>4</sup> ]		<mark>[50]</mark>	<mark>[50]</mark>	<mark>[400]</mark>	<mark>[6.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	[90]
[2114]	[Hondo Creek]	[PCR1]	[H]	[PS/AP <sup>4</sup>		<mark>[50]</mark>	<mark>[100]</mark>	<mark>[400]</mark>	<mark>[5.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	[90]
[2115]	[Seco Creek]	[PCR1]	[H]	[PS/AP <sup>4</sup> ]		<mark>[50]</mark>	<mark>[70]</mark>	<mark>[400]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[2116]	[Choke Canyon Reservoir]	[PCR1]	[H]	[PS]		<mark>[250]</mark>	<mark>[250]</mark>	720	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[2117]	[Frio River Above Choke Canyon Reservoir]	[PCR1]	[H]	[PS/AP <sup>4</sup> ]		<mark>[620]</mark>	<mark>[380]</mark>	[1,700]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[90]
[2118]	[Upper Atascosa River]	[PCR1]	[1]			350	700	1,550	[4.0]	<mark>[6.5-</mark> <mark>9.0]</mark>	[126]	[90]

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

A TDS criterion of 735 mg/L, a Cl<sup>-1</sup> criterion of 285 mg/L, and a SO<sub>4</sub><sup>-2</sup> criterion of 145 mg/L will apply for the Frio River portion of the segment from the confluence of the Nueces River upstream to Choke Canyon Dam. A TDS criterion of 950 mg/L, a Cl<sup>-1</sup> criterion of 350 mg/L, and a SO<sub>4</sub><sup>-2</sup> criterion of 165 mg/L will apply for the Nueces River portion of the segment from a point 100 meters upstream of US 59 in Live Oak County upstream to the confluence of the Frio River. A site-specific conversion factor of 0.58 was used to calculate the TDS criteria.

[3 The critical low-flow is calculated in accordance with §307.8(a)(2)(B) of this title.]

[4 The aquifer protection use applies to the contributing, recharge, and transition zones of the Edwards Aquifer.]

### [Nueces-Rio Grande Coastal Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	[Nueces-Rio Grande Coastal Basin Segment Names]	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria <sup>1</sup> #/100 mL]	[Temperature (degrees F)]
[2201]	[Arroyo Colorado Tidal]	[PCR1]	[H]					[4.0]	<mark>[6.5-</mark> 9.0]	[35]	<mark>[95]</mark>
[2202]	[Arroyo Colorado Above Tidal]	[PCR1]	[1]		<mark>[1,200]</mark>	<mark>[1,000]</mark>	<mark>[4,000]</mark>	<mark>[4.0]</mark>	<mark>[6.5-</mark> 9.0]	[126]	[95]
[2203]	[Petronila Creek Tidal]	[PCR1]	<mark>[H]</mark>					<mark>[4.0]</mark>	<mark>[6.5-</mark> 9.0]	[35]	[95]
[2204]	[Petronila Creek Above Tidal <sup>2</sup> ]	[PCR1]	[1]		<mark>[1,500]</mark>	<mark>[500]</mark>	<mark>[4,000]</mark>	[4.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[95]</mark>

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci.]

[2 High concentrations of Cl<sup>-1</sup>, SO<sub>4</sub><sup>-2</sup>, and TDS are due to past brine discharges that were halted effective January 10, 1987 by order of the Texas Railroad Commission. Water quality is expected to improve as residual brines are flushed from the system. These estimated criteria are subject to modification as improvement in water quality is documented.]

[pH [Dissolved [Indicator [Domestic [C]<sup>-1</sup>  $[SO_4^{-2}]$ [Segment [Rio Grande Basin [Recreation [Aquatic Water [Other [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature (mg/L)] (mg/L)] (degrees F)] No.] Segment Names] Use] Life Usel Supply Use **Uses**l (mg/L)] (mg/L)] (SU)] #/100 mLl [6.5-[2301][Rio Grande Tidal] [E] [5.0][35] [95] [PCR1] 9.01 [6.5-[2302] [Rio Grande Below Falcon Reservoir] [H] [PS] [270][5.0][PCR1] [350] [880] [126][90] 9.01 [6.5-[2303][International Falcon Reservoir] [H] [PS] [200] [5.0]<mark>[93]</mark> [PCR1] [<u>300</u>] [1,000][126]9.0] [Rio Grande Below Amistad [6.5-[2304][PCR1] [H] [PS] [200] [300] [1,000]**[5.0]** [126]**[95]** Reservoir] <mark>9.01</mark> [6.5-[2305][H] [PS] [International Amistad Reservoir] [PCR1] [150][270][800] [5.0][126] [88] <mark>9.01</mark> [Rio Grande Above Amistad [<u>6.5</u>-[2306][PCR1] [H][PS] 200 450 1,400 [5.0][126] <mark>[93]</mark> 9.01 Reservoir] [<u>6.5</u>-Rio Grande Below Riverside [H] [2307] [PCR1] [PS] [<mark>300</mark>] [550] [1,500]**[5.0]** [126] <mark>[93]</mark> Diversion Dam 9.01 [Rio Grande Below International [6.5-[2308] [NCR] [L] [250] [450] [1, 400][3.0] [605] [95] . 9.01 Dam] [<mark>6.5-</mark> [2309][Devils River<sup>2</sup>] [PCR1] [E] [PS] [50] **[50]** [300] [6.0][126] [90] 9.0]

#### [Rio Grande Basin Designated Uses and Numeric Criteria]

<mark>[Segment</mark> No.]	<mark>[Rio Grande Basin</mark> <mark>Segment Names]</mark>	[Recreation Use]	<mark>[Aquatic</mark> Life Use]	[Domestic Water Supply Use]	<mark>[Other</mark> Uses]	[Cl <sup>-1</sup> (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[TDS (mg/L)]	[Dissolved Oxygen (mg/L)]	[pH Range (SU)]	[Indicator Bacteria¹ #/100 mL]	[Temperature (degrees F)]
[2310]	[Lower Pecos River]	[PCR1]	[H]	[PS]		<mark>[1,700]</mark>	[1,000]	[4,000]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[92]
[2311]	[Upper Pecos River]	[PCR1]	L			<mark>[7,000]</mark>	<mark>[3,500]</mark>	[15,000]	[5.0] <sup>3</sup>	<mark>[6.5-</mark> 9.0]	[33]	[92]
[2312]	[Red Bluff Reservoir]	[PCR1]	[H]			<mark>[3,200]</mark>	<mark>[2,200]</mark>	<mark>[9,400]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[33]	<mark>[90]</mark>
[2313]	[San Felipe Creek <sup>2</sup> ]	[PCR1]	[H]	[PS]		<mark>[50]</mark>	<mark>[50]</mark>	<mark>[400]</mark>	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[90]</mark>
[2314]	[Rio Grande Above International Dam]	[PCR1]	[H]	[PS]		[340]	[600]	[1,800]	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	[92]
2315	Rio Grande Below Rio Conchos	[PCR1]	[H]			450	750	2,100	[5.0]	<mark>[6.5-</mark> 9.0]	[126]	<mark>[93]</mark>

[1 The indicator bacteria for freshwater is *E. coli* and for saltwater is Enterococci. The indicator bacteria for Segments 2311 and 2312 is Enterococci. ]

[2 The critical low-flow is calculated in accordance with §307.8(a)(2)(A) of this title.]

3 The 24-hour minimum dissolved oxygen criterion is 1.0 mg/L.

[Dissolved [pH [Indicator [Domestic  $[Cl^{-1}]$  $[SO_4^{-2}]$ [Segment [Bays and Estuaries [Recreation [Aquatic Water [Other [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature No.] Segment Names] Uses] (mg/L)] (mg/L)] <mark>#/100 mL]</mark> (degrees F)] Use] Life Usel Supply Use] (mg/L)] (mg/L)] (SU)] <mark>[6.5-</mark> [2411][Sabine Pass] [PCR1] [E/O] [5.0][35/14][95] 9.01 [6.5-[2412][Sabine Lake] [PCR1] [H/O] [4.0][35/14] [95] 9.01 [6.5-[2421][Upper Galveston Bay] [PCR1] [H/O] [4.0][35/14] [95] 9.0] [6.5-[2422][Trinity Bay] [PCR1] [H/O] **[4.0]** [35/14] [95] . 9.01 [6.5-[2423] [East Bay] [PCR1] [H/O] [4.0]<mark>[35/14]</mark> [95] **9.0**] [<u>6.5</u>-[2424] [35/14] [West Bay] [PCR1] [H/O] [4.0][95] . 9.0] [<mark>6.5-</mark> [H] [2425] [Clear Lake] [PCR1] [4.0][35] [95] 9.01 [6.5-[2426] [Tabbs Bay] [PCR1] [H] [4.0][35] <mark>[95]</mark> 9.01 [<u>6.5</u>-[2427][San Jacinto Bay] [PCR1] [H] [4.0][35] [95] 9.0]

[Bays and Estuaries Uses and Numeric Criteria]

[Indicator [pH [Domestic [Dissolved [TDS [Temperature [Segment [Bays and Estuaries [Recreation [Aquatic Water [Other  $[Cl^{-1}]$  $[SO_4^{-2}]$ **Oxygen** Range Bacteria<sup>1</sup> Segment Names] No.] Use] Life Usel Supply Use] Uses] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] <mark>#/100 mL]</mark> (degrees F)] [6.5-[2428][Black Duck Bay] [H] **[4.0]** [35] <mark>[95]</mark> [PCR1] 9.0] <mark>[6.5-</mark> 9.0] [2429][Scott Bay] [H] [4.0][35] [95] [PCR1] [<mark>6.5-</mark> [Burnet Bay] [PCR1] [H] [4.0][35] [95] [2430]9.01 [6.5-[2431][Moses Lake] [PCR1] [H] [4.0][35] [95] 9.0] [6.5-[2432] [Chocolate Bay] [PCR1] [H/O] [4.0]<mark>[35/14]</mark> [95] . <mark>9.0]</mark> [6.5-[2433] [Bastrop Bay/Oyster Lake] [PCR1] [H/O] [4.0] <mark>[35/14]</mark> [95] 9.01 [<u>6.5</u>-[2434] [Christmas Bay] [PCR1] [H/O] [4.0]<mark>[35/14]</mark> [95] . 9.0] [<u>6.5</u>-[2435] [Drum Bay] [PCR1] [H/O] [4.0][35/14][95] 9.01 [<u>6.5</u>-[Barbours Cut] [PCR1] [H] [4.0][35] <mark>[95]</mark> [2436] 9.01

[Indicator [pH [Domestic [Dissolved [Bays and Estuaries [Segment [Recreation [Aquatic Water [Other  $[Cl^{-1}]$  $[SO_4^{-2}]$ **Oxygen** Range Bacteria<sup>1</sup> [Temperature [TDS Segment Names] No.] **Use**] Life Usel Uses] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] <mark>#/100 mL</mark>] (degrees F)] Supply Use] [6.5-[Texas City Ship Channel] [H] **[4.0]** [35] <mark>[95]</mark> [2437] [NCR] 9.0] [6.5-[2438][Bayport Channel] [4.0][35] [95] [NCR] [H] 9.0 [<mark>6.5-</mark> [Lower Galveston Bay] [PCR1] [H/O] [4.0][35/14] [95] [2439]9.01 [6.5-[East Matagorda Bay] [PCR1] [E/O] [5.0][35/14] [95] [2441]9.0] [6.5-[2442] [Cedar Lakes] [PCR1] [H/O] [4.0]<mark>[35/14]</mark> [95] . <mark>9.0]</mark> [6.5-[2451][Matagorda Bay/Powderhorn Lake] [PCR1] [E/O] **[5.0]** <mark>[35/14]</mark> [95] 9.01 [<u>6.5</u>-[2452] [Tres Palacios/Turtle Bay] [PCR1] [E/O] <mark>[35/14]</mark> [95] [5.0] . 9.0] [<u>6.5</u>-[2453] [Lavaca Bay/Chocolate Bay] [PCR1] [E/O] [5.0][35/14][95] **9.0**] <mark>[6.5-</mark> [Cox Bay] [PCR1] [E/O] [5.0] <mark>[35/14]</mark> [<mark>95]</mark> [2454] 9.01

[Indicator [pH [Domestic [Dissolved [Segment [Bays and Estuaries [Recreation [Aquatic Water [Other  $[Cl^{-1}]$  $[SO_4^{-2}]$ **Oxygen** Range Bacteria<sup>1</sup> [Temperature [TDS Segment Names] No.] **Use**] Life Usel Uses] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] <mark>#/100 mL</mark>] (degrees F)] Supply Use] [6.5-[2455][E/O] [5.0][35/14] <mark>[95]</mark> [Keller Bay] [PCR1] 9.0] <mark>[6.5-</mark> 9.0] [Carancahua Bay] [5.0][35/14] [95] [2456][PCR1] [E/O] [<mark>6.5-</mark> [Espiritu Santo Bay] [PCR1] [E/O]**[5.0]** [35/14] [95] [2461]9.01 [San Antonio Bay/Hynes [6.5-[2462][PCR1] [E/O] [5.0][35/14] [95] Bay/Guadalupe Bay/Mission Lake] 9.0] [6.5-[Mesquite Bay/Carlos Bay/Ayres Bay] [PCR1] [E/O] [5.0]<mark>[35/14]</mark> [95] [2463]. <mark>9.0]</mark> [6.5-[2471][Aransas Bay] [PCR1] [E/O] [5.0] <mark>[35/14]</mark> [95] 9.01 [<u>6.5</u>-[Copano Bay/Port Bay/Mission Bay] [E/O] <mark>[35/14]</mark> [95] [2472][PCR1] [5.0] . 9.0] [<u>6.5</u>-[2473] [St. Charles Bay] [PCR1] [E/O] [5.0][35/14][95] **9.0**] <mark>[6.5-</mark> [Corpus Christi Bay] [PCR1] [E/O] [5.0] <mark>[35/14]</mark> [95] [2481]9.01

[Indicator [pH [Domestic [Dissolved [Segment [Bays and Estuaries [Recreation [Aquatic Water [Other  $[Cl^{-1}]$  $[SO_4^{-2}]$ [TDS **Oxygen** Range Bacteria<sup>1</sup> [Temperature Segment Names] No.] **Use**] Life Usel Uses] (mg/L)] (mg/L)] (mg/L)] (SU)] <mark>#/100 mL</mark>] (degrees F)] Supply Use] (mg/L)] [6.5-[2482][Nueces Bay<sup>2</sup>] [E/O] [5.0][35/14] <mark>[95]</mark> [PCR1] 9.0] <mark>[6.5-</mark> 9.0] [Redfish Bay] [5.0][35/14] [95] [2483] [PCR1] [E/O] [<mark>6.5-</mark> [Corpus Christi Inner Harbor] [NCR] [I] [35] [95] [2484][<u>3.0]</u> 9.01 [6.5-[2485][Oso Bay] [PCR1] [E/O]  $[4.5^3]$ [35/14] [95] 9.0] [6.5-[2486] [Blind Oso Bay] [PCR1] [E/O]  $[4.5^4]$ <mark>[35/14]</mark> [95] . <mark>9.0]</mark> [6.5-Upper Laguna Madre [PCR1] [E/O] <mark>[35/14]</mark> [95] 2490  $4.5^{3}$ . 9.0] [<u>6.5</u>-Lower Laguna Madre [E/O] <mark>[35/14]</mark> [95] 2491 [PCR1] [5.0] . 9.0] [Baffin Bay/Alazan Bay/Cayo del [<u>6.5</u>-[2492] [PCR1] [H/O] [4.0][35/14][95] Grullo/Laguna Salada] **9.0**] <mark>[6.5-</mark> [South Bay] [PCR1] [E/O] [5.0] <mark>[35/14]</mark> [95] [2493] 9.01

[Domestic [Dissolved [pH [Indicator [Segment [Bays and Estuaries Water  $[Cl^{-1}]$  $[SO_4^{-2}]$ Oxygen Bacteria<sup>1</sup> [Recreation [Aquatic [Other [TDS **Range** [Temperature Ségment Names] No.] Life Usel Uses] (mg/L)] (mg/L)] (mg/L)] (mg/L)] (SU)] #/100 mL] (degrees F)] **Usel** Supply Use] [6.5-[Brownsville Ship Channel] [E] [35] [95] [2494][NCR] [5.0]9.01 [1 The indicator bacteria for recreational suitability in saltwater is Enterococci. The indicator bacteria for oyster water use is fecal coliform.] For assessment purposes only, the acute aquatic life criterion for zinc is 29 µg/L. This is based on the zinc TMDL [2 approved November 1, 2006, and the Implementation Plan approved October 24, 2007.] [3 The 24-hour minimum dissolved oxygen criteria is 3.5 mg/L.] [4 A 24-hour average dissolved oxygen criterion of 4.0 mg/L and a 24-hour minimum dissolved oxygen criterion of 1.5 mg/L apply from March 15 to October 15. During the remainder of the year, a 24-hour minimum dissolved oxygen criterion of 3.5 mg/L applies to the segment.]

[Gulf of Mexico Uses and Numeric Criteria]

	(SU)] #/100 mL] (degrees F)]	<mark>Range</mark> (SU)]	Oxygen (mg/L)]	[TDS (mg/L)]	[SO4 <sup>-2</sup> (mg/L)]	[Cl <sup>-1</sup> (mg/L)]	<mark>[Other</mark> <mark>Uses]</mark>	Water Supply Use]		[Recreation Use]	[Gulf of Mexico <mark>Segment Names]</mark>	<mark>[Segment</mark> No.]
[2501] [Gulf of Mexico] [PCR1] [E/O] [E/O] [5.0] [5.0] [6.5- 9.0] [35/14]			[5.0]						[E/O]	[PCR1]	[Gulf of Mexico]	[2501]

[1 The indicator bacteria for recreational suitability in saltwater is Enterococci. The indicator bacteria for oyster water use is fecal coliform.]

#### [Appendix B - Sole-source Surface Drinking Water Supplies]

[This table contains sole-source surface drinking water supplies as provided by the TCEQ Drinking Water Protection Team. This table is current as of July 27, 2020. Where a water body has been identified as a sole-source surface drinking water supply but is not included in this appendix yet, the same level of protection may be applied. If designations of sole-source surface drinking water supplies change, those designations can be changed by laws or regulations that address sole-source surface drinking water supplies. Sole-source protection zones of sole-source surface drinking water supplies are defined in §307.3 of this title (relating to Definitions and Abbreviations).]

[The listed county names provide the general location of these drinking water supplies. The segment numbers listed below are only provided to help in finding the general location of a sole-source water body and are associated with classified segments as listed in Appendices A and C of this section. Segment numbers in parentheses () indicate that the water body is in close proximity to the segment listed, but not a part of the segment. For a current list and the precise location of a sole-source surface drinking water supply, contact the TCEQ Drinking Water Protection Team.]

[Water Body Name]	[County]	[Segment No.]
[Lake Texoma]	[Grayson]	[0203]
[Lake Arrowhead]	[Clay]	[0212]
[Lake Kickapoo]	[Archer]	[0213]
[Mackenzie Reservoir]	[Briscoe]	[0228]
[Wright Patman Lake]	[Cass]	[0302]
[Big Creek Lake]	[Delta]	<mark>[(0303)]</mark>
[Big Cypress Creek Below Lake O' the Pines]	[Harrison]	[0402]
[Lake O' the Pines]	[Marion]	<mark>[0403]</mark>
[Lake Cypress Springs]	[Franklin]	[0405]

[Water Body Name]	[County]	[Segment No.]
[Lake Bob Sandlin]	[Camp, Titus]	[0408]
[Toledo Bend Reservoir]	[Sabine, Shelby]	[0504]
[Lake Tawakoni]	[Hunt, Rains, Van Zandt, [Kaufman]	[0507]
[Lake Murvaul]	[Panola]	[0509]
[Lake Fork Reservoir]	[Wood]	[0512]
[Big Sandy Creek]	[Upshur]	[0514]
[Lower Neches Valley Authority Canal]	[Hardin, Jefferson]	[(0602)]
[Neches River Below Lake Palestine]	[Anderson]	[0604]
[Lake Palestine]	[Smith]	[0605]
[Lake Livingston]	[Polk, Trinity]	<mark>[0803]</mark>
[Trinity River Above Lake Livingston]	[Walker]	[0804]
[Eagle Mountain Reservoir]	[Tarrant]	<mark>[0809]</mark>
[Bridgeport Reservoir]	[Wise]	[0811]
[Houston County Lake]	[Houston]	<mark>[0813]</mark>
[Bardwell Reservoir]	[Ellis]	[0815]
[Cedar Creek Reservoir]	[Kaufman, Henderson]	[0818]
[Elm Fork Trinity River Below Lewisville Lake]	[Dallas]	[0822]
[Lake Grapevine]	[Denton, Tarrant]	[0826]

[Water Body Name]	[County]	[Segment No.]
[Lake Arlington]	[Tarrant]	[0828]
[Richland-Chambers Reservoir]	[Navarro]	<mark>[0836]</mark>
[Lake Houston]	[Harris]	[1002]
[Lake Granbury]	[Hood]	[1205]
[Possum Kingdom Lake]	[Palo Pinto]	[1207]
[Navasota River Below Lake Limestone]	[Brazos, Grimes, Leon, [Madison, Robertson]	[1209]
[Somerville Lake]	[Washington]	[1212]
[Little River]	[Milam]	[1213]
[Leon River Below Belton Lake]	[Bell]	[1219]
[Belton Lake]	[Bell]	[1220]
[Proctor Lake]	[Comanche]	[1222]
[Leon Reservoir]	[Eastland]	[1224]
[Waco Lake]	[McLennan]	[1225]
[Lake Palo Pinto]	[Palo Pinto]	[1230]
[Lake Graham/Lake Eddleman]	[Young]	[1231]
[Hubbard Creek Reservoir]	[Stephens]	[1233]
[Lake Cisco]	[Eastland]	[1234]
[Granger Lake]	[Williamson]	[1247]
[Navasota River Below Lake Mexia]	[Limestone]	[1253]
[Aquilla Reservoir]	[Hill]	[1254]

[Water Body Name]	[County]	[Segment No.]
[Lake Austin]	[Travis]	[1403]
[Lake Travis]	[Burnet, Travis]	[1404]
[Marble Falls Lake]	[Burnet]	[1405]
[Lake Lyndon B. Johnson]	[Burnet, Llano]	[1406]
[Inks Lake]	[Burnet, Llano]	[1407]
[Lake Buchanan]	[Llano]	[1408]
[Pedernales River]	[Blanco]	[1414]
[South Llano River (part of Llano River)]	[Kimble]	[1415]
[Llano City Lake (part of Llano River)]	[Llano]	[1415]
[Lake Coleman]	[Coleman]	[1419]
[Lake Dunlap (part of Guadalupe [River Below Comal River)]	[Guadalupe]	[1804]
[Canyon Lake]	[Comal]	[1805]
[San Marcos River]	<mark>[Caldwell, Gonzales,</mark> Guadalupe, Hays]	[1808]
[Guadalupe River Below Canyon Dam]	[Comal]	[1812]
[Lake Corpus Christi]	[San Patricio, Live Oak]	[2103]
[Choke Canyon Reservoir]	[Live Oak, McMullen]	[2116]
[Rio Grande Below Falcon Reservoir]	[Starr]	[2302]

[Water Body Name]	[County]	[Segment No.]
[International Falcon Reservoir]	[Starr, Zapata]	[2303]
[Rio Grande Below Amistad Reservoir]	[Maverick, Webb]	[2304]

## [Appendix C - Segment Descriptions]

[The following descriptions define the geographic extent of the state's classified segments. Boundaries of bay and estuary segments have not been precisely defined.]

[SEGMENT] [DESCRIPTION]

[0101	Canadian River Below Lake Meredith - from the Oklahoma State Line in Hemphill County to Sanford Dam in Hutchinson County]
[0102	Lake Meredith - from Sanford Dam in Hutchinson County to a point immediately upstream of the confluence of Camp Creek in Potter County, up to the normal pool elevation of 2936.5 feet (impounds Canadian River)]
[0103	Canadian River Above Lake Meredith - from a point immediately upstream of the confluence of Camp Creek in Potter County to the New Mexico State Line in Oldham County]
[0104	Wolf Creek - from the Oklahoma State Line in Lipscomb County to a point 2.0 km (1.2 mi) upstream of FM 3045 in Ochiltree County]
[0105	Rita Blanca Lake - from Rita Blanca Dam in Hartley County up to the normal pool elevation of 3860 feet (impounds Rita Blanca Creek)]
[0201	Lower Red River - from the Arkansas State Line in Bowie County to the Arkansas-Oklahoma State Line in Bowie County]
[0202	Red River Below Lake Texoma - from the Arkansas-Oklahoma State Line in Bowie County to Denison Dam in Grayson County]
[0203	Lake Texoma - from Denison Dam in Grayson County to a point immediately upstream of the confluence of Sycamore Creek in Cooke County, up to the normal pool elevation of 617 feet (impounds Red River)]
[0204	Red River Above Lake Texoma - from a point immediately upstream of the confluence of Sycamore Creek in Cooke County to the confluence of the Wichita River in Clay County]
[0205	Red River Below Pease River - from the confluence of the Wichita River in Clay County to the confluence of the Pease River in Wilbarger County]

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[0206	Red River Above Pease River - from the confluence of the Pease River in Wilbarger County to a point immediately upstream of the confluence of Buck Creek in Hardeman County]
[0207	Lower Prairie Dog Town Fork Red River - from a point immediately upstream of the confluence of Buck Creek in Hardeman County to a point 100 meters (110 yards) upstream of the confluence of Salt Fork Creek in Armstrong County]
[0208	Lake Crook - from Lake Crook Dam in Lamar County up to the normal pool elevation of 476 feet (impounds Pine Creek)]
[0209	Pat Mayse Lake - from Pat Mayse Dam in Lamar County up to the normal pool elevation of 451 feet (impounds Sanders Creek)]
[0210	Farmers Creek Reservoir (also known as Lake Nocona) - from Farmers Creek Dam in Montague County up to the normal pool elevation of 827.5 feet (impounds Farmers Creek)]
[0211	Little Wichita River - from the confluence with the Red River in Clay County to Lake Arrowhead Dam in Clay County
[0212	Lake Arrowhead - from Lake Arrowhead Dam in Clay County up to the normal pool elevation of 926 feet (impounds the Little Wichita River)]
[0213	Lake Kickapoo - from Kickapoo Dam in Archer County up to the normal pool elevation of 1045 feet (impounds North Fork Little Wichita River)]
[0214	Wichita River Below Diversion Lake - from the confluence with the Red River in Clay County to Diversion Dam in Archer County]
0215	Diversion Lake - from Diversion Dam in Archer County to a point 1.5 km (0.9 mi) downstream of the confluence of Cottonwood Creek in Baylor County, up to the normal pool elevation of 1052 feet (impounds Wichita River)]
[0216	Wichita River Below Lake Kemp - from a point 1.5 km (0.9 mi) downstream of the confluence of Cottonwood Creek in Baylor County to Lake Kemp Dam in Baylor County]
[0217	Lake Kemp - from Lake Kemp Dam in Baylor County to a point 9.4 km (5.8 mi) downstream of the confluence of Crooked Creek in Baylor County, up to the normal pool elevation of 1144 feet (impounds Wichita River)]

0218	Wichita/North Fork Wichita River - from a point 9.4 km (5.8 mi) downstream of the confluence of Crooked Creek in Baylor County to a point 8.5 km (5.3 mi) downstream of the most upstream crossing of FM 193 in Dickens County]
[0219	Lake Wichita - from Lake Wichita Dam in Wichita County up to the normal pool elevation of 980.5 feet (impounds Holliday Creek)]
[0220	Upper Pease/North Fork Pease River - from the confluence with Canal Creek at the Hardeman-Foard county line to 6.0 km (3.7 mi) upstream of the confluence of Dick Moore Canyon in Floyd County]
[0221	Middle Fork Pease River - from the confluence with the North Fork Pease River in Cottle County to the confluence of Boggy Creek and Mott Creek in Motley County]
[0222	Salt Fork Red River - from the Oklahoma State Line in Collingsworth County to Greenbelt Dam in Donley County]
[0223	Greenbelt Lake - from Greenbelt Dam in Donley County up to the normal pool elevation of 2664 feet (impounds Salt Fork Red River)]
[0224	North Fork Red River - from the Oklahoma State Line in Wheeler County to a point 4.0 km (2.5 mi) upstream of FM 2300 in Gray County]
[0225	McKinney Bayou - from the Arkansas State Line in Bowie County to a point 100 meters (110 yards) upstream of the most upstream crossing of FM 1397 near King Lake in Bowie County]
[0226	South Fork Wichita River - from the confluence with the North Fork Wichita River in Knox County to a point 15.0 km (9.3 mi) upstream of US 82 in Dickens County]
[0227	South Fork Pease River - from the confluence with the Middle Fork Pease River in Cottle County to the confluence of Wolf Creek and Rustler Creek in Motley County]
[0228	Mackenzie Reservoir - from Mackenzie Dam in Briscoe County up to the normal pool elevation of 3100 feet (impounds Tule Creek)]
[0229	Upper Prairie Dog Town Fork Red River - from a point 100 meters (110 yards) upstream of the confluence of Salt Fork Creek in Armstrong County to Lake Tanglewood Dam in Randall County]

[0230 Pease River - from the confluence with the Red River in Wilbarger County upstream to the confluence with Canal Creek at the Hardeman-Foard county line] 0301 Sulphur River Below Wright Patman Lake - from the Arkansas State Line in Bowie/Cass County to Wright Patman Lake Dam in Bowie/Cass County] Wright Patman Lake - from Wright Patman Lake Dam in Bowie/Cass 0302 County to a point 1.5 km (0.9 mi) downstream of Bassett Creek in Bowie/Cass County, up to the normal pool elevation of 226.4 feet (impounds the Sulphur River)] Sulphur/South Sulphur River - from a point 1.5 km (0.9 mi) downstream [0303 of Bassett Creek in Bowie/Cass County to Jim L. Chapman Dam (formerly Cooper Lake dam) in Delta/Hopkins County] 0304 Davs Creek - from the Arkansas State Line in Bowie County to the confluence of Swampoodle Creek and Nix Creek in Bowie County [0305 North Sulphur River - from the confluence with the South Sulphur River in Lamar County to a point 6.7 km (4.2 mi) upstream of FM 68 in Fannin County] Upper South Sulphur River - from a point 1.0 km (0.7 mi) upstream of SH 0306 71 in Delta/Hopkins County to SH 78 in Fannin County [0307 Jim L. Chapman Lake (formerly Cooper Lake) - from Jim L. Chapman Dam in Delta/Hopkins County to a point 1.0 km (0.7 mi) upstream of SH 71 on the South Sulphur River arm in Delta/Hopkins County and 300 meters (275 yards) below the confluence of Barnett Creek on the Middle Sulphur River arm in Delta County, up to a conservation pool elevation of 440 feet (impounds the Middle Sulphur/South Sulphur River)] [0401 Caddo Lake - from the Louisiana State Line in Harrison/Marion County to a point 12.3 km (7.6 mi) downstream of SH 43 in Harrison/Marion County, up to the normal pool elevation of 168.5 feet (impounds Big Cypress Creek)] [0402 Big Cypress Creek Below Lake O' the Pines - from a point 12.3 km (7.6 mi) downstream of SH 43 in Harrison/Marion County to Ferrell's Bridge Dam in Marion County]

[0403	Lake O' the Pines - from Ferrell's Bridge Dam in Marion County to a point 1.0 km (0.6 mi) downstream of US 259 in Morris/Upshur County, up to the normal pool elevation of 228.5 feet (impounds Big Cypress Creek)]
[0404	Big Cypress Creek Below Lake Bob Sandlin - from a point 1.0 km (0.6 mi) downstream of US 259 in Morris/Upshur County to Fort Sherman Dam in Camp/Titus County]
[0405	Lake Cypress Springs - from Franklin County Dam in Franklin County up to the normal pool elevation of 378 feet (impounds Big Cypress Creek)]
[0406	Black Bayou - from the Louisiana State Line in Cass County to FM 96 in Cass County]
[0407	James Bayou - from the Louisiana State Line in Marion County to Club Lake Road northwest of Linden in Cass County]
[0408	Lake Bob Sandlin - from Fort Sherman Dam in Camp/Titus County to Franklin County Dam in Franklin County, up to the normal pool elevation of 337.5 feet (impounds Big Cypress Creek)]
[0409	Little Cypress Bayou (Creek) - from the confluence with Big Cypress Creek in Harrison County to a point 1.0 km (0.6 mi) upstream of FM 2088 in Wood County]
[0410	Black Cypress Bayou (Creek) - from the confluence with Big Cypress Creek in Marion County to the confluence with Kelly Creek in Cass County]
[0501	Sabine River Tidal - from the confluence with Sabine Lake in Orange County to Morgans Bluff in Orange County]
[0502	Sabine River Above Tidal - from Morgans Bluff in Orange County to the confluence with Caney Creek in Newton County]
[0503	Sabine River Above Caney Creek - from a point immediately upstream of the confluence with Caney Creek in Newton County up to Toledo Bend Dam in Newton County]
[0504	Toledo Bend Reservoir - from Toledo Bend Dam in Newton County to a point immediately upstream of the confluence of Murvaul Creek in Panola County, up to the normal pool elevation of 172 feet (impounds Sabine River)]

[0505	Sabine River Above Toledo Bend Reservoir - from a point immediately upstream of the confluence of Murvaul Creek in Panola County to a point 100 meters (110 yards) downstream of US 271 in Gregg County]
[0506	Sabine River Below Lake Tawakoni - from a point 100 meters (110 yards) downstream of US 271 in Gregg County to Iron Bridge Dam in Rains County]
[0507	Lake Tawakoni - from Iron Bridge Dam in Rains County up to the normal pool elevation of 437.5 feet (impounds Sabine River)]
[0508	Adams Bayou Tidal - from the confluence with the Sabine River in Orange County to a point 1.1 km (0.7 mi) upstream of IH 10 in Orange County]
[0509	Murvaul Lake - from Murvaul Dam in Panola County up to the normal pool elevation of 265.3 feet (impounds Murvaul Bayou)]
[0510	Lake Cherokee - from Cherokee Dam in Gregg/Rusk County up to the normal pool elevation of 280 feet (impounds Cherokee Bayou)]
[0511	Cow Bayou Tidal - from the confluence with the Sabine River in Orange County to a point 4.8 km (3.0 mi) upstream of IH 10 in Orange County]
[0512	Lake Fork Reservoir - from Lake Fork Dam in Wood County up to the normal pool elevation of 403 feet (impounds Lake Fork Creek)]
[0513	Big Cow Creek - from the confluence with the Sabine River in Newton County to a point 4.6 km (2.9 mi) upstream of Recreational Road 255 in Newton County]
[0514	Big Sandy Creek - from the confluence with the Sabine River in Upshur County to a point 2.6 km (1.6 mi) upstream of SH 11 in Hopkins County]
[0515	Lake Fork Creek - from the confluence with the Sabine River in Wood County to Lake Fork Dam in Wood County]
[0601	Neches River Tidal - from the confluence with Sabine Lake in Orange County to the Neches River Saltwater Barrier, which is at a point 0.8 km (0.5 mi) downstream of the confluence of Pine Island Bayou, in Orange County]
[0602	Neches River Below B. A. Steinhagen Lake - from the Neches River Saltwater Barrier, which is at a point 0.8 km (0.5 mi) downstream of the

	<mark>confluence of Pine Island Bayou, in Orange County to Town Bluff Dam in Jasper/Tyler County]</mark>
[0603	B. A. Steinhagen Lake - from Town Bluff Dam in Jasper/Tyler County to a point immediately upstream of the confluence of Hopson Mill Creek on the Neches River Arm in Jasper/Tyler County and to a point immediately upstream of the confluence of Indian Creek on the Angelina River Arm in Jasper County, up to the normal pool elevation of 83 feet (impounds Neches River)]
[0604	Neches River Below Lake Palestine - from a point immediately upstream of the confluence of Hopson Mill Creek in Jasper/Tyler County to Blackburn Crossing Dam in Anderson/Cherokee County]
[0605	Lake Palestine - from Blackburn Crossing Dam in Anderson/Cherokee County to a point 6.7 km (4.2 mi) downstream of FM 279 in Henderson/Smith County, up to the normal pool elevation of 345 feet (impounds Neches River)]
[0606	Neches River Above Lake Palestine - from a point 6.7 km (4.2 mi) downstream of FM 279 in Henderson/Smith County to Rhine Lake Dam in Van Zandt County before it was breached in 2001]
0607	Pine Island Bayou - from the confluence with the Neches River in Hardin/Jefferson County to the confluence with Willow Creek in Hardin/ Jefferson County
[0608	Village Creek - from the confluence with the Neches River in Hardin County to the confluence of Big Sandy Creek and Kimball Creek in Hardin County]
[0609	Angelina River Below Sam Rayburn Reservoir - from a point immediately upstream of the confluence of Indian Creek in Jasper County to Sam Rayburn Dam in Jasper County]
[0610	Sam Rayburn Reservoir - from Sam Rayburn Dam in Jasper County to a point 5.6 km (3.5 mi) upstream of Marion's Ferry on the Angelina River Arm in Angelina/Nacogdoches County and to a point 3.9 km (2.4 mi) downstream of Curry Creek on the Attoyac Bayou Arm in Nacogdoches/San Augustine County, up to the normal pool elevation of 164.4 feet (except on the Angelina River Arm) (impounds Angelina River and Attoyac Bayou)]

[0611	Angelina River Above Sam Rayburn Reservoir - from the aqueduct crossing 1.0 km (0.6 mi) upstream of the confluence of Paper Mill Creek in Angelina/Nacogdoches County to the confluence of Barnhardt Creek and Mill Creek at FM 225 in Rusk County]
[0612	Attoyac Bayou - from a point 3.9 km (2.4 mi) downstream of Curry Creek in Nacogdoches/San Augustine County to FM 95 in Rusk County]
[0613	Lake Tyler/Lake Tyler East - from Whitehouse Dam and Mud Creek Dam in Smith County up to the normal pool elevation of 375.38 feet (impounds Prairie Creek and Mud Creek)]
[0614	Lake Jacksonville - from Buckner Dam in Cherokee County up to the normal pool elevation of 422 feet (impounds Gum Creek)]
[0615	Angelina River/Sam Rayburn Reservoir - the riverine portion of Sam Rayburn Reservoir from a point 5.6 km (3.5 miles) upstream of Marion's Ferry to the aqueduct crossing 1.0 km (0.6 mi) upstream of the confluence of Paper Mill Creek]
[0701	Taylor Bayou Above Tidal - from the salt water lock 7.7 km (4.8 mi) downstream of SH 73 in Jefferson County to the Lower Neches Valley Authority Canal crossing of North Fork Taylor Bayou in Jefferson County]
[0702	Intracoastal Waterway Tidal - from the confluence with Galveston Bay at Port Bolivar in Galveston County to the confluence with the Sabine- Neches/Port Arthur Canal in Jefferson County (including Taylor Bayou Tidal from the confluence with the Intracoastal Waterway up to the salt water lock 7.7 km (4.8 mi) downstream of SH 73 in Jefferson County)]
[0703	Sabine-Neches Canal Tidal - from the confluence with Sabine Pass at the southern tip of Pleasure Island in Jefferson County to the Sabine Lake seawall at the northern tip of Pleasure Island in Jefferson County]
[0704	Hillebrandt Bayou - from the confluence of Taylor Bayou in Jefferson County to a point 100 meters (110 yards) upstream of SH 124 in Jefferson County]
[0801	Trinity River Tidal – from the saltwater barrier, which is 5.5 km (3.4 mi) downstream of IH 10, in Chambers County to a point 3.1 km (1.9 mi) downstream of US 90 in Liberty County]

[0802 Trinity River Below Lake Livingston - from a point 3.1 km (1.9 mi) downstream of US 90 in Liberty County to Livingston Dam in Polk/San Jacinto County 0803 Lake Livingston - from Livingston Dam in Polk/San Jacinto County to a point 1.8 km (1.1 mi) upstream of Boggy Creek in Houston/Leon County, up to the normal pool elevation of 131 feet (impounds Trinity River) [0804 Trinity River Above Lake Livingston - from a point 1.8 km (1.1 mi) upstream of Boggy Creek in Houston/Leon County to a point immediately upstream of the confluence of the Cedar Creek Reservoir discharge canal in Henderson/Navarro County] [0805 Upper Trinity River - from a point immediately upstream of the confluence of the Cedar Creek Reservoir discharge canal in Henderson/Navarro County to a point immediately upstream of the confluence of Elm Fork Trinity River in Dallas County [0806] West Fork Trinity River Below Lake Worth - from a point immediately upstream of the confluence of Village Creek in Tarrant County to Lake Worth Dam in Tarrant County] [0807 Lake Worth - from Lake Worth Dam in Tarrant County to a point 4.0 km (2.5 mi) downstream of Eagle Mountain Dam in Tarrant County, up to the normal pool elevation of 594 feet (impounds West Fork Trinity River)] [0808] West Fork Trinity River Below Eagle Mountain Reservoir - from a point 4.0 km (2.5 mi) downstream of Eagle Mountain Dam in Tarrant County to Eagle Mountain Dam in Tarrant County Eagle Mountain Reservoir - from Eagle Mountain Dam in Tarrant County [0809 to a point 0.6 km (0.4 mi) downstream of the confluence of Oates Branch in Wise County up to the normal pool elevation of 649.1 feet (impounds West Fork Trinity River)] West Fork Trinity River Below Bridgeport Reservoir - from a point 0.6 km [0810 (0.4 mi) downstream of the confluence of Oates Branch in Wise County to Bridgeport Dam in Wise County] [0811 Bridgeport Reservoir - from Bridgeport Dam in Wise County to a point immediately upstream of the confluence of Bear Hollow in Jack County, up to the normal pool elevation of 836 feet (impounds West Fork Trinity River)]

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[0812	West Fork Trinity River Above Bridgeport Reservoir - from a point
	immediately upstream of the confluence of Bear Hollow in Jack County to
	SH 79 in Archer County]
[0813	Houston County Lake - from Houston County Dam in Houston County up
	to the normal pool elevation of 260 feet (impounds Little Elkhart Creek)]
0814	Chambers Creek Above Richland-Chambers Reservoir - from a point 4.0
-	km (2.5 mi) downstream of Tupelo Branch in Navarro County to the
	confluence of North Fork Chambers Creek and South Fork Chambers Creek]
0815	Bardwell Reservoir - from Bardwell Dam in Ellis County up to the normal
-	pool elevation of 421 feet (impounds Waxahachie Creek)]
[0816	Lake Waxahachie - from South Prong Dam in Ellis County up to the
	normal pool elevation of 531.5 feet (impounds South Prong Creek)]
[0817	Navarro Mills Lake - from Navarro Mills Dam in Navarro County up to the
	normal pool elevation of 424.5 feet (impounds Richland Creek)]
[0818	Cedar Creek Reservoir - from Joe B. Hoggsett Dam in Henderson County
	up to the normal pool elevation of 322 feet (impounds Cedar Creek)]
[0819	East Fork Trinity River - from the confluence with the Trinity River in
	Kaufman County to Rockwall-Forney Dam in Kaufman County]
[0820	Lake Ray Hubbard - from Rockwall-Forney Dam in Kaufman County to
	Lavon Dam in Collin County, up to the normal pool elevation of 435.5 feet (impounds East Fork Trinity River)]
[0821	Lavon Lake - from Lavon Dam in Collin County up to the normal pool
	elevation of 492 feet (impounds East Fork Trinity River)]
[0822	Elm Fork Trinity River Below Lewisville Lake - from the confluence with
	the West Fork Trinity River in Dallas County to Lewisville Dam in Denton County]
[0823	Lewisville Lake - from Lewisville Dam in Denton County to a point 200
	meters (220 yards) upstream of FM 428 in Denton County, up to the
	normal pool elevation of 522 feet (impounds Elm Fork Trinity River)]

[0824	Elm Fork Trinity River Above Ray Roberts Lake - from a point 9.5 km (5.9 mi) downstream of the confluence of Pecan Creek in Cooke County to US 82 in Montague County][
[0825	Denton Creek - from the confluence with the Elm Fork Trinity River in Dallas County to Grapevine Dam in Tarrant County]
[0826	Grapevine Lake - from Grapevine Dam in Tarrant County up to the normal pool elevation of 535 feet (impounds Denton Creek)]
[0827	White Rock Lake - from White Rock Dam in Dallas County up to the normal pool elevation of 458 feet (impounds White Rock Creek)]
[0828	Lake Arlington - from Arlington Dam in Tarrant County up to the normal pool elevation of 550 feet (impounds Village Creek)]
0829	Clear Fork Trinity River Below Benbrook Lake - from the confluence with the West Fork Trinity River in Tarrant County to Benbrook Dam in Tarrant County]
[0830	Benbrook Lake - from Benbrook Dam in Tarrant County to a point 200 meters (220 yards) downstream of US 377 in Tarrant County, up to the normal pool elevation of 694 feet (impounds Clear Fork Trinity River)]
[0831	Clear Fork Trinity River Below Lake Weatherford - from a point 200 meters (220 yards) downstream of US 377 in Tarrant County to Weatherford Dam in Parker County]
[0832	Lake Weatherford - from Weatherford Dam in Parker County to a point 3.1 km (1.9 mi) upstream of FM 730 in Parker County, up to the normal pool elevation of 896 feet (impounds Clear Fork Trinity River)]
[0833	Clear Fork Trinity River Above Lake Weatherford - from a point 3.1 km (1.9 mi) upstream of FM 730 in Parker County to the confluence with Strickland Creek approximately 8 km (5 mi) upstream of FM 51 in Parker County]
[0834	Lake Amon G. Carter - from Amon G. Carter Dam in Montague County up to the normal pool elevation of 920 feet (impounds Big Sandy Creek)]
[0835	Richland Creek Below Richland-Chambers Reservoir - from the confluence with the Trinity River in Freestone County to Richland-Chambers Dam in Freestone County]

[0836	Richland-Chambers Reservoir - from Richland-Chambers Dam in Freestone County to a point immediately upstream of the confluence of
	Pin Oak Creek on the Richland Creek Arm in Navarro County and to a point 4.0 km (2.5 mi) downstream of Tupelo Branch on the Chambers
	Creek Arm in Navarro County, up to the normal pool elevation of 315 feet
	(impounds Richland and Chambers Creeks)]
[0837	Richland Creek Above Richland-Chambers Reservoir - from a point immediately upstream of the confluence of Pin Oak Creek in Navarro County to Navarro Mills Dam in Navarro County]
[0838	Joe Pool Lake - from Joe Pool Dam in Dallas County up to the normal pool elevation of 522 feet (impounds Mountain Creek)]
[0839	Elm Fork Trinity River Below Ray Roberts Lake - from a point 200 meters (220 yards) upstream of FM 428 in Denton County to Ray Roberts Dam in Denton County]
[0840	Ray Roberts Lake - from Ray Roberts Dam in Denton County to a point 9.5 km (5.9 mi) downstream of the confluence of Pecan Creek in Cooke County, up to the normal pool elevation of 632.5 feet (impounds Elm Fork Trinity River)]
0841	Lower West Fork Trinity River - from a point immediately upstream of the confluence of the Elm Fork Trinity River in Dallas County to a point immediately upstream of the confluence of Village Creek in Tarrant County]
[0901	Cedar Bayou Tidal - from the confluence with Galveston Bay 1.0 km (0.6 mi) downstream of Tri-City Beach Road in Chambers County to a point 2.2 km (1.4 mi) upstream of IH 10 in Chambers/Harris County]
[0902	Cedar Bayou Above Tidal - from a point 2.2 km (1.4 mi) upstream of IH 10 in Chambers/Harris County to a point 7.4 km (4.6 mi) upstream of FM 1960 in Liberty County]
[1001	San Jacinto River Tidal - from a point 100 meters (110 yards) downstream of IH 10 in Harris County to Lake Houston Dam in Harris County]
[1002	Lake Houston - from Lake Houston Dam in Harris County to the confluence of Spring Creek on the West Fork San Jacinto Arm in Harris/Montgomery County and to the confluence of Caney Creek on the East Fork San Jacinto Arm in Harris County, up to the normal pool elevation of 44.5 feet (impounds San Jacinto River)]

[1003	East Fork San Jacinto River - from the confluence of Caney Creek in Harris County to US 190 in Walker County]
[1004	West Fork San Jacinto River - from the confluence of Spring Creek in Harris/Montgomery County to Conroe Dam in Montgomery County]
[1005	Houston Ship Channel/San Jacinto River Tidal - from the confluence with Galveston Bay at Morgan's Point in Harris/Chambers County to a point 100 meters (110 yards) downstream of IH 10 in Harris County]
1006	Houston Ship Channel Tidal - from the confluence with the San Jacinto River in Harris County to a point immediately upstream of Greens Bayou in Harris County, including tidal portions of tributaries and Old River
[1007	Houston Ship Channel/Buffalo Bayou Tidal - from a point immediately upstream of Greens Bayou in Harris County to a point 100 meters (110 yards) upstream of US 59 in Harris County, including tidal portions of tributaries]
[1008	Spring Creek - from the confluence with the West Fork San Jacinto River in Harris/Montgomery County to the confluence with Kickapoo Creek in Harris/Waller County]
[1009	Cypress Creek - from the confluence with Spring Creek in Harris County to the confluence of Snake Creek and Mound Creek in Waller County]
[1010	Caney Creek - from the confluence with the East Fork San Jacinto River in Harris County to SH 150 in Walker County]
[1011	Peach Creek - from the confluence with Caney Creek in Montgomery County to SH 150 in Walker County]
[1012	Lake Conroe - from Conroe Dam in Montgomery County up to the normal pool elevation of 201 feet (impounds West Fork San Jacinto River)]
[1013	Buffalo Bayou Tidal - from a point 100 meters (110 yards) upstream of US 59 in Harris County to a point 400 meters (440 yards) upstream of Shepherd Drive in Harris County including the tidal portion of tributaries]
[1014	Buffalo Bayou Above Tidal - from a point 400 meters (440 yards) upstream of Shepherd Drive in Harris County to SH 6 in Harris County]

[1015 Lake Creek - from the confluence with the West Fork San Jacinto River in Montgomery County to a point 4.0 km (2.5 mi) upstream of SH 30 in Grimes County] [1016] Greens Bayou Above Tidal - from a point 0.7 km (0.4 mi) upstream of the confluence of Halls Bayou in Harris County, to a point 100 meters (110 vards) upstream of FM 1960 in Harris County [1017 Whiteoak Bayou Above Tidal - from a point immediately upstream of the confluence of Little Whiteoak Bayou in Harris County to a point 3.0 km (1.9 mi) upstream of FM 1960 in Harris County] [1101 Clear Creek Tidal - from the confluence with Clear Lake at a point 3.2 km (2.0 mi) downstream of El Camino Real in Galveston/Harris County to a point 100 meters (110 yards) upstream of FM 528 in Galveston/Harris County] [1102 Clear Creek Above Tidal - from a point 100 meters (110 yards) upstream of FM 528 in Galveston/Harris County to Rouen Road in Fort Bend **County**] Dickinson Bayou Tidal - from the confluence with Dickinson Bay 2.1 km [1103 (1.3 mi) downstream of SH 146 in Galveston County to a point 4.0 km (2.5 mi) downstream of FM 517 in Galveston County] [1104 Dickinson Bayou Above Tidal - from a point 4.0 km (2.5 mi) downstream of FM 517 in Galveston County to FM 528 in Galveston County [1105 Bastrop Bayou Tidal - from the confluence with Bastrop Bay 1.1 km (0.7 mi) downstream of the Intracoastal Waterway in Brazoria County to a point 8.6 km (5.3 mi) upstream of Business 288 at Lake Jackson in Brazoria County [1107 Chocolate Bayou Tidal - from the confluence with Chocolate Bay 1.4 km (0.9 mi) downstream of FM 2004 in Brazoria County to the salt water barrier (immediately downstream of the Chocolate Bayou Rice Canal) 5.2 km (3.2 mi) downstream of SH 35 in Brazoria County] [1108 Chocolate Bayou Above Tidal - from the salt water barrier (immediately downstream of the Chocolate Bayou Rice Canal) 5.2 km (3.2 mi) downstream of SH 35 in Brazoria County to SH 6 in Brazoria County]

[1109	Oyster Creek Tidal - from the confluence with the Intracoastal Waterway in Brazoria County to a point 100 meters (110 yards) upstream of FM 2004 in Brazoria County]
[1110	Oyster Creek Above Tidal - from a point 100 meters (110 yards) upstream of FM 2004 in Brazoria County to a point 4.3 km (2.7 mi) upstream of Scanlan Road in Fort Bend County]
[1111	Old Brazos River Channel Tidal - from the confluence with the Intracoastal Waterway in Brazoria County to SH 288 in Brazoria County]
[1113	Armand Bayou Tidal - from the confluence with Clear Lake (at the NASA Road 1 bridge) in Harris County to a point 0.8 km (0.5 mi) downstream of Genoa-Red Bluff Road in Pasadena in Harris County (includes Mud Lake)]
[1201	Brazos River Tidal - from the confluence with the Gulf of Mexico in Brazoria County to a point 100 meters (110 yards) upstream of SH 332 in Brazoria County]
[1202	Brazos River Below Navasota River - from a point 100 meters (110 yards) upstream of SH 332 in Brazoria County to a point immediately upstream of the confluence of the Navasota River in Grimes County]
[1203	Whitney Lake - from Whitney Dam in Bosque/Hill County to a point immediately upstream of the confluence of Camp Creek on the Brazos River Arm in Bosque/Johnson County and to a point immediately upstream of the confluence of Rock Creek on the Nolan River Arm in Hill County, up to the normal pool elevation of 533 feet (impounds Brazos River)]
[1204	Brazos River Below Lake Granbury - from a point immediately upstream of the confluence of Camp Creek in Bosque/Johnson County to De Cordova Bend Dam in Hood County]
[1205	Lake Granbury – from De Cordova Bend Dam in Hood County to a point 100 meters (110 yards) upstream of FM 2580 in Parker County, up to the normal pool elevation of 693 feet (impounds Brazos River)]
[1206	Brazos River Below Possum Kingdom Lake - from a point 100 meters (110 yards) upstream of FM 2580 in Parker County to Morris Sheppard Dam in Palo Pinto County]
[1207	Possum Kingdom Lake - from Morris Sheppard Dam in Palo Pinto County to a point immediately upstream of the confluence of Cove Creek at

	Salem Bend in Young County, up to the normal pool elevation of 1000 feet (impounds Brazos River)]
[1208	Brazos River Above Possum Kingdom Lake - from a point immediately upstream of the confluence of Cove Creek at Salem Bend in Young County to the confluence of the Double Mountain Fork Brazos River and the Salt Fork Brazos River in Stonewall County]
[1209	Navasota River Below Lake Limestone - from the confluence with the Brazos River in Grimes County to Sterling C. Robertson Dam in Leon/Robertson County]
[1210	Lake Mexia - from Bistone Dam in Limestone County up to the normal pool elevation of 448.3 feet (impounds Navasota River)]
[1211	Yegua Creek - from the confluence with the Brazos River in Burleson/Washington County to Somerville Dam in Burleson/Washington County]
[1212	Somerville Lake - from Somerville Dam in Burleson/Washington County up to the normal pool elevation of 238 feet (impounds Yegua Creek)]
[1213	Little River - from the confluence with the Brazos River in Milam County to the confluence of the Leon River and the Lampasas River in Bell County]
[1214	San Gabriel River - from the confluence with the Little River in Milam County to Granger Lake Dam in Williamson County]
[1215	Lampasas River Below Stillhouse Hollow Lake - from the confluence with the Leon River in Bell County to Stillhouse Hollow Dam in Bell County
[1216	Stillhouse Hollow Lake - from Stillhouse Hollow Dam in Bell County to a point immediately upstream of the confluence of Rock Creek in Bell County, up to the normal pool elevation of 622 feet (impounds Lampasas River)]
[1217	Lampasas River Above Stillhouse Hollow Lake - from a point immediately upstream of the confluence of Rock Creek in Bell County to FM 2005 in Hamilton County]
[1218	Nolan Creek/South Nolan Creek - from the confluence with the Leon River in Bell County to a point 100 meters (110 yards) upstream of the

	most upstream crossing of US 190 near the intersection of US 190 and Loop 172 in Bell County]
[1219	Leon River Below Belton Lake - from the confluence with the Lampasas River in Bell County to Belton Dam in Bell County]
[1220	Belton Lake - from Belton Dam in Bell County to a point 100 meters (110 yards) upstream of FM 236 in Coryell County, up to the normal pool elevation of 594 feet (impounds Leon River)]
[1221	Leon River Below Proctor Lake - from a point immediately upstream of the confluence of Plum Creek in Coryell County to Proctor Dam in Comanche County]
[1222	Proctor Lake - from Proctor Dam in Comanche County to a point immediately upstream of the confluence of Mill Branch in Comanche County, up to the normal pool elevation of 1162 feet (impounds Leon River)]
[1223	Leon River Below Leon Reservoir - from a point immediately upstream of the confluence of Mill Branch in Comanche County to Leon Dam in Eastland County]
[1224	Leon Reservoir - from Leon Dam in Eastland County up to the normal pool elevation of 1375 feet (impounds Leon River)]
[1225	Waco Lake - from Waco Lake Dam in McLennan County to a point immediately upstream of the confluence of Long Branch on the North Bosque River Arm in McLennan County; and on the South Bosque River Arm in McLennan County, to a point on the Middle Bosque River 1.64 km (1.02 mi) upstream of the confluence of the Middle Bosque and South Bosque rivers and to a point on the South Bosque River, 1.35 km (0.84 mi) upstream of the confluence of the Middle Bosque and South Bosque rivers, up to the normal pool elevation of 462 feet (impounds the Bosque River)]
[1226	North Bosque River - from a point immediately upstream of the confluence of Long Branch in McLennan County to a point immediately upstream of the confluence of Indian Creek in Erath County]
[1227	Nolan River - from a point immediately upstream of the confluence of Rock Creek in Hill County to Cleburne Dam in Johnson County]

[1228	Lake Pat Cleburne - from Cleburne Dam in Johnson County up to the normal pool elevation of 733.5 feet (impounds Nolan River)]
[1229	Paluxy River/North Paluxy River - from the confluence with the Brazos River in Somervell County to the confluence of Rough Creek in Erath County]
[1230	Lake Palo Pinto - from Palo Pinto Creek Dam in Palo Pinto County up to the normal pool elevation of 867.3 feet (impounds Palo Pinto Creek)]
[1231	Lake Graham - from Graham Dam and Eddleman Dam in Young County up to the normal pool elevation of 1075 feet (impounds Salt Creek and Flint Creek)]
[1232	Clear Fork Brazos River - from the confluence with the Brazos River in Young County to the most upstream crossing of US 180 in Fisher County]
[1233	Hubbard Creek Reservoir - from Hubbard Creek Dam in Stephens County up to the normal pool elevation of 1183 feet (impounds Hubbard Creek)]
[1234	Lake Cisco - from Williamson Dam in Eastland County up to the normal pool elevation of 1496 feet (impounds Sandy Creek)]
[1235	Lake Stamford - from Stamford Dam in Haskell County up to the normal pool elevation of 1416.8 feet (impounds Paint Creek)]
[1236	Fort Phantom Hill Reservoir - from Fort Phantom Hill Dam in Jones County up to the normal pool elevation of 1635.9 feet (impounds Elm Creek)]
[1237	Lake Sweetwater - from Sweetwater Dam in Nolan County up to the normal pool elevation of 2116.5 feet (impounds Bitter Creek)]
[1238	Salt Fork Brazos River - from the confluence of the Double Mountain Fork Brazos River in Stonewall County to the most upstream crossing of SH 207 in Crosby County]
[1239	White River - from the confluence with the Salt Fork Brazos River in Kent County to White River Dam in Crosby County]
[1240	White River Lake - from White River Dam in Crosby County up to the normal pool elevation of 2372.2 feet (impounds White River)]

[1241	Double Mountain Fork Brazos River - from the confluence with the Salt Fork Brazos River in Stonewall County to the confluence of the North
	Fork Double Mountain Fork Brazos River in Kent County]
[1242	Brazos River Above Navasota River - from a point immediately upstream of the confluence of the Navasota River in Brazos/Grimes/Washington County to the low water dam forming Lake Brazos in McLennan County]
[1243	Salado Creek - from the confluence with the Lampasas River in Bell County to the confluence of North Salado Creek and South Salado Creek in Williamson County]
[1244	Brushy Creek - from the confluence with the San Gabriel River in Milam County to the confluence of South Brushy Creek in Williamson County]
[1245	Upper Oyster Creek - from Steep Bank Creek/Brazos River confluence in Fort Bend County to pumping station on Jones Creek at Brazos River in Fort Bend County (includes portions of Steep Bank Creek, Flat Bank Creek, Flat Bank Creek Diversion Channel, and Jones Creek)]
[1246	Middle Bosque/South Bosque River - for the Middle Bosque River from a point 1.64 km (1.02 mi) from the confluence with the South Bosque River in McLennan County to the confluence of Cave Creek and Middle Bosque Creek in Coryell County and for the South Bosque River from a point 1.35 km (0.84 mi) from the confluence of the Middle Bosque River in McLennan County to FM 2671 in McLennan County]
[1247	Granger Lake - from Granger Dam in Williamson County to a point 1.9 km (1.2 mi) downstream of SH 95 in Williamson County, up to the normal pool elevation of 504 feet (impounds San Gabriel River)]
[1248	San Gabriel/North Fork San Gabriel River - from a point 1.9 km (1.2 mi) downstream of SH 95 in Williamson County to North San Gabriel Dam in Williamson County]
[1249	Lake Georgetown - from North San Gabriel Dam in Williamson County to a point 6.6 km (4.1 mi) downstream of US 183 in Williamson County, up to the normal pool elevation of 791 feet (impounds North Fork San Gabriel River)]
[1250	South Fork San Gabriel River - from the confluence with the North Fork San Gabriel River in Williamson County to the most upstream crossing of SH 29 in Burnet County]

[1251	North Fork San Gabriel River - from a point 6.6 km (4.1 mi) downstream of US 183 in Williamson County to the confluence of Allen Branch in Burnet County]
[1252	Lake Limestone - from Sterling C. Robertson Dam in Leon/Robertson County to a point 2.3 km (1.4 mi) downstream of SH 164 in Limestone County, up to the normal pool elevation of 363 feet (impounds Navasota River)]
[1253	Navasota River Below Lake Mexia - from a point 2.3 km (1.4 mi) downstream of SH 164 in Limestone County to Bistone Dam in Limestone County]
[1254	Aquilla Reservoir - from Aquilla Dam in Hill County up to the normal pool elevation of 537.5 feet (impounds Aquilla Creek)]
[1255	Upper North Bosque River - from a point immediately upstream of the confluence of Indian Creek in Erath County to the confluence of the North Fork and South Fork of the North Bosque River in Erath County]
[1256	Brazos River/Lake Brazos - from the low water dam forming Lake Brazos in McLennan County to a point immediately upstream of the confluence of Aquilla Creek in McLennan County (includes the Bosque River arm to the Waco Lake Dam)
[1257	Brazos River Below Whitney Lake - from a point immediately upstream of the confluence of Aquilla Creek in McLennan County to Whitney Dam in Bosque/Hill County]
[1258	Middle Oyster Creek - from the confluence with the Brazos River to the Flat Bank diversion channel in Fort Bend County
[1259	Leon River Above Belton Lake - from a point 100 meters (110 yards) upstream of FM 236 in Coryell County to a point immediately upstream of the confluence with Plum Creek in Coryell County]
[1301	San Bernard River Tidal - from the confluence with the Intracoastal Waterway in Brazoria County to a point 3.2 km (2.0 mi) upstream of SH 35 in Brazoria County]
[1302	San Bernard River Above Tidal - from a point 3.2 km (2.0 mi) upstream of SH 35 in Brazoria County to the county road southeast of New Ulm in Austin County]

[1304	Caney Creek Tidal - from the confluence with the Intracoastal Waterway in Matagorda County to a point 1.9 km (1.2 mi) upstream of the confluence of Linnville Bayou in Matagorda County]
[1305	Caney Creek Above Tidal - from a point 1.9 km (1.2 mi) upstream of the confluence of Linnville Bayou in Matagorda County to the confluence of Water Hole Creek in Matagorda County]
[1401	Colorado River Tidal - from the confluence with Matagorda Bay due to a diversion channel in Matagorda County to a point 2.1 km (1.3 mi) downstream of the Missouri-Pacific Railroad in Matagorda County]
[1402	Colorado River Below La Grange - from a point 2.1 km (1.3 mi) downstream of the Missouri-Pacific Railroad in Matagorda County to a point 100 meters (110 yards) downstream of Business SH 71 at La Grange in Fayette County]
[1403	Lake Austin - from Tom Miller Dam in Travis County to Mansfield Dam in Travis County, up to the normal pool elevation of 492.8 feet (impounds Colorado River)]
[1404	Lake Travis - from Mansfield Dam in Travis County to Max Starcke Dam on the Colorado River Arm in Burnet County and to a point immediately upstream of the confluence of Fall Creek on the Pedernales River Arm in Travis County, up to the normal pool elevation of 681.6 feet (impounds Colorado River)]
[1405	Marble Falls Lake - from Max Starcke Dam in Burnet County to Alvin Wirtz Dam in Burnet County, up to the normal pool elevation of 738 feet (impounds Colorado River)]
[1406	Lake Lyndon B. Johnson - from Alvin Wirtz Dam in Burnet County to Roy Inks Dam on the Colorado River Arm in Burnet/Llano County and to a point immediately upstream of the confluence of Honey Creek on the Llano River Arm in Llano County, up to the normal pool elevation of 825.6 feet (impounds Colorado River)]
[1407	Inks Lake - from Roy Inks Dam in Burnet/Llano County to Buchanan Dam in Burnet/Llano County, up to the normal pool elevation of 888 feet (impounds Colorado River)]
[1408	Lake Buchanan - from Buchanan Dam in Burnet/Llano County to a point immediately upstream of the confluence of Yancey Creek, up to the normal pool elevation of 1020.5 feet (impounds Colorado River)]

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[1409	Colorado River Above Lake Buchanan - from a point immediately
	upstream of the confluence of Yancey Creek in Burnet/San Saba/Lampasas County to the confluence of the San Saba River in San
	Saba County]
[1410	Colorado River Below O. H. Ivie Reservoir - from the confluence of the San
-	Saba River in San Saba County to S. W. Freese Dam in Coleman/Concho County]
[1411	E. V. Spence Reservoir - from Robert Lee Dam in Coke County to a point
-	immediately upstream of the confluence of Little Silver Creek in Coke County, up to the normal pool elevation of 1898 feet (impounds Colorado River)]
[1412	Colorado River Below Lake J. B. Thomas - from a point immediately
	upstream of the confluence of Little Silver Creek in Coke County to Colorado River Dam in Scurry County]
[1413	Lake J. B. Thomas - from Colorado River Dam in Scurry County up to the
	normal pool elevation of 2258 feet (impounds Colorado River)]
[1414	Pedernales River - from a point immediately upstream of the confluence
	of Fall Creek in Travis County to FM 385 in Kimble County]
[1415	Llano River - from a point immediately upstream of the confluence of
	Honey Creek in Llano County to FM 864 on the North Llano River in Sutton County and to SH 55 on the South Llano River in Edwards County]
[1416	San Saba River - from the confluence with the Colorado River in San Saba
	County to the confluence of the North Valley Prong and the Middle Valley Prong in Schleicher County
[1417	Lower Pecan Bayou - from the confluence with the Colorado River in Mills County to a point immediately upstream of the confluence of Mackinally
	Creek in Brown County]
[1418	Lake Brownwood - from Lake Brownwood Dam in Brown County to a
	point 100 meters (110 yards) upstream of FM 2559 in Brown County, up to the normal pool elevation of 1425 feet (impounds Pecan Bayou)]
[1419	Lake Coleman - from Coleman Dam in Coleman County up to the normal
	pool elevation of 1717.5 feet (impounds Jim Ned Creek)]

[1420	Pecan Bayou Above Lake Brownwood - from a point 100 meters (110 yards) upstream of FM 2559 in Brown County to the confluence of the North Prong Pecan Bayou and the South Prong Pecan Bayou in Callahan County]
[1421	Concho River - from a point 2.0 km (1.2 mi) upstream of the confluence of Fuzzy Creek in Concho County to San Angelo Dam on the North Concho River in Tom Green County and to Nasworthy Dam on the South Concho River in Tom Green County]
[1422	Lake Nasworthy - from Nasworthy Dam in Tom Green County to Twin Buttes Dam in Tom Green County, up to the normal pool elevation of 1872.2 feet (impounds South Concho River)]
[1423	Twin Buttes Reservoir - from Twin Buttes Dam in Tom Green County to a point 100 meters (110 yards) upstream of US 67 on the Middle Concho River Arm in Tom Green County and to a point 4.0 km (2.5 mi) downstream of FM 2335 on the South Concho River Arm in Tom Green County, up to the normal pool elevation of 1940.2 feet (impounds the Middle Concho River and the South Concho River)]
[1424	Middle Concho/South Concho River - from a point 4.0 km (2.5 mi) downstream of FM 2335 in Tom Green County to the confluence of Bois d'Arc Draw on the South Concho River in Tom Green County and from a point 100 meters (110 yards) upstream of US 67 in Tom Green County to the confluence of Three Bluff Draw and Indian Creek on the Middle Concho River in Reagan County]
[1425	O. C. Fisher Lake - from San Angelo Dam in Tom Green County up to the normal pool elevation of 1908 feet (impounds North Concho River)]
[1426	Colorado River Below E. V. Spence Reservoir - from a point 3.7 km (2.3 mi) downstream of the confluence of Mustang Creek in Runnels County to Robert Lee Dam in Coke County]
[1427	Onion Creek - from the confluence with the Colorado River in Travis County to the most upstream crossing of FM 165 in Blanco County]
[1428	Colorado River Below Lady Bird Lake (formerly Town Lake) - from a point 100 meters (110 yards) upstream of FM 969 near Utley in Bastrop County to Longhorn Dam in Travis County]

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[1429	Lady Bird Lake (formerly Town Lake) - from Longhorn Dam in Travis County to Tom Miller Dam in Travis County, up to the normal pool elevation of 429 feet (impounds Colorado River)]
[1430	Barton Creek - from the confluence with Lady Bird Lake (formerly Town Lake) in Travis County to FM 12 in Hays County]
[1431	Mid Pecan Bayou - from a point immediately upstream of the confluence of Mackinally Creek in Brown County to a point immediately upstream of Willis Creek in Brown County]
[1432	Upper Pecan Bayou - from a point immediately upstream of the confluence of Willis Creek in Brown County to Lake Brownwood Dam in Brown County]
[1433	O. H. Ivie Reservoir - from S. W. Freese Dam in Coleman/Concho County to a point 3.7 km (2.3 mi) downstream of the confluence of Mustang Creek on the Colorado River Arm in Runnels County and to a point 2.0 km (1.2 mi) upstream of the confluence of Fuzzy Creek on the Concho River Arm in Concho County, up to the conservation pool level of 1551.5 feet (impounds Colorado River)]
[1434	Colorado River Above La Grange - from a point 100 meters (110 yards) downstream of Business SH 71 at La Grange in Fayette County to a point 100 meters (110 yards) upstream of FM 969 near Utley in Bastrop County]
[1501	Tres Palacios Creek Tidal - from the confluence with Tres Palacios Bay in Matagorda County to a point 1.6 km (1.0 mi) upstream of the confluence of Wilson Creek in Matagorda County]
[1502	Tres Palacios Creek Above Tidal - from a point 1.6 km (1.0 mi) upstream of the confluence of Wilson Creek in Matagorda County to State Route 525 (Old US 59) in Wharton County]
[1601	Lavaca River Tidal - from the confluence with Lavaca Bay in Calhoun/Jackson County to a point 8.6 km (5.3 mi) downstream of US 59 in Jackson County]
[1602	Lavaca River Above Tidal - from a point 8.6 km (5.3 mi) downstream of US 59 in Jackson County to the confluence of Campbell Branch west of Hallettsville in Lavaca County]
[1603	Navidad River Tidal - from the confluence with the Lavaca River in Jackson County to Palmetto Bend Dam in Jackson County]

[1604	Lake Texana - from Palmetto Bend Dam in Jackson County to a point 100 meters (110 yards) downstream of FM 530 in Jackson County, up to the
	normal pool elevation of 44 feet (impounds Navidad River)]
[1605	Navidad River Above Lake Texana - from a point 100 meters (110 yards) downstream of FM 530 in Jackson County to the confluence of the East Navidad River and the West Navidad River in Colorado/Lavaca County]
[1701	Victoria Barge Canal Tidal - from the confluence with San Antonio Bay in Calhoun County to Victoria Turning Basin in Victoria County]
[1801	Guadalupe River Tidal - from the confluence with Guadalupe Bay in Calhoun/Refugio County to the Guadalupe-Blanco River Authority Salt Water Barrier 0.7 km (0.4 mi) downstream of the confluence of the San Antonio River in Calhoun/Refugio County]
[1802	Guadalupe River Below San Antonio River - from the Guadalupe-Blanco River Authority Salt Water Barrier 0.7 km (0.4 mi) downstream of the confluence of the San Antonio River in Calhoun/Refugio County to a point immediately upstream of the confluence of the San Antonio River in Calhoun/Refugio/Victoria County]
[1803	Guadalupe River Below San Marcos River - from a point immediately upstream of the confluence of the San Antonio River in Calhoun/Refugio/Victoria County to a point immediately upstream of the confluence of the San Marcos River in Gonzales County]
[1804	Guadalupe River Below Comal River - from a point immediately upstream of the confluence of the San Marcos River in Gonzales County to a point immediately upstream of the confluence of the Comal River in Comal County]
[1805	Canyon Lake - from Canyon Dam in Comal County to a point 2.7 km (1.7 mi) downstream of Rebecca Creek Road in Comal County, up to the normal pool elevation of 909 feet (impounds Guadalupe River)]
[1806	Guadalupe River Above Canyon Lake - from a point 2.7 km (1.7 mi) downstream of Rebecca Creek Road in Comal County to the confluence of the North Fork Guadalupe River and the South Fork Guadalupe River in Kerr County]
[1807	Coleto Creek - from the confluence with the Guadalupe River in Victoria County to the confluence of Fifteenmile Creek and Twelvemile Creek in Goliad/Victoria County, including Coleto Creek Reservoir]

[1808	Lower San Marcos River - from the confluence with the Guadalupe River
	in Gonzales County to a point 1.0 km (0.6 mi) upstream of the confluence of the Blanco River in Hays County]
[1809	Lower Blanco River - from the confluence with the San Marcos River in
	Hays County to a point 0.3 km (0.2 mi) upstream of Limekiln Road in Hays County]
[1810	Plum Creek - from the confluence with the San Marcos River in Caldwell
	County to FM 2770 in Hays County]
[1811	Comal River - from the confluence with the Guadalupe River in Comal
	County to Klingemann Street at New Braunfels in Comal County]
[1812	Guadalupe River Below Canyon Dam - from a point immediately upstream
	of the confluence of the Comal River in Comal County to Canyon Dam in Comal County]
[1813	Upper Blanco River - from a point 0.3 km (0.2 mi) upstream of Limekiln
	Road in Hays County to the confluence of Meier Creek in Kendall County]
[1814	Upper San Marcos River - from a point 1.0 km (0.6 mi) upstream of the
	confluence of the Blanco River in Hays County to a point 0.7 km (0.4 mi) upstream of Loop 82 in San Marcos in Hays County (includes Spring Lake)]
[1815	Cypress Creek - from the confluence with the Blanco River in Hays
	County to a point 6.4 km (4.0 mi) upstream of the most upstream unnamed county road crossing in Hays County]
[1816	Johnson Creek - from the confluence with the Guadalupe River in Kerr
	County to a point 1.2 km (0.7 mi) upstream of the most upstream crossing of SH 41 in Kerr County]
[1817	North Fork Guadalupe River - from the confluence with the Guadalupe
-	River in Kerr County to a point 18.2 km (11.3 mi) upstream of Boneyard Draw in Kerr County]
[1818	South Fork Guadalupe River - from the confluence with the Guadalupe
	River in Kerr County to a point 4.8 km (3.0 mi) upstream of FM 187 in Kerr County]

[1901	Lower San Antonio River - from the confluence with the Guadalupe River in Refugio/Victoria County to a point 600 meters (660 yards) downstream of FM 791 at Mays Crossing near Falls City in Karnes County]
[1902	Lower Cibolo Creek - from the confluence with the San Antonio River in Karnes County to a point 100 meters (110 yards) downstream of IH 10 in Bexar/Guadalupe County]
[1903	Medina River Below Medina Diversion Lake - from the confluence with the San Antonio River in Bexar County to Medina Diversion Dam in Medina County]
[1904	Medina Lake - from Medina Lake Dam in Medina County to a point immediately upstream of the confluence of Red Bluff Creek in Bandera County, up to the normal pool elevation of 1072 feet (impounds Medina River)]
[1905	Medina River Above Medina Lake - from a point immediately upstream of the confluence of Red Bluff Creek in Bandera County to the confluence of the North Prong Medina River and the West Prong Medina River in Bandera County]
[1906	Lower Leon Creek - from the confluence with the Medina River in Bexar County to a point 100 meters (110 yards) upstream of SH 16 northwest of San Antonio in Bexar County]
[1907	Upper Leon Creek - from a point 100 meters (110 yards) upstream of SH 16 northwest of San Antonio in Bexar County to a point 9.0 km (5.6 mi) upstream of Scenic Loop Road north of Helotes in Bexar County]
[1908	Upper Cibolo Creek - from the Missouri-Pacific Railroad bridge west of Bracken in Comal County to a point 1.5 km (0.9 mi) upstream of the confluence of Champee Springs in Kendall County]
[1909	Medina Diversion Lake - from Medina Diversion Dam in Medina County to Medina Lake Dam in Medina County, up to the normal pool elevation of 926.5 feet (impounds Medina River)]
[1910	Salado Creek - from the confluence with the San Antonio River in Bexar County to the confluence of Beitel Creek in Bexar County]
[1911	Upper San Antonio River - from a point 600 meters (660 yards) downstream of FM 791 at Mays Crossing near Falls City in Karnes County

	to a point 100 meters (110 yards) upstream of Hildebrand Avenue at San Antonio in Bexar County]						
[1912	Medio Creek - from the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream of IH 35 at San Antonio in Bexar County						
[1913	Mid Cibolo Creek - from a point 100 meters (110 yards) downstream of IH 10 in Bexar/Guadalupe County to the Missouri-Pacific Railroad bridge west of Bracken in Comal County]						
[2001	Mission River Tidal - from the confluence with Mission Bay in Refugio County to a point 7.4 km (4.6 mi) downstream of US 77 in Refugio County]						
[2002	Mission River Above Tidal - from a point 7.4 km (4.6 mi) downstream of US 77 in Refugio County to the confluence of Blanco Creek and Medio Creek in Refugio County]						
[2003	Aransas River Tidal - from the confluence with Copano Bay in Aransas/Refugio County to a point 1.6 km (1.0 mi) upstream of US 77 in Refugio/San Patricio County]						
[2004	Aransas River Above Tidal - from a point 1.6 km (1.0 mi) upstream of US 77 in Refugio/San Patricio County to the confluence of Poesta Creek and Aransas Creek in Bee County]						
2101	Nueces River Tidal - from the confluence with Nueces Bay in Nueces County to Calallen Dam 1.7 km (1.1 mi) upstream of US 77/IH 37 in Nueces/San Patricio County]						
[2102	Nueces River Below Lake Corpus Christi - from Calallen Dam 1.7 km (1.1 mi) upstream of US 77/IH 37 in Nueces/San Patricio County to Wesley E. Seale Dam in Jim Wells/San Patricio County]						
[2103	Lake Corpus Christi - from Wesley E. Seale Dam in Jim Wells/San Patricio County to a point 100 meters (110 yards) upstream of US 59 in Live Oak County, up to the normal pool elevation of 94.0 feet (impounds Nueces River)]						
[2104	Nueces River Above Frio River - from the confluence of the Frio River in Live Oak County to Holland Dam in LaSalle County]						

[2105	Nueces River Above Holland Dam - from Holland Dam in LaSalle County to a point 100 meters (110 yards) upstream of FM 1025 in Zavala County]
[2106	Nueces/Lower Frio River - from a point 100 meters (110 yards) upstream of US 59 in Live Oak County to Choke Canyon Dam in Live Oak County]
[2107	Lower Atascosa River - from the confluence with the Frio River in Live Oak County to the confluence with Borrego Creek in Atascosa County]
[2108	San Miguel Creek - from a point immediately upstream of the confluence of Mustang Branch in McMullen County to the confluence of San Francisco Perez Creek and Chacon Creek in Frio County]
[2109	Leona River - from the confluence with the Frio River in Frio County to US 83 in Uvalde County]
[2110	Lower Sabinal River - from the confluence with the Frio River in Uvalde County to a point 100 meters (110 yards) upstream of SH 127 in Uvalde County]
[2111	Upper Sabinal River - from a point 100 meters (110 yards) upstream of SH 127 in Uvalde County to the most upstream crossing of FM 187 in Bandera County]
[2112	Upper Nueces River - from a point 100 meters (110 yards) upstream of FM 1025 in Zavala County to the confluence of the East Prong Nueces River and Hackberry Creek in Edwards County]
[2113	Upper Frio River - from a point 100 meters (110 yards) upstream of US 90 in Uvalde County to the confluence of the West Frio River and the East Frio River in Real County]
[2114	Hondo Creek - from the confluence with the Frio River in Frio County to FM 470 in Bandera County]
[2115	Seco Creek - from the confluence with Hondo Creek in Frio County to the confluence of West Seco Creek in Bandera County]
[2116	Choke Canyon Reservoir - from Choke Canyon Dam in Live Oak County to a point 4.2 km (2.6 mi) downstream of SH 16 on the Frio River Arm in McMullen County and to a point 100 meters (110 yards) upstream of the confluence of Mustang Branch on the San Miguel Creek Arm in McMullen County, up to the normal pool elevation of 220.5 feet (impounds Frio River)]

[2117	Frio River Above Choke Canyon Reservoir - from a point 4.2 km (2.6 mi) downstream of SH 16 in McMullen County to a point 100 meters (110 yards) upstream of US 90 in Uvalde County]
[2118	Upper Atascosa River - from the confluence with Borrego Creek to the confluence with Galvan Creek in Atascosa County]
[2201	Arroyo Colorado Tidal - from the confluence with Laguna Madre in Cameron/Willacy County to a point 100 meters (110 yards) downstream of Cemetery Road south of Port Harlingen in Cameron County]
2202	Arroyo Colorado Above Tidal - from a point 100 meters (110 yards) downstream of Cemetery Road south of Port Harlingen in Cameron County to FM 2062 in Hidalgo County (includes La Cruz Resaca, Llano Grande Lake, and the Main Floodway)]
[2203	Petronila Creek Tidal - from the confluence of Chiltipin Creek in Kleberg County to a point 1 km (0.6 mi) upstream of private road crossing near Laureles Ranch in Kleberg County]
[2204	Petronila Creek Above Tidal - from a point 1 km (0.6 mi) upstream of private road crossing near Laureles Ranch in Kleberg County to the confluence of Agua Dulce and Banquete Creeks in Nueces County]
[2301	Rio Grande Tidal - from the confluence with the Gulf of Mexico in Cameron County to a point 10.8 km (6.7 mi) downstream of the International Bridge in Cameron County]
[2302	Rio Grande Below Falcon Reservoir - from a point 10.8 km (6.7 mi) downstream of the International Bridge in Cameron County to Falcon Dam in Starr County]
[2303	International Falcon Reservoir - from Falcon Dam in Starr County to a point 0.66 km (0.41 mi) upstream of the confluence of the Arroyo El Lobo (Mexico) in Webb County, up to the normal pool elevation of 301.1 feet (impounds Rio Grande)]
[2304	Rio Grande Below Amistad Reservoir - from a point 0.66 km (0.41 mi) upstream of the confluence of the Arroyo El Lobo (Mexico) in Webb County to Amistad Dam in Val Verde County]
[2305	International Amistad Reservoir - from Amistad Dam in Val Verde County to a point 1.8 km (1.1 mi) downstream of the confluence of Ramsey Canyon on the Rio Grande Arm in Val Verde County and to a point 0.7

km (0.4 mi) downstream of the confluence of Painted Canyon on the Pecos River Arm in Val Verde County and to a point 0.6 km (0.4 mi) downstream of the confluence of Little Satan Creek on the Devils River Arm in Val Verde County, up to the normal pool elevation of 1117 feet (impounds Rio Grande)] 2306 Rio Grande Above Amistad Reservoir - from a point 1.8 km (1.1 mi) downstream of the confluence of Ramsey Canyon in Val Verde County to the confluence of Cow Canyon in Brewster County [2307 Rio Grande Below Riverside Diversion Dam - from the confluence of the Rio Conchos (Mexico) in Presidio County to Riverside Diversion Dam in El Paso Countyl 2308 Rio Grande Below International Dam - from the Riverside Diversion Dam in El Paso County to International Dam in El Paso County] Devils River - from a point 0.6 km (0.4 mi) downstream of the confluence [2309 of Little Satan Creek in Val Verde County to the confluence of Dry Devils **River in Sutton County** [2310 Lower Pecos River - from a point 0.7 km (0.4 mi) downstream of the confluence of Painted Canyon in Val Verde County to a point immediately upstream of the confluence of Independence Creek in Crockett/Terrell County] [2311]Upper Pecos River - from a point immediately upstream of the confluence of Independence Creek in Crockett/Terrell County to Red Bluff Dam in Loving/Reeves County] [2312 Red Bluff Reservoir - from Red Bluff Dam in Loving/Reeves County to the New Mexico State Line in Loving/Reeves County, up to the normal pool elevation of 2842 feet (impounds Pecos River)] 2313 San Felipe Creek - from the confluence with the Rio Grande in Val Verde County to a point 4.0 km (2.5 mi) upstream of US 90 in Val Verde County [2314]Rio Grande Above International Dam - from International Dam in El Paso County to the New Mexico State Line in El Paso County 2315 Rio Grande Below Rio Conchos - from the confluence of Cow Canyon in Brewster County to the confluence of the Rio Conchos (Mexico) in Presidio County

[2411	Sabine Pass * - from the end of the jetties at the Gulf of Mexico to SH 82]
[2412	Sabine Lake *]
[2421	Upper Galveston Bay *]
[2422	Trinity Bay *]
[2423	East Bay *]
[2424	West Bay *]
[2425	Clear Lake *]
[2426	Tabbs Bay *]
[2427	San Jacinto Bay *]
[2428	Black Duck Bay *]
[2429	Scott Bay *]
[2430	Burnet Bay *]
[2431	Moses Lake *]
[2432	Chocolate Bay *]
[2433	Bastrop Bay/Oyster Lake *]
[2434	Christmas Bay *]
[2435	Drum Bay *]
[2436	Barbours Cut *]
[2437	Texas City Ship Channel *]
[2438	Bayport Channel *]
[2439	Lower Galveston Bay *]
[2441	East Matagorda Bay *]
[2442	Cedar Lakes *]

[2451	Matagorda Bay/Powderhorn Lake *]						
[2452	Tres Palacios Bay/Turtle Bay *]						
[2453	Lavaca Bay/Chocolate Bay *]						
[2454	Cox Bay *]						
[2455	Keller Bay *]						
[2456	Carancahua Bay *]						
[2461	Espiritu Santo Bay *]						
[2462	San Antonio Bay/Hynes Bay/Guadalupe Bay/Mission Lake *]						
[2463	Mesquite Bay/Carlos Bay/Ayres Bay *]						
[2471	Aransas Bay *]						
[2472	Copano Bay/Port Bay/Mission Bay *]						
[2473	St. Charles Bay *]						
[2481	Corpus Christi Bay *]						
[2482	Nueces Bay *]						
[2483	Redfish Bay *]						
[2484	Corpus Christi Inner Harbor * - from US 181 to Viola Turning Basin]						
[2485	Oso Bay * - portion of the bay southeast of a line drawn from a point 550 meters west-northwest of the mouth of Oso Bay to the northern terminus of Shangrila Lane]						
[2486	Blind Oso Bay * - portion of the bay northwest of a line drawn from a point 550 meters west-northwest of the mouth of Oso Bay to the northern terminus of Shangrila Lane]						
2490	Upper Laguna Madre * - upper portion of bay north of the Saltillo Flats						
2491	Lower Laguna Madre * - lower portion of the bay south of the Saltillo Flats						

[2492	Baffin Bay/Alazan Bay/Cayo del Grullo/Laguna Salada *]
[2493	South Bay *]
[2494	Brownsville Ship Channel *]
[2501	Gulf of Mexico * - from the Gulf shoreline to the limit of Texas' jurisdiction between Sabine Pass and the mouth of the Rio Grande]

[\* The segment boundaries are considered to be the mean high tide line.]

## [Appendix D - Site-specific Uses and Criteria for Unclassified Water Bodies]

[Water bodies listed in this appendix are those waters that are not designated segments listed in Appendix A of this section. The water bodies are included because a regulatory action has been taken or is anticipated to be taken by the commission or because sufficient information exists to provide an aquatic life use designation. The segment numbers listed refer to the designated segments as defined in Appendix C of this section. The county listed is the primary location where the use designation is. The water body is a tributary within the drainage basin of the listed segment. The aquatic life use (ALU) designations and dissolved oxygen (DO) criterion are the same as defined in §307.4(h) and §307.7(b)(3)(A) of this title (relating to General Criteria and Site-Specific Uses and Criteria, respectively). The description defines the specific area where the aquatic life use designation pertains. Recreational uses as defined in §307.4(j) of this title are assigned to the waters listed. Generally, there is not sufficient data on these waters to develop other conventional criteria and those criteria are the same as for the segment where the water body is located unless further site-specific information is obtained.]

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0101]	<mark>[Carson,</mark> Hutchinson]	[Dixon Creek]	[1]	<mark>[4.0]</mark>	[Intermittent stream with perennial pools from the confluence with the Canadian River in Hutchinson County upstream to the confluence with Middle and East Dixon creeks in Carson County]	[The 24-hour minimum DO criterion is 2.0 mg/L.]
[0101]	[Hutchinson]	[Rock Creek]	[L]	<mark>[3.0]</mark>	[Perennial stream from the confluence with the Canadian River upstream to SH 136 in the City of Borger]	

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[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0201]	[Bowie]	[Jones Creek]	Π	[4.0]	[Intermittent stream with perennial pools from the confluence with Barkman Creek upstream to the western most crossing of FM 1398 near the City of Hooks]	
[0202]	[Fannin]	<mark>[Bois d'Arc</mark> Creek]	[H]	[5.0]	[Intermittent stream with perennial pools from the confluence with Sandy Creek near Davy Crockett Lake upstream to the confluence with Sandy Creek north of the City of Dodd City]	
[0202]	[Fannin]	<mark>[Bois d'Arc</mark> Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Sandy Creek north of the City of Dodd City upstream to the confluence with Pace Creek]	
[0202]	[Grayson]	<mark>[Corneliason</mark> Creek]	[]]	[3.0]	[Intermittent stream with perennial pools from the confluence with Mill Creek upstream to FM 1897 in the City of Bells]	
[0202]	[Lamar]	[Pine Creek]	[1]	[4.0]	[Perennial and intermittent stream from the confluence with the Red River upstream to the dam forming Lake Crook]	

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[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	<mark>[Additional Site-Specific</mark> Factors]
[0203]	[Grayson]	<mark>[Big Mineral</mark> Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the normal pool elevation of Lake Texoma upstream to the confluence with an unnamed second order tributary on North Branch 2.4 km upstream of US 377 and upstream to the confluence with an unnamed second order tributary on South Branch 1.1 km upstream of US 377 north of the City of Whitesboro]	
[0203]	[Grayson]	<mark>[Little Mineral</mark> Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the normal pool elevation of Lake Texoma upstream to the confluence with an unnamed tributary approximately 0.7 km upstream of Reeves Road]	
[0204]	[Montague]	[Ritchie Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with Salt Creek upstream to SH 59 east of the City of Montague]	
[0302]	[Bowie]	[Big Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from FM 2149 upstream to 1.3 km south of US 82 southeast of the City of New Boston]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0302]	[Bowie]	[Anderson Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with an unnamed tributary approximately 4.2 km downstream of SH 992 upstream to the confluence with an unnamed tributary approximately 2.2 km upstream of CR 4320]	
[0303]	[Franklin, Hopkins, Morris, Titus]	<mark>[White Oak</mark> Creek]	[1]	[4.0]	[Perennial stream from the confluence with the Sulphur River north of the City of Naples in Morris County upstream approximately 0.26 km upstream of FM 900 in northeast Hopkins County]	
[0303]	[Red River]	<mark>[Morrison</mark> Branch]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Little Mustang Creek upstream to approximately 0.7 km south of FM 909 southeast of the City of Bogata]	
[0304]	[Bowie]	[Wagner Creek]	[1]	[4.0]	[Perennial stream from the confluence with Days Creek upstream to a point 1.5 km upstream of IH 30]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
<mark>[0400]</mark>	[Harrison]	[Cross Bayou]	<mark>[H]</mark>	[5.0]	[Perennial stream from the Texas/Louisiana border upstream to the headwaters approximately 0.2 km south of the cemetery at Stricklen Springs]	
[0401]	[Harrison]	[Harrison Bayou]	[H]	<mark>[≤5.0]</mark>	[Intermittent stream with perennial pools from the confluence with Caddo Lake within the Caddo Lake National Wildlife Refuge (also known as the Longhorn Ordinance Works facility) east of the City of Karnack upstream to FM 1998 east of the City of Marshall]	[See footnote 1.]
[0402]	[Cass]	[Hughes Creek]	(H)	[5.0]	[Perennial stream from the confluence with Black Cypress Creek upstream to the confluence with an unnamed first order tributary approximately 0.5 km downstream of FM 250]	
[0403]	<mark>[Marion,</mark> Upshur]	[Meddlin Creek]	[H]	[5.0]	[Perennial stream from the confluence with Lake O' the Pines in Marion County upstream to US 259 in Upshur County]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0404]	[Camp]	[Dry Creek]	[1]	[4.0]	[Perennial stream from the confluence with Big Cypress Creek upstream to the confluence of Mile Branch and Little Creek]	
[0404]	[Camp]	[Sparks Branch]	[1]	<mark>[4.0]</mark>	[Perennial stream from the confluence with Dry Creek upstream to US 271]	
[0404]	[Morris]	[Brutons Creek]	[1]	[4.0]	[Perennial stream from the headwaters of Ellison Reservoir upstream to SH 49 near the City of Daingerfield]	
[0404]	[Morris]	[Unnamed tributary of Okry Creek]	[1]	[4.0]	[Perennial stream from the confluence with Okry Creek upstream to a point 0.26 km upstream of US 259 south of the City of Omaha]	
[0404]	[Titus]	[Hart Creek]	[H]	[5.0]	[Perennial stream from the confluence with Big Cypress Creek upstream to 0.2 km upstream of FM 1402]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0404]	[Titus]	<mark>[Tankersley</mark> Creek]	[H]	[5.0]	[Perennial stream from the confluence with Big Cypress Creek upstream to the confluence with an unnamed tributary 250 meters upstream of IH 30]	
[0407]	[Cass]	[Beach Creek]	[1]	[4.0]	[Perennial stream from Iron Ore Lake upstream to the confluence with an unnamed tributary 0.48 km upstream of Hwy 59]	
[0409]	[Upshur]	[Walnut Creek]	[H]	[5.0]	[Perennial stream from the confluence with Little Cypress Creek upstream to the confluence with Little Walnut Creek]	
[0410]	[Cass]	<mark>[Black Cypress</mark> Creek/Bayou]	[H]	<mark>[≤5.0]</mark>	[Intermittent stream with perennial pools from the confluence with Kelly Creek upstream to FM 250 north of the City of Hughes Springs]	[See footnote 1.]
[0501]	[Orange]	<mark>[County Relief</mark> Ditch]	[L]	<mark>[3.0]</mark>	[Perennial ditch from the confluence with the Sabine River upstream to SH 87]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0502]	[Newton]	[Caney Creek]	[H]	[5.0]	[Perennial stream from the Sabine River upstream to the confluence with Martin Branch]	
[0502]	[Newton]	[Unnamed tributary of Dempsey Creek]	Ξ	[4.0]	[Perennial stream from the confluence with Dempsey Creek to a headwater swamp near the City of Bon Weir]	
[0504]	[Shelby]	[Unnamed tributary of Flat Fork Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence of an unnamed tributary 1.0 km upstream of FM 1645 upstream to 0.4 km upstream of SH 87]	
[0504]	<mark>[Shelby]</mark>	[Prairie Creek]	[H]	<mark>[5.0]</mark>	[Perennial stream from the confluence with Cedar Creek upstream to SH 7]	
[0505]	[Gregg]	[Grace Creek]	[1]	<mark>[4.0]</mark>	[Perennial stream from the confluence with the Sabine River upstream to FM 1844]	
<u>[0505]</u>	[Gregg]	[Hawkins Creek]	[L]	[3.0]	[Perennial stream from the confluence with the Sabine River upstream to FM 2605 in the City of White Oak]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0505]	[Gregg]	[Rocky Creek]	H	[5.0]	[Intermittent stream with perennial pools from the confluence with Prairie Creek upstream to the confluence with an unnamed first order tributary 0.6 km west of SH 135]	
[0505]	<mark>[Gregg, Rusk]</mark>	[Rabbit Creek]	Ξ	[4.0]	[Perennial stream from the confluence with the Sabine River in Gregg County upstream to the confluence with Little Rabbit Creek in Rusk County]	[See footnote 2.]
[0505]	[Gregg]	<mark>[Campbells</mark> Creek]	[1]	<mark>[4.0]</mark>	[Intermittent stream with perennial pools from the confluence with Moody Creek upstream to the dam forming Lake Devernia]	
[0505]	[Harrison]	[Eightmile Creek]	[1]	[4.0]	[Perennial stream from the confluence with the Sabine River upstream to SH 31]	[A 24-hour average DO criterion of 3.0 mg/L applies from June through October.]
[0505]	[Harrison]	[Mason Creek]		[3.0]	[Intermittent stream with perennial pools from the confluence with a swamp 3.1 km downstream of IH 20 upstream to 0.2 km above IH 20 near the intersection with FM 968]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0505]	[Harrison]	[Wards Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Sewell Creek upstream to the confluence with an unnamed second order tributary approximately 0.6 km upstream of US 80]	
[0505]	[Panola]	[Wall Branch]	[1]	[4.0]	[Perennial stream from the confluence with Irons Bayou upstream to the confluence with an unnamed tributary 400 meters upstream of the City of Beckville wastewater treatment plant]	
[0505]	[Rusk]	<mark>[Little Rabbit</mark> Creek]	[1]	[4.0]	[Perennial stream from the confluence with Rabbit Creek upstream to the confluence with an unnamed tributary 0.15 km upstream of FM 850 east of the City of Overton]	
[0505]	[Rusk]	[Unnamed tributary of Sabine River]	[1]	[4.0]	[Perennial stream from the confluence with the Sabine River upstream 0.7 km above the Santa Fe Railroad crossing in the City of Easton]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0506]	[Rains]	[Sandy Creek]	[H]	[5.0]	[Perennial stream from the confluence of Glade Creek upstream to the confluence of an unnamed tributary 0.3 km below SH 19]	
[0506]	[Smith]	[Wiggins Creek]	H	[5.0]	[Perennial stream from the confluence with Harris Creek upstream to the dam impounding an unnamed reservoir located approximately 3.8 km upstream of FM 2015 northeast of the City of Tyler]	
[0506]	[Smith]	[Mill Creek]	<mark>[H]</mark>	[5.0]	[Spring-fed perennial stream from the confluence with the Old Sabine River Channel upstream to the spring source at or above FM 2710]	
[0506]	[Van Zandt]	[Giladon Creek]	[1]	[4.0]	[Perennial stream from the confluence with Mill Creek upstream to the confluence with an unnamed tributary approximately 0.4 km upstream of FM 859 near the City of Edgewood]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0506]	[Van Zandt]	[Unnamed tributary of Grand Saline Creek]	[1]	<mark>[3.0]</mark>	[Perennial stream from the confluence with Grand Saline Creek upstream to the confluence with an unnamed tributary approximately 0.2 km downstream of US 80]	[A 24-hour average DO criterion of 3.0 mg/L applies due to low ambient levels of DO upstream of the City of Grand Saline discharge point.]
<mark>[0506]</mark>	[Wood]	[Unnamed tributary of Sabine River (Ninemile Creek)]	[H]	[5.0]	[Perennial stream from the confluence with the Sabine River upstream to the confluence with an unnamed tributary immediately upstream of US 80 southeast of the City of Mineola]	
[0506]	[Wood]	[No. 5 Branch]	[H]	[5.0]	[Intermittent stream with perennial pools from the confluence with Simpkins Creek upstream to US 69]	
[0507]	[Hunt]	<mark>[West Caddo</mark> Creek]		[3.0]	[Intermittent stream with perennial pools from the confluence with Brushy Creek upstream to the confluence of Middle Caddo Creek northwest of Caddo Mills]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0510]	[Rusk]	[Adaway Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Mill Creek upstream to the confluence with an unnamed tributary 0.36 km upstream of FM 782 north of the City of Henderson]	
[0510]	<mark>[Rusk]</mark>	[Mill Creek]	[1]	[4.0]	[Perennial stream from the confluence with Beaver Run upstream to the confluence with an unnamed tributary 50 meters upstream of FM 2276 north of the City of Henderson]	
[0511]	[Orange]	[Coon Bayou]	[H]	<mark>[4.0]</mark>	[From the confluence with Cow Bayou upstream to the extent of tidal limits]	
[0511]	[Orange]	[Unnamed tributary of Cow Bayou]	(H)	[4.0]	[From the confluence with Cow Bayou (north bank approximately 1.6 km from the Sabine River confluence) upstream to the extent of tidal limits]	
[0513]	[Newton, Jasper]	[Trout Creek]	[H]	[5.0]	[Perennial stream from the confluence with Big Cow Creek in Newton County upstream to the confluence with Boggy Creek and Davis Creek in Jasper County]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0601]	[Orange]	[Tiger Creek]	[L]	[3.0]	[Perennial stream from the confluence with Meyer Bayou upstream to the confluence of Caney Creek near the City of Vidor]	
[0602]	[Hardin]	[Unnamed tributary (Booger Branch) of Massey Lake Slough]		[3.0]	[Perennial stream from Massey Lake Slough upstream to the Santa Fe Railroad crossing south of the City of Silsbee]	
[0603]	<mark>[Jasper]</mark>	[Sandy Creek]	[H]	[5.0]	[Perennial stream from the confluence with B. A. Steinhagen Lake upstream to 0.5 km below FM 776 east of the City of Jasper]	
[0604]	<mark>[Anderson,</mark> Henderson]	[Caddo Creek]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with the Neches River below Lake Palestine in Anderson County upstream to the dam of Caddo Creek Lake in Henderson County]	
[0604]	[Anderson]	[Unnamed tributary of Caddo Creek]	[H]	[5.0]	[Perennial stream from the confluence with Caddo Creek approximately 1 km south of SH 175 upstream to its headwaters 0.6 km north of SH 175]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0604]	<mark>[Angelina]</mark>	[Cedar Creek]	[1]	[4.0]	[Perennial stream from the confluence with Jack Creek upstream to the confluence with an unnamed tributary adjacent to SH Loop 287]	
[0604]	<mark>[Jasper,</mark> Angelina]	[Graham Creek]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with the Neches River in Jasper County upstream to the confluence with Mill Creek in Angelina County]	
[0604]	[Angelina]	[Hurricane Creek]	[1]	[4.0]	[Perennial stream from the confluence with Cedar Creek upstream to the confluence of two unnamed tributaries 100 meters upstream of SH Loop 287 in the City of Lufkin]	
0604	Trinity, Houston	Piney Creek	Ι	1.5	Intermittent with pools stream from the confluence with Mossy Creek in Trinity County upstream to the confluence with an unnamed tributary in Houston County 0.75 km west of FM 2781	The 24-hour minimum DO criterion is 1.0 mg/L.

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
0604	Polk, Trinity	Piney Creek	Н	3.0	Intermittent with pools stream from the confluence with the Neches River in Polk County upstream to the confluence with Mossy Creek in Trinity County	
[0604]	<mark>[Angelina]</mark>	[Sandy Creek]	[H]	[5.0]	[Perennial stream from the confluence with Shawnee Creek upstream to the confluence with an unnamed tributary approximately 0.5 km upstream of US 69]	
[0604]	<mark>[Angelina]</mark>	[Shawnee Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Dry Creek upstream to the headwaters just downstream of the railroad line southeast of the City of Huntington]	
[0604]	[Cherokee]	[Alto Branch]	[H]	[5.0]	[Perennial stream from the confluence of Larrison Creek upstream to FM 851 north of the City of Alto]	
[0604]	[Cherokee]	[Larrison Creek]	[H]	[5.0]	[Perennial stream from US 69 southeast of the City of Alto upstream to 1.0 km above SH 21 east of Alto]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0604]	[Cherokee]	[One Eye Creek]	[1]	[4.0]	[Perennial stream from the confluence with McCann Creek upstream to the confluence with College Creek]	
[0604]	[Polk]	[Dabbs Creek]	[H]	[5.0]	[Perennial stream from the confluence of Caney Creek upstream to the confluence of Dabbs Branch approximately 4.5 km above FM 942]	
[0605]	[Henderson]	<mark>[Little Duncan</mark> Branch]	[1]	[4.0]	[Perennial stream from the confluence with Big Duncan Branch upstream to the dam impounding Jackson Lake]	
[0606]	[Smith]	<mark>[Black Fork</mark> Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from a point 0.4 km downstream of FM 14 upstream to a point 0.2 km upstream of SH 31 in the City of Tyler]	
[0606]	[Smith]	<mark>[Black Fork</mark> Creek]	[H]	[5.0]	[Perennial stream from the confluence with Prairie Creek upstream to a point 0.4 km downstream of FM 14 in the City of Tyler]	[A 24-hour average DO criterion of 4.0 mg/L applies from May through October.]

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
<mark>[0606]</mark>	[Smith]	[Prairie Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Neches River to a point immediately upstream of the confluence of Caney Creek]	[A 24-hour average DO criterion of 3.0 mg/L applies from May through October.]
[0606]	[Smith]	[Prairie Creek]	Η	[5.0]	[Perennial stream from a point immediately upstream of the confluence with Caney Creek upstream to the confluence with an unnamed tributary approximately 0.6 km downstream of the US 69 bridge crossing, which is located approximately 0.6 km south of the City of Lindale]	
[0607]	[Hardin]	[Boggy Creek]	[H]	1.5	[Intermittent stream with perennial pools from the confluence with Pine Island Bayou upstream to the confluence with an unnamed tributary 4.0 km downstream of the crossing of the Southern Pacific Railroad]	The 24-hour minimum DO criterion is 0.5 mg/L.
[0607]	[Jefferson]	[Cotton Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Pine Island Bayou upstream to the confluence of an unnamed tributary 1.2 km south of the Southern Pacific Railroad]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
0607	Hardin	Little Pine Island Bayou	Ι	2.0	Intermittent with pools stream from the confluence with an unnamed tributary 1.1 km southeast of the intersection of FM 770 and FM 787 upstream to the confluence with Doe Pond Creek	The 24-hour minimum DO criterion is 1.5 mg/L.
0607	Hardin	Little Pine Island Bayou	Н	3.0	Intermittent with pools stream from the confluence with Pine Island Bayou at the Hardin/Jefferson County border upstream to an unnamed tributary 1.1 km southeast of the intersection of FM 770 and FM 787	
0607	Hardin	Pine Island Bayou	Ι	1.5	Intermittent stream with perennial pools from the confluence with Willow Creek upstream to FM 787	The 24-hour minimum DO criterion is 1.0 mg/L.
0607	Jefferson, Liberty	Willow Creek	Ι	3.0	Intermittent stream with perennial pools from the confluence with Pine Island Bayou in Jefferson County upstream to the confluence with Bull Tongue Creek in Liberty County	A 24-hour average DO criterion of 2.0 mg/L and 24-hour minimum DO criterion of 1.5 mg/L apply for the months of June through September.

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0608]	[Hardin]	[Cypress Creek]	Ι	2.5	Intermittent stream with perennial pools from the confluence with Village Creek upstream to the confluence of Bad Luck Creek	The 24-hour minimum DO criterion is 2.0 mg/L.
[0608]	[Tyler]	[Turkey Creek]	[H]	[5.0]	[Perennial stream from the confluence with Village Creek upstream to 1.6 km above US 69 north of the City of Woodville]	
[0610]	[Sabine]	[Little Sandy Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Pomponaugh Creek upstream to 0.5 km above FM 83 north of the City of Pineland]	
[0610]	[San Augustine]	<mark>[Ayish Bayou]</mark>	Ξ	[5.0]	[Perennial stream from the headwaters of Sam Rayburn Reservoir upstream to the dam impounding Bland Lake approximately 0.1 km upstream of FM 1279 near the City of San Augustine]	
[0611]	[Cherokee]	[Keys Creek]	[H]	[5.0]	[Perennial stream from the confluence with Mud Creek upstream to the confluence of Barber Branch east of the City of Jacksonville]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0611]	<mark>[Cherokee,</mark> Smith]	[Mud Creek]	H	[5.0]	[Perennial stream from the confluence with the Angelina River in Cherokee County upstream to a point immediately upstream of the confluence of Prairie Creek in Smith County]	
<mark>[0611]</mark>	[Cherokee]	[Ragsdale Creek]	[1]	[4.0]	[Perennial stream from the confluence with Keys Creek upstream to the confluence of an unnamed tributary 250 meters upstream of Canada Street in the City of Jacksonville]	
[0611]	[Nacogdoches]	[Bayou La Nana]	[1]	[4.0]	[Perennial stream from the confluence with the Angelina River upstream to FM 1878 in the City of Nacogdoches]	
[0611]	[Rusk]	<mark>[Unnamed</mark> tributary of Johnson Creek]	[L]	[3.0]	[Perennial stream from the confluence with Johnson Creek upstream to 2.4 km upstream of the confluence, which is 0.8 km south of SH 64 west of the City of Joinerville]	
[0611]	[Smith]	<mark>[Blackhawk</mark> Creek]	[1]	[4.0]	[Perennial stream from the confluence with Mud Creek upstream to the confluence of an unnamed tributary 120 meters upstream of SH 110 south of the City of Whitehouse]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0611]	[Smith]	[Henshaw Creek]	[H]	<mark>[5.0]</mark>	[Perennial stream from the confluence with West Mud Creek upstream to FM 2813]	
[0611]	<mark>[Cherokee,</mark> Smith]	[West Mud Creek]	[L]	[3.0]	[Perennial stream from the confluence with Mud Creek in Cherokee County upstream to the confluence of an unnamed tributary 300 meters upstream of the most northern crossing of US 69 (approximately 2.25 km south of the intersection of Loop 323) in the City of Tyler]	
[0615]	[Angelina]	[Unnamed tributary of Mill Creek]	[L]	<mark>[3.0]</mark>	[Intermittent stream with perennial pools from the confluence with Mill Creek upstream to 1.0 km above FM 2251 north of the City of Lufkin]	
[0615]	[Angelina]	[Mill Creek]	[H]	[5.0]	[Perennial stream from the confluence with Paper Mill Creek upstream to 1.0 km upstream of FM 2251 north of the City of Lufkin]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0701]	[Jefferson]	<mark>[Green Pond</mark> Gully]	[1]	<mark>[4.0]</mark>	[Perennial stream from the confluence with North Fork Taylor Bayou upstream to the confluence with an unnamed tributary approximately 2.4 km downstream of US 90 near the City of China]	
[0701]	[Jefferson]	[Mayhan Gully]	[1]	[4.0]	[Perennial stream from the confluence with Green Pond Gully upstream 6.0 km to the confluence with an unnamed tributary near the City of China]	
[0701]	[Jefferson]	[Rhodair Gully]	[1]	[4.0]	[Perennial stream from the confluence with Taylor Bayou upstream to US 69 near the City of Nederland]	
[0702]	[Jefferson]	<mark>[Main Canal D,</mark> Canal A, Canal B, Canal C]	[1]	[3.0]	[All perennial canals in Jefferson County Drainage District No. 7 that eventually drain into the tidal portion of Taylor Bayou at the pump house gate]	[The 24-hour average DO criterion is 3.0 mg/L.]

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0704]	[Jefferson]	<mark>[Willow Marsh</mark> Bayou]	[1]	<mark>[4.0]</mark>	[Perennial stream from the confluence with Hillebrandt Bayou upstream to the confluence with an unnamed tributary immediately upstream of Old Sour Lake Road]	
[0801]	[Liberty]	[Linney Creek]	[H]	[5.0]	[Intermittent stream with perennial pools from the confluence with Spring Branch upstream to its confluence with French Creek]	
[0801]	[Liberty]	[Spring Branch]	H	[5.0]	[Intermittent stream with perennial pools from the confluence with Day Lake Slough upstream to the confluence with Big Bayou approximately 425 meters downstream of US 90]	
[0802]	[Polk]	[Choates Creek]	[H]	[5.0]	[Perennial stream from the confluence with Long King Creek upstream to the confluence with an unnamed tributary approximately 3.0 km upstream of SH 146 near the City of Livingston]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0802]	[Polk]	<mark>[Long King</mark> Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Trinity River upstream to the confluence with an unnamed tributary approximately 1.2 km upstream of FM 350 near the City of Livingston]	
[0802]	[Polk]	[Crooked Creek]	[H]	[5.0]	[Perennial spring-fed stream from the confluence with Long King Creek upstream to the headwaters]	
<mark>[0802]</mark>	[Polk]	[Unnamed tributary of Crooked Creek]	[H]	[5.0]	[Perennial spring-fed stream from the confluence with Crooked Creek upstream to the headwaters]	
<mark>[0802]</mark>	[San Jacinto]	[Unnamed tributary of Coley Creek]	[H]	[5.0]	[Perennial stream from the confluence with Coley Creek upstream to its origin at the culvert leading from Lake Run-Amuck at Wright Road]	
<mark>[0803]</mark>	[Walker]	[Harmon Creek]	[H]	[5.0]	[Perennial stream from the confluence with the normal pool elevation of Lake Livingston upstream to the confluence of East Fork Creek]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0803]	[Walker]	[Parker Creek]	[1]	[4.0]	[Perennial stream from the confluence with Harmon Creek upstream to the confluence with Town Branch]	
[0803]	[Walker]	[Turkey Creek]	[1]	[4.0]	[Perennial stream from the normal pool elevation of Lake Livingston upstream to the confluence with an unnamed tributary 2.85 km downstream of FM 980]	
[0804]	[Anderson]	[Box Creek]	[1]	[4.0]	[Perennial stream from the confluence of Elkhart Creek upstream to the Elkhart Lake dam northeast of the City of Elkhart]	
[0804]	<mark>[Anderson,</mark> Henderson]	[Catfish Creek]	[H]	[4.0]	[Perennial stream from the confluence with Trinity River upstream to the confluence with Wolf Creek]	[A 24-hour average DO criterion of 3.0 mg/L and 24-hour minimum DO criterion of 2.0 mg/L apply for the months of May through September.]
[0804]	[Anderson]	[Keechi Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Trinity River upstream to a point 0.05 km upstream of FM 645]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	<mark>[Additional Site-Specific</mark> Factors]
[0804]	[Anderson]	[Basset Creek]	[H]	<mark>[5.0]</mark>	[Perennial stream from the confluence with Town Creek upstream to Blue Lake]	
[0804]	[Anderson]	[Town Creek]	[H]	<mark>[5.0]</mark>	[Perennial stream from the confluence with Keechi Creek upstream to SH 256]	
[0804]	[Freestone]	[Mims Creek]	[1]	[4.0]	[Perennial stream from the confluence with Upper Keechi Creek upstream to the confluence of an unnamed tributary approximately 2.1 km upstream of FM 1580 near the City of Fairfield]	
[0804]	[Henderson]	[Walnut Creek]	[H]	[5.0]	[Intermittent stream with perennial pools from the confluence with an unnamed tributary approximately 0.5 km upstream of FM 753 upstream to FM 2494 in the City of Athens]	
[0804]	[Leon]	[Toms Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Trinity River upstream to the Missouri Pacific Railroad crossing near the City of Oakwood]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0804]	[Leon]	[Unnamed tributary (Northwest Branch)]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with Toms Creek upstream to a point 0.3 km upstream of FM 831]	
[0809]	[Tarrant, Parker]	[Ash Creek]	[H]	[5.0]	[Intermittent stream with perennial pools from Eagle Mountain Lake in Tarrant County upstream to its confluence with Mill Branch in Parker County]	
[0815]	[Ellis]	<mark>[Waxahachie</mark> Creek]	[1]	[4.0]	[Perennial stream from the confluence with the normal pool elevation of Bardwell Reservoir upstream to the confluence with North Prong Creek]	
[0818]	[Henderson]	[One Mile Creek]	[1]	[4.0]	[Perennial stream from the confluence with Valley View Reservoir upstream to the confluence with an unnamed tributary 0.8 km upstream of SH 19]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0819]	<mark>[Kaufman,</mark> Dallas]	[Duck Creek]	Ш	<mark>[4.0]</mark>	[Perennial stream from the confluence with the East Fork Trinity River in Kaufman County upstream to the confluence of an unnamed tributary 0.6 km upstream of Jupiter Road in Dallas County]	
[0819]	[Rockwall]	<mark>[Buffalo Creek]</mark>	[L]	[3.0]	[Perennial stream from the confluence with the East Fork Trinity River upstream to 0.6 km above the confluence with Little Buffalo Creek]	
[0820]	[Collin]	<mark>[Cottonwood</mark> Creek]	[L]	[3.0]	[Perennial stream from the confluence with Rowlett Creek upstream to SH 5 (near Greenville Road)]	
[0820]	[Collin]	[Rowlett Creek]	[1]	[4.0]	[Perennial stream from the normal pool elevation of Lake Ray Hubbard upstream to the Parker Road crossing]	
[0821]	[Collin]	<mark>[Pilot Grove</mark> Creek]	[L]	[3.0]	[Perennial stream from the confluence of Desert Creek upstream to FM 121 approximately five mi north of the City of Blue Ridge]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
<mark>[0823]</mark>	<mark>[Collin,</mark> Grayson]	[Little Elm Creek]	[1]	[4.0]	[Perennial stream from FM 455 in Collin County upstream to 1.4 km above FM 121 in Grayson County near the City of Gunter]	
<mark>[0826]</mark>	[Denton]	[Denton Creek]	[H]	[5.0]	[Perennial stream from the headwaters of Grapevine Lake upstream to the confluence of Trail Creek near the City of Justin]	
[0826]	[Denton]	[Trail Creek]	[H]	[5.0]	[Perennial stream from the confluence with Denton Creek upstream to 2.1 km upstream of SH 156 in the City of Justin]	
[0827]	[Dallas]	[Cottonwood Creek]	[1]	[4.0]	[Perennial stream from the confluence with White Rock Creek upstream to the confluence with an unnamed tributary approximately 0.25 km upstream of Campbell Road in the City of Richardson]	
[0827]	[Dallas]	<mark>[White Rock</mark> Creek]	[1]	[4.0]	[Perennial stream from the headwaters of White Rock Lake upstream to the confluence with McKamy Branch east of the City of Addison]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0831]	[Parker]	[Town Creek]	[1]	[4.0]	[Perennial stream from the confluence with Willow Creek to form the headwaters of South Fork Trinity River upstream to the confluence of an unnamed tributary 2.0 km (1.2 mi) upstream of US Highway 180]	
<mark>[0836]</mark>	[Limestone, Hill]	[Pin Oak Creek]	[1]	[4.0]	[Perennial stream from the confluence with the North Fork of Pin Oak Creek in Limestone County upstream to the confluence with Pin Oak Creek and an unnamed tributary flowing from the west approximately 2.8 km downstream of SH 171 near the City of Hubbard]	
[0840]	[Cooke]	[Spring Creek]	[H]	<mark>[5.0]</mark>	[Perennial stream from the confluence with Pecan Creek upstream to the confluence with John's Branch]	
[0901]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[0901]	[Harris]	[Unmaintained channelized ditches and streams]	Π	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[0902]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[0902]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1001]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1001]	[Harris]	[Unmaintained channelized ditches and streams]	Ξ	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1001]	[Harris]	[Bear Lake]	[H]	[4.0]	[Encompasses the entire tidal portion of the bay (tributary bay of San Jacinto River Tidal)]	
[1001]	[Harris]	<mark>[Gum Gully]</mark>	[H]	[5.0]	[Perennial stream from the confluence with Jackson Bayou upstream to the confluence with an unnamed tributary approximately 0.4 km downstream of Huffman-Crosby Road]	
[1001]	[Harris]	[Jackson Bayou]	[H]	[5.0]	[Perennial stream from a point immediately upstream of the tidal portion of Jackson Bayou upstream to the confluence with Gum Gully]	
[1001]	[Harris]	[Rickett Creek]	[L]	<mark>[3.0]</mark>	<mark>[Intermittent stream with perennial pools</mark> from San Jacinto River Tidal upstream to US 90]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1002]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1002]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1002]	[Liberty]	<mark>[Tarkington</mark> Bayou]	[1]	[4.0]	[Perennial stream from the confluence with Luce Bayou upstream to the confluence of Little Tarkington Bayou near the City of Cleveland]	
[1003]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1003]	[Harris]	[Unmaintained channelized ditches and streams]	Ш	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1004]	[Montgomery]	[East Fork White Oak Creek]	[1]	[4.0]	[Perennial stream from the confluence with White Oak Creek upstream to the confluence with an unnamed tributary approximately 0.4 km upstream of League Line Road in the City of Panorama Village]	
[1004]	[Montgomery]	<mark>[Unnamed</mark> Tributary]	[1]	[4.0]	[Perennial stream from the confluence of the West Fork San Jacinto River upstream to the Missouri-Pacific Railroad bridge crossing located east of IH 45 and north of Needham Road approximately 10 km south of the City of Conroe]	
[1004]	[Montgomery]	<mark>[West Fork White</mark> Oak Creek]	[H]	[5.0]	[Perennial stream from the confluence with White Oak Creek upstream to an on-channel impoundment on West Fork White Oak Creek 1.2 km upstream of League Line Road]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	<mark>[Additional Site-Specific</mark> Factors]
[1004]	[Montgomery]	<mark>[Unnamed</mark> tributary of Woodsons Gully]	[H]	[5.0]	[Perennial stream from the confluence with Woodsons Gully upstream to the headwaters]	
[1004]	[Montgomery]	[Woodsons Gully]	[H]	[5.0]	[Perennial stream from the confluence with West Fork San Jacinto River upstream to the confluence with an unnamed tributary approximately 1.9 km upstream from Riley- Fussel Road]	
[1005]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1005]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1006]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1006]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1006]	[Harris]	<mark>[Carpenters</mark> Bayou]	[1]	[4.0]	[Perennial stream from 9.0 km upstream of the Houston Ship Channel upstream to 0.8 km upstream of Wallisville Road]	
[1006]	[Harris]	<mark>[Carpenters</mark> Bayou]	[L]	[3.0]	[Perennial stream from 0.8 km upstream of Wallisville Road upstream to Sheldon Reservoir]	
[1006]	<mark>[Harris]</mark>	[Halls Bayou]	[1]	<mark>[4.0]</mark>	[Perennial stream from the confluence with Greens Bayou upstream to US 59]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1006]	[Harris]	[Halls Bayou]	<mark>[L]</mark>	<mark>[3.0]</mark>	[Perennial stream from US 59 upstream to Frick Road]	
[1007]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[1]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1007]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1007]	[Harris]	<mark>[Berry Bayou</mark> Above Tidal]	[L]	[3.0]	[Perennial stream from 2.4 km upstream from the confluence with Sims Bayou upstream to the southern city limits of South Houston]	
[1007]	<mark>[Harris]</mark>	<mark>[Brays Bayou</mark> Above Tidal]	[L]	[3.0]	[Perennial stream from 11.5 km upstream from the confluence with the Houston Ship Channel upstream to SH 6]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1007]	[Harris]	[Keegans Bayou]	[L]	[3.0]	[Perennial stream from the confluence with Brays Bayou upstream to the Harris County line]	
[1007]	[Harris]	<mark>[Sims Bayou</mark> Above Tidal]	[L]	[3.0]	[Perennial stream from 11.0 km upstream of the confluence with the Houston Ship Channel upstream to Hiram Clark Drive]	
[1007]	[Harris]	<mark>[Willow</mark> Waterhole Bayou]	[L]	[3.0]	[Perennial stream from the confluence with Brays Bayou upstream to South Garden (in the City of Missouri City)]	
[1008]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1008]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1008]	[Harris]	[Metzler Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence of Cannon Gully upstream to 0.2 km below Kuykendahl Road]	
[1008]	<mark>[Montgomery,</mark> Grimes]	[Mill Creek]	Ξ	[4.0]	[Perennial stream from the normal pool elevation of Neidigk Lake in Montgomery County upstream to the confluence with Hurricane Creek and Kickapoo Creek in Grimes County]	
[1008]	[Montgomery]	[Panther Branch]		[3.0]	[Intermittent stream with perennial pools from the normal pool elevation of 125 feet of Lake Woodlands upstream to the confluence with Bear Branch]	
[1008]	[Montgomery]	[Panther Branch]	[1]	[4.0]	[Perennial stream from the confluence with Spring Creek upstream to the dam impounding Lake Woodlands]	
[1008]	[Montgomery]	[Arnold Branch]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Mink Branch upstream to the headwaters just upstream of FM 1774]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	<mark>[Additional Site-Specific]</mark> Factors]
[1008]	[Montgomery]	[Mink Branch]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with Walnut Creek upstream to the confluence with an unnamed tributary approximately 1.0 km upstream of Nichols-Sawmill Road]	
[1008]	[Montgomery]	[Sulphur Branch]	[H]	[5.0]	[Intermittent stream with perennial pools from an unnamed reservoir, known locally as Lake Apache, upstream to FM 1774. The unnamed reservoir impounds Sulphur Branch approximately 0.8 km upstream of the confluence with Walnut Creek.]	
[1009]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1009]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1009]	[Harris]	[Dry Creek]	[1]	[4.0]	[Perennial stream from the confluence with Cypress Creek upstream to the beginning of channelization at Jarvis Road, 0.6 km upstream from the confluence with Cypress Creek north of US 290]	
[1009]	[Harris]	[Dry Creek]	[L]	[3.0]	[Perennial stream from the point where channelization begins at Jarvis Road, which is 0.6 km upstream of the confluence with Cypress Creek, upstream to Harris County Flood Control District ditch K145-01-00, 0.29 km upstream of Spring Cypress Road north of US 290]	
[1009]	[Harris]	[Dry Gully]	[1]	[4.0]	[Perennial stream from its confluence with Cypress Creek upstream 3.2 km, which is approximately 1 km upstream of Louetta Road]	
[1009]	[Harris]	[Dry Gully]	[L]	<mark>[3.0]</mark>	[Perennial stream from a point 1.0 km upstream of Louetta Road upstream to Spring Cypress Road]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1009]	[Waller]	[Mound Creek]	[H]	[5.0]	[Perennial stream from the confluence with Snake Creek, which together form Cypress Creek, upstream to an unnamed tributary 1.95 km upstream of FM 362]	
[1010]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1010]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1010]	[Montgomery]	[Dry Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from Caney Creek upstream to the confluence with an unnamed tributary approximately 3.6 km upstream of SH 242]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1010]	[Montgomery]	<mark>[White Oak</mark> Creek]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with Caney Creek upstream to the confluence with an unnamed tributary approximately 2.08 km upstream of US 59]	
[1012]	[Montgomery]	[Town Creek]	[1]	[4.0]	[Perennial stream from the confluence with Atkins Creek upstream to the confluence with Carwile Creek]	
[1012]	[Walker]	[Robinson Creek]	Ш	<mark>[4.0]</mark>	[Perennial stream from the confluence with the West Fork San Jacinto River upstream to the confluence with an unnamed second order tributary approximately 0.1 km upstream of Bethel Road]	
[1013]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1013]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1013]	[Harris]	<mark>[Little Whiteoak</mark> Bayou]	[1]	[4.0]	[Perennial stream from the confluence with Whiteoak Bayou upstream to the railroad tracks north of IH 610]	
[1013]	[Harris]	<mark>[Little Whiteoak</mark> Bayou]	[L]	<mark>[3.0]</mark>	[Perennial stream from the railroad tracks north of IH 610 upstream to Yale Street]	
[1014]	[Harris]	[Concrete lined and maintained channelized ditches and streams]		[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1014]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1014]	[Harris]	[Bear Creek]	[1]	[4.0]	[Perennial stream from the confluence with South Mayde Creek upstream to the confluence with an unnamed tributary 1.24 km north of Longenbaugh Road]	
[1014]	[Harris, Fort Bend]	[Buffalo Bayou]	[1]	[4.0]	[Perennial stream from SH 6 in Harris County upstream to the confluence with Willow Fork Buffalo Bayou in Fort Bend County]	
[1014]	[Harris]	[Dinner Creek]	Ш	<mark>[3.0]</mark>	[Perennial stream from the confluence with Langham Creek upstream to Frey Road]	
[1014]	[Harris]	[Horsepen Creek]	[L]	[3.0]	[Perennial stream from 0.62 km north of FM 529 upstream to a point 2.4 km upstream of SH 6]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1014]	[Harris]	[Horsepen Creek]	[1]	[4.0]	[Perennial stream from the confluence with Langham Creek upstream to where channelization begins, which is 0.62 km north of FM 529]	
[1014]	[Harris]	[Langham Creek]	[L]	<mark>[3.0]</mark>	[Perennial stream from the confluence with Dinner Creek upstream to FM 529]	
[1014]	[Harris]	[Langham Creek]	[1]	[4.0]	[Perennial stream from the confluence with Bear Creek upstream to the confluence with Dinner Creek]	
[1014]	[Harris]	[Mason Creek]	[1]	[4.0]	[Perennial stream from the confluence with Buffalo Bayou upstream to channelization, which is 1.55 km south of Franz Road]	
[1014]	[Harris]	<mark>[South Mayde</mark> Creek]	[L]	[3.0]	[Perennial stream from an unnamed tributary 1.3 km west of Barker-Cypress Road upstream to an unnamed tributary 1.05 km south of Clay Road]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1014]	[Harris]	<mark>[South Mayde</mark> Creek]	[1]	[4.0]	[Perennial stream in the Addicks Reservoir flood pool area from the confluence with Buffalo Bayou upstream to the confluence with an unnamed tributary 1.3 km (0.8 mi) west of Barker-Cypress Road]	
[1014]	[Harris]	[Turkey Creek]	Π	[4.0]	[Perennial stream from the confluence with South Mayde Creek upstream to a point 0.16 km south of Clay Road]	
[1014]	<mark>[Fort Bend,</mark> Waller]	<mark>[Willow Fork</mark> Buffalo Bayou]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Buffalo Bayou in Fort Bend County upstream to 1.0 km above US 90 in Waller County]	
[1015]	[Montgomery]	[Mound Creek]	[H]	[5.0]	[Perennial stream from the confluence with Lake Creek upstream to the confluence with an unnamed tributary approximately 0.75 km downstream of Rabon-Chapel Road]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1016]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1016]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1016]	[Harris]	[Garners Bayou]	[L]	[3.0]	[Perennial stream from the confluence with Greens Bayou Above Tidal upstream to 1.5 km north of Atascocita Road]	
[1017]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	<mark>[Additional Site-Specific</mark> Factors]
[1017]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1017]	[Harris]	<mark>[Brickhouse</mark> Gully/Bayou]	[L]	<mark>[3.0]</mark>	[Perennial stream from the confluence with Whiteoak Bayou upstream to Gessner Road]	
[1017]	[Harris]	[Cole Creek]	[L]	<mark>[3.0]</mark>	[Perennial stream from the confluence with Whiteoak Bayou upstream to Flintlock Street]	
[1017]	[Harris]	[Vogel Creek]	[L]	[3.0]	[Perennial stream from the confluence with Whiteoak Bayou upstream to a point 3.2 km upstream of the confluence with Whiteoak Bayou]	
[1101]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1101]	[Harris]	[Unmaintained channelized ditches and streams]	Ш	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1101]	[Galveston]	[Magnolia Creek]	E	[4.0]	[Intermittent stream with perennial pools from the confluence with Clear Creek upstream to 0.8 km upstream of the confluence with the second unnamed tributary]	
[1102]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1102]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1102]	<mark>[Galveston,</mark> Brazoria]	[Cowart Creek]		[3.0]	[Intermittent stream with perennial pools from the confluence with Clear Creek in Galveston County upstream to SH 35 in Brazoria County]	
[1102]	[Brazoria]	[Mary's Creek/North Fork Mary's Creek]	[1]	[4.0]	[Perennial stream from the confluence with Clear Creek upstream to the confluence with North Fork Mary's Creek and South Fork Mary's Creek near FM 1128, approximately 5 km southwest of the City of Pearland. Includes perennial portions of North Fork Mary's Creek from the confluence of Mary's Creek to the confluence of an unnamed tributary approximately 3.2 km upstream of FM 1128.]	
[1105]	<mark>[Brazoria]</mark>	[Flores Bayou]	[1]	[4.0]	[Perennial stream from a point 2.6 km downstream of County Road 171 upstream to SH 35]	
[1111]	[Brazoria]	<mark>[Flag Lake</mark> Drainage Canal]	[1]	<mark>[4.0]</mark>	[Perennial water body from the seaward pump station near the confluence with East Union Bayou upstream to the inland pump station near the confluence with the Brazos River]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1113]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[1113]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[1202]	[Fort Bend]	[Rabbs Bayou]	[L]	[3.0]	[Perennial stream from Smithers Lake upstream to the confluence with an unnamed tributary below HW 59]	
[1202]	[Fort Bend]	[Unnamed oxbow slough]	[L]	[3.0]	[An unnamed oxbow slough immediately north of the intersection of US 90A and SH 6 at the head of Ditch H]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1202]	[Fort Bend]	[Big Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with an unnamed tributary 2.1 km downstream of FM 2977 upstream to the confluence of Cottonwood Creek and Coon Creek]	
[1202]	[Grimes]	[Beason Creek]	[1]	[4.0]	[Perennial stream from the confluence with the Brazos River upstream to the confluence with an unnamed tributary 2.8 km upstream of FM 362]	
[1202]	[Waller]	<mark>[Brookshire</mark> Creek]		[3.0]	[Perennial stream from the confluence of an unnamed tributary located 0.2 km downstream of SH 359 upstream to 500 meters upstream of US 90]	
[1202]	[Waller]	[Bessies Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Bessies Bayou upstream to the confluence with an unnamed tributary approximately 0.7 km upstream of FM 359 northwest of the City of Pattison]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1202]	[Waller]	[Clear Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Brazos River upstream to the confluence with an unnamed tributary approximately 0.2 km upstream of FM 1488]	
[1202]	[Washington]	[Hog Branch]	[1]	[4.0]	[Perennial stream from the confluence with Little Sandy Creek upstream to Loop 318 in the City of Brenham]	
[1202]	[Washington]	<mark>[Little Sandy</mark> Creek]	[1]	[4.0]	[Perennial stream from the confluence with New Year Creek to a point 100 meters upstream of SH 36]	
[1202]	[Washington]	[New Year Creek]	[1]	[4.0]	[Perennial stream from the confluence with Woodward Creek upstream to the confluence of Big Sandy Creek]	
[1203]	[Bosque]	[Steele Creek]	[H]	[5.0]	[Perennial stream from the confluence with Whitney Lake upstream to 2.4 km above the confluence of Cox Branch]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1205]	[Hood]	<mark>[McCarthy</mark> Branch]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with Lake Granbury upstream to FM 208]	
[1206]	<mark>[Parker, Hood,</mark> Erath]	[Kickapoo Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with the Brazos River in Parker County upstream to Bailey's Lake at the Hood-Erath county line near the City of Lipan]	
[1206]	[Parker]	[Rock Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Dry Creek upstream to the confluence with an unnamed second order tributary approximately 0.7 km downstream of Lake Mineral Wells]	
[1206]	[Parker]	[Unnamed tributary of Rock Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Rock Creek upstream to the confluence with an unnamed first order tributary approximately 0.2 km upstream of Hood Road, west of Lake Mineral Wells]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1209]	[Brazos]	[Carters Creek]	[1]	[4.0]	[Perennial stream from the confluence with the Navasota River upstream to the confluence of an unnamed tributary 0.5 km upstream of FM 158]	
[1209]	[Brazos]	[Wickson Creek]	[L]	[3.0]	[Perennial stream from the confluence with an unnamed first order tributary (approximately 1.3 km upstream of Reliance Road crossing) upstream to the confluence with an unnamed first order tributary approximately 15 meters upstream of Dilly Shaw Road]	
[1209]	<mark>[Brazos]</mark>	[Wolfpen Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with Carter Creek upstream to near Bizzell Street in the City of College Station]	
[1211]	[Burleson]	[Davidson Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Yegua Creek upstream to 0.2 km above SH 21 near the City of Caldwell]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1217]	<mark>[Burnet]</mark>	<mark>[North Fork</mark> Rocky Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with South Rocky Creek upstream to its headwaters approximately 11 km west of US 183]	[A 24-hour average DO criterion of 2.0 mg/L and a 24-hour minimum DO criterion of 1.0 mg/L apply when stream flows are below 1.5 cfs.]
[1217]	[Lampasas]	[Sulphur Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Lampasas River upstream to the spring source located in the City of Lampasas]	
[1221]	[Comanche]	[Indian Creek]	[1]	[4.0]	[Perennial stream from the confluence with Armstrong Creek approximately 1.5 km downstream of SH 36 upstream to the confluence with an unnamed tributary approximately 0.1 km upstream of US 377]	
[1221]	[Hamilton]	[Pecan Creek]	[1]	[4.0]	[Perennial stream from the confluence with the Leon River upstream to the confluence with an unnamed tributary approximately 3.5 km upstream of SH 36 near the City of Hamilton]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1224]	[Eastland]	[Leon River Above Leon Reservoir]	<mark>[H]</mark>	[5.0]	[From the headwaters of Leon Reservoir upstream to the confluence of the North Fork Leon River and the South Fork Leon River (includes Lake Olden)]	
[1224]	[Eastland]	<mark>[South Fork Leon</mark> River]	[H]	[5.0]	[From the confluence of the North Fork Leon River upstream to the confluence of the Middle Fork Leon River]	
[1227]	[Johnson]	[Buffalo Creek]		[3.0]	[Intermittent stream with perennial pools from the confluence with the Nolan River upstream to the confluence of East Buffalo Creek and West Buffalo Creek]	
[1227]	<mark>[Johnson]</mark>	[Mustang Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with the Nolan River upstream to FM 916 near Rio Vista]	
[1230]	[Eastland]	[Palo Pinto Creek]	Ξ	[5.0]	[Perennial stream from the confluence with the normal pool elevation of Lake Palo Pinto which is near the confluence with an unnamed tributary at the Texas and Pacific Railroad crossing upstream to the dam forming Hagaman Lake]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1232]	[Stephens]	[Gonzales Creek]	[H]	[5.0]	[Perennial stream from the confluence with Hubbard Creek upstream to the confluence with Brown Branch approximately 1.2 km upstream of Elliott Street in the City of Breckenridge]	
[1241]	[Lubbock]	[North Fork Double Mountain Fork Brazos River]	[L]	[3.0]	[Perennial stream from the confluence with Double Mountain Fork Brazos River upstream to the dam forming Lake Ransom Canyon]	
[1242]	[Brazos]	<mark>[Cottonwood</mark> Branch]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Still Creek upstream 0.95 km to the confluence with an unnamed tributary]	
[1242]	[Brazos]	[Still Creek]	[H]	[5.0]	[Perennial stream from the confluence with Thompsons Creek upstream to the confluence with Cottonwood Branch]	
[1242]	[Brazos]	<mark>[Thompsons</mark> Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Brazos River upstream to the confluence with Still Creek]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1242]	[Brazos]	<mark>[Thompsons</mark> Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Still Creek upstream to the confluence with Thompsons Branch, north of FM 1687]	A 24-hour average DO criterion of 2.0 mg/L and a 24-hour minimum DO criterion of 1.0 mg/L apply from June to September.
[1242]	[Brazos]	[Unnamed tributary of Cottonwood Branch]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Cottonwood Branch upstream to the headwaters]	
[1242]	[Milam, Falls]	[Pond Creek]	[L]	[3.0]	[Perennial stream from the confluence with the Brazos River in Milam County, upstream to the confluence with Live Oak Creek in Falls County]	
[1242]	[Falls]	[Deer Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Brazos River upstream to the confluence with Dog Branch]	
[1242]	[McLennan]	<mark>[Tradinghouse</mark> Reservoir]	[H]	<mark>[5.0]</mark>	[Encompasses the entire reservoir up to the normal pool elevation of 447 feet]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1242]	<mark>[Brazos,</mark> Robertson]	<mark>[Little Brazos</mark> River]	H	[5.0]	[Perennial stream from the confluence with the Brazos River in Brazos County upstream to the confluence of Walnut Creek in Robertson County west of the City of Calvert]	
[1244]	[Williamson]	[Brushy Creek]	[H]	[5.0]	[Perennial stream from the confluence of South Brushy Creek upstream to the confluence of North Fork Brushy Creek and South Fork Brushy Creek]	
[1244]	[Williamson]	[Mustang Creek]	[1]	<mark>[4.0]</mark>	[Perennial stream from the confluence with Brushy Creek upstream to the confluence of North Fork Mustang Creek]	
[1244]	[Williamson]	[Cluck Creek]	[H]	[5.0]	[Perennial stream from the confluence with South Brushy Creek upstream to the confluence with an unnamed tributary 0.6 km downstream of US 183]	
[1245]	[Fort Bend]	[Red Gully]	[1]	[4.0]	[Perennial stream from the confluence with Oyster Creek upstream to 1.7 km upstream of Old Richmond Road]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1246]	[McLennan]	<mark>[Comanche</mark> Springs Spring Brook]	Η	[5.0]	[Spring-fed intermittent stream with perennial pools from the confluence with Harris Creek upstream to and including Comanche Springs approximately 2.1 km upstream of US 84 west of the City of McGregor]	
[1246]	[McLennan]	[Harris Creek]	[H]	[5.0]	[Spring-fed intermittent stream with perennial pools from the confluence with South Bosque River upstream to the confluence with an unnamed tributary approximately 1.19 km upstream of US 84 west of the City of McGregor]	
[1246]	[McLennan]	[Tonk Creek]	H	[5.0]	[Intermittent stream with perennial pools from the confluence with Middle Bosque/South Bosque River upstream to the confluence with an unnamed tributary 1.0 km upstream of FM 185 near Tonkawa Falls Park]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1246]	[McLennan]	[Unnamed tributary of South Bosque River (Sheep Creek)]	[1]	[4.0]	[Perennial stream from the confluence with the South Bosque River upstream to 1.0 km above SH 317 south of the City of McGregor]	
[1248]	[Williamson]	[Berry Creek]	[H]	[5.0]	[Perennial stream from the confluence with the San Gabriel River upstream to the confluence of Stapp Branch southwest of the City of Florence]	
[1304]	<mark>[Matagorda,</mark> Brazoria]	[Linnville Bayou]	[L]	[3.0]	[Intermittent stream with perennial pools from a point 1.1 km above the confluence with Caney Creek in Matagorda County upstream to a point 0.1 km above SH 35 in Brazoria/Matagorda counties]	
[1305]	[Matagorda]	<mark>[Hardeman</mark> Slough]	[1]	[4.0]	[Perennial stream from the confluence with Caney Creek upstream to the confluence with an unnamed tributary approximately 1.9 km downstream of FM 3156 near the City of Van Vleck]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1402]	[Colorado]	[Cummins Creek]	<b>[E]</b>	[6.0]	[Perennial stream from the confluence with the Colorado River upstream to the confluence of Boggy Creek at FM 1291]	
[1402]	[Fayette]	[Allen Creek]	11	[4.0]	[Intermittent stream with perennial pools from the confluence of Pool Branch upstream to its headwaters south of the City of Fayetteville]	
1402	Fayette	Buckners Creek	Ι	3.0	Intermittent with pools stream from the confluence with Pin Oak Creek upstream to the confluence with Live Oak Creek	
1402	Fayette	Buckners Creek	Н	5.0	Perennial stream from the confluence with the Colorado River upstream to the confluence with Pin Oak Creek	
[1402]	[Fayette]	<mark>[Cedar Creek</mark> Reservoir/Lake Fayette]	[H]	[5.0]	[Encompasses the entire reservoir up to the normal pool elevation of 390 feet]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1402]	[Fayette]	[Cedar Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Colorado River upstream to the dam forming Cedar Creek Reservoir/Lake Fayette]	
[1402]	[Colorado]	[Skull Creek]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with the Colorado River Below La Grange, upstream approximately 48 km (30 mi) to its headwaters]	[A 24-hour average DO criterion of 3.0 mg/L and a 24-hour minimum DO criterion of 2.0 mg/L apply from March 15 to October 15.
[1404]	[Burnet]	[Hamilton Creek]	[1]	[4.0]	[Perennial stream from the confluence with Delaware Creek upstream to the confluence with an unnamed tributary in the City of Burnet 1.1 km upstream of the Southern Pacific Railroad]	
[1412]	<mark>[Mitchell,</mark> Howard]	[Beals Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with the Colorado River in Mitchell County upstream to the confluence of Mustang Draw and Sulphur Springs Draw in Howard County]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1412]	[Mitchell]	<mark>[North Fork</mark> Champion Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with an unnamed tributary approximately 2.3 km upstream of IH 20 to its headwaters north of the City of Loraine]	
[1412]	[Scurry]	[Deep Creek]	[1]	[4.0]	[Perennial stream from the confluence with Hell Roaring Hollow Creek upstream to the confluence with an unnamed first order tributary approximately 0.07 km downstream of RR 1605]	
[1414]	<mark>[Gillespie]</mark>	[Barons Creek]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with the Pedernales River upstream to the most northern crossing of US 87 northwest of the City of Fredericksburg]	
[1415]	[Kimble]	<mark>[Johnson Fork</mark> Creek]	<mark>[H]</mark>	[5.0]	[Perennial stream from the confluence with the Llano River upstream to source springs (Rio Bonito Springs) south of the City of Segovia]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1415]	[Mason]	<mark>[Comanche</mark> Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with the Llano River upstream to the confluence of West Comanche Creek near the City of Mason]	
[1416]	[McCulloch]	[Brady Creek]	[1]	[4.0]	[Perennial stream and intermittent stream with perennial pools from the confluence with an unnamed tributary approximately 5.0 km east of FM 2309 east of the City of Brady upstream to Brady Lake dam]	
[1418]	[Coleman]	[Hord Creek]	Π	[4.0]	[Perennial stream from the confluence with an unnamed second order tributary approximately 0.7 km downstream of Live Oak Street crossing upstream to the confluence with Bachelor Prong Creek]	
[1420]	[Callahan]	[Kaiser Creek]	[L]	<mark>[3.0]</mark>	[Intermittent stream with perennial pools from the confluence with North Prong Pecan Bayou upstream to 0.5 km upstream of FM 2700 south of the City of Clyde]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	<mark>[Additional Site-Specific</mark> Factors]
[1420]	<mark>[Brown,</mark> Callahan]	[Turkey Creek]	[H]	[5.0]	[From the confluence with Pecan Bayou in Brown County upstream to SH 36 in Callahan County]	
[1426]	[Runnels]	[Elm Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Colorado River upstream to the dam approximately 300 meters downstream of US Highway 67]	
1427	Travis	Slaughter Creek	Ι	3.0	Intermittent stream with perennial pools from the confluence with Granada Hills Tributary upstream to the headwaters above US 290 west of the City of Austin	The 24-hour minimum DO criterion is 2.0 mg/L.
1427	Travis	Slaughter Creek	М	2.0	Intermittent stream from the confluence with an unnamed tributary 0.25 km upstream of FM 2304 upstream to the confluence with Granada Hills Tributary	
[1427]	[Travis]	[Slaughter Creek]	[H]	[5.0]	Perennial stream from the confluence with Onion Creek upstream to the confluence with an unnamed tributary 0.25 km upstream of FM 2304	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1428]	[Travis]	[Gilleland Creek]	<mark>(H)</mark>	[5.0]	[Perennial stream from the confluence with the Colorado River upstream to an unnamed tributary 0.39 km downstream of Edgemere Drive]	
[1428]	[Travis]	[Gilleland Creek]	[H]	[5.0]	[Intermittent stream with perennial pools from the confluence with an unnamed tributary 0.39 km downstream of Edgemere Drive upstream to the spring source (Ward Spring) northwest of the City of Pflugerville]	
[1428]	[Bastrop]	[Dry Creek]	[H]	[5.0]	[Perennial stream from the mouth of the Colorado River upstream to 150 meters upstream of the confluence with Cottonwood Creek]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1428]	[Bastrop, Travis]	[Dry Creek]		[3.0]	[Intermittent stream with perennial pools from 150 meters upstream of the confluence with Cottonwood Creek in Bastrop County upstream to just below the confluence with an unnamed tributary located approximately 2.73 km upstream of Wolf Lane in Travis County. Channel topography in this reach is a braided to anastomosing channel, and all channels within the reach are intermittent with perennial pools.]	
[1428]	[Travis]	[Dry Creek]	(E)	<mark>[6.0]</mark>	[Perennial stream from just below the confluence with an unnamed tributary located approximately 2.73 km upstream of Wolf Lane upstream to the confluence of North Fork Dry Creek and Dry Creek]	
[1428]	[Travis]	[Dry Creek]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with North Fork Dry Creek upstream to US 183 south of Pilot Knob]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1428]	[Travis]	[Harris Branch]	H	[5.0]	[Perennial stream from the confluence with Gilleland Creek upstream to the confluence with an unnamed tributary approximately 2.6 km downstream of Gregg Lane]	
[1428]	[Travis]	[Unnamed tributary of Harris Branch]	[L]	[3.0]	[Intermittent stream with perennial pools from the confluence with Harris Branch upstream to the confluence with an unnamed tributary approximately 0.7 km downstream of the Old Railroad grade]	
[1434]	<mark>[Travis]</mark>	[Wilbarger Creek]	(H)	[5.0]	[Perennial stream from the confluence of an unnamed tributary approximately 2.3 km (1.4 mi) upstream of US 290 upstream to the confluence of an unnamed tributary 2.3 km (1.4 mi) upstream of Cameron Road]	
[1434]	[Travis]	[Wilbarger Creek]	[H]	[5.0]	[Intermittent stream with perennial pools from the confluence of an unnamed tributary approximately 2.3 km (1.4 mi) upstream of Cameron Road upstream to the confluence of an unnamed tributary approximately 3.7 km (2.3 mi) downstream of FM 685]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1434]	[Travis]	[Unnamed tributary of Wilbarger Creek]	[H]	[5.0]	[Perennial stream from the confluence with Wilbarger Creek approximately 2.3 km (1.4 mi) upstream of the Cameron Road crossing of Wilbarger Creek upstream to the confluence of two forks of the tributary downstream of Jesse Bohls Road]	
[1434]	[Bastrop]	[Cedar Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Colorado River upstream to the confluence of an unnamed tributary at FM 535]	
[1434]	[Bastrop]	[Gazley Creek]	[1]	[4.0]	[Perennial stream from the confluence with the Colorado River above the City of La Grange upstream to the confluence with an unnamed tributary approximately 3.25 km upstream of the southern-most crossing of the Missouri-Kansas-Texas Railroad south of the City of Smithville]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1434]	[Bastrop, Travis]	[Maha Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Cedar Creek in Bastrop County upstream to the confluence with an unnamed tributary approximately 0.25 km upstream of US 183 in Travis County]	
[1501]	[Matagorda]	[Wilson Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Tres Palacios River upstream to the confluence with the first tributary south of SH 35]	
[1602]	[Lavaca, DeWitt]	<mark>[Big Brushy</mark> Creek]	[H]	[5.0]	[Perennial stream from the confluence with Clarks Creek in Lavaca County upstream to the confluence with an unnamed tributary just downstream of the Loop 51 (US Highway B77) bridge crossing in DeWitt County south of the City of Yoakum]	
[1602]	[Lavaca]	[Rocky Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Lavaca River upstream to 1.0 km above FM 533 west of the City of Shiner]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1602]	[Lavaca]	[Lavaca River]	[H]	[5.0]	[Intermittent stream with perennial pools from the confluence of Campbells Creek west of the City of Hallettsville upstream to the confluence with West Prong Lavaca River downstream of the City of Moulton]	[A 24-hour average DO criterion of 3.0 mg/L and a 24-hour minimum DO criterion of 2.0 mg/L apply from March 15 through October 15.]
[1604]	[Wharton]	<mark>[East Mustang</mark> Creek]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with Middle Mustang Creek upstream to the confluence with an unnamed tributary approximately 4.2 km upstream of US 59 northeast of the City of Louise]	
[1605]	[Lavaca, Fayette]	<mark>[West Navidad</mark> River]	(H)	[5.0]	[Intermittent stream with perennial pools from the confluence with the Navidad River above Lake Texana in Lavaca County upstream to the confluence with Walker Branch approximately 0.5 km upstream of IH 10 in Fayette County]	
[1803]	<mark>[Gonzales,</mark> Karnes, Wilson]	[Elm Creek]	[1]	<mark>[3.0]</mark>	[Perennial stream from the confluence with Sandies Creek in Gonzales County upstream to the headwaters in Wilson County]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[1803]	[DeWitt, Gonzales, Guadalupe]	[Sandies Creek]	[1]	[3.0]	[Perennial stream from the confluence with Guadalupe River in DeWitt County upstream to the headwaters in Guadalupe County]	
[1806]	[Kerr]	<mark>[Camp Meeting</mark> Creek]	Π	<mark>[5.0]</mark>	[Intermittent stream with perennial pools from the confluence with the Guadalupe River upstream to an unnamed impoundment, located downstream of Ranchero Road in the City of Kerrville.]	[A 24-hour average DO criterion of 4.0 mg/L and a 24-hour minimum DO criterion of 2.0 mg/L apply from July 1 to September 30.]
[1806]	[Kerr]	[Camp Meeting Creek]	[H]	[5.0]	[Intermittent stream with perennial pools from an unnamed impoundment located downstream of Ranchero Road upstream to the dam of an unnamed impoundment approximately 0.65 km upstream of Tree Lane in the City of Kerrville.]	[A 24-hour average DO criterion of 2.0 mg/L and a 24-hour minimum DO criterion of 1.0 mg/L apply from July 1 to September 30.]
[1810]	[Caldwell]	[Town Branch]	[H]	[5.0]	[Perennial stream from the confluence with Plum Creek upstream to US 183 in the City of Lockhart]	
<mark>[1902]</mark>	[Bexar]	[Martinez Creek]	[1]	[4.0]	[Perennial stream from the confluence with Escondido Creek upstream to Binz-Engleman Road]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
<mark>[1903]</mark>	[Medina]	[Polecat Creek]	[H]	[5.0]	[Perennial stream from 6.4 km above the confluence with the Medina River upstream to the spring source 1.3 km above FM 2790 southeast of the City of LaCoste]	
[1910]	[Bexar]	[Salado Creek]	[L]	[4.0]	[Intermittent stream with perennial pools from the confluence with Beitel Creek upstream to Nacogdoches Road]	[The 24-hour minimum DO criterion is 3.0 mg/L.]
<mark>[2108]</mark>	<mark>[Frio, Medina]</mark>	[Chacon Creek]	[1]	[4.0]	[Perennial stream from the confluence with San Francisco Perez Creek in Frio County upstream to the confluence of an unnamed tributary approximately 0.8 km north of SH 132 in Medina County]	
[2108]	[Medina]	[Fort Ewell Creek]	[1]	[4.0]	[Perennial stream from the confluence with Chacon Creek upstream to the confluence of the Natalia Canal approximately 0.8 km north of SH 132]	
[2118]	<mark>[Atascosa]</mark>	[Atascosa River]		[3.0]	[Intermittent stream with perennial pools from the confluence with Galvan Creek upstream to the confluence with Palo Alto Creek]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[2118]	[Atascosa]	<mark>[West Prong</mark> Atascosa River]	[1]	[4.0]	[Intermittent stream with perennial pools from the confluence with the Atascosa River upstream to the confluence with an unnamed tributary at IH 35]	
[2201]	<mark>[Cameron,</mark> Hidalgo, Willacy]	<mark>[Drainage</mark> Ditches]	[L]	<mark>[3.0]</mark>	[Perennial freshwater drainage ditches that flow into the segment in the counties listed]	
[2202]	<mark>[Cameron,</mark> Hidalgo]	<mark>[Drainage</mark> Ditches]	[L]	<mark>[3.0]</mark>	[Perennial freshwater drainage ditches that flow into the segment in the counties listed]	
[2304]	[Val Verde]	[Cienegas Creek]	[H]	[5.0]	[Perennial stream from the confluence with the Rio Grande River upstream to the headwater spring source (Cienegas Springs) approximately 0.8 km north of Cienega Lane west of the City of Del Rio]	
[2310]	[Terrell]	[Independence Creek]	<b>[E]</b>	[6.0]	[Perennial stream from the confluence with the Pecos River upstream to the mouth of Surveyor Canyon (upstream of FM 2400)]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[2421]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[2421]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[2422]	[Chambers]	[Anahuac Ditch]	Π	[4.0]	[Perennial stream from the confluence with the West Fork Double Bayou upstream to FM 563 near the City of Anahuac]	
[2425]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[2425]	[Harris]	[Unmaintained channelized ditches and streams]	Ш	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[2425]	[Harris]	[Taylor Lake]	[H]	[4.0]	<mark>[Encompasses the entire tidal portion of the</mark> bay (tributary bay of Clear Lake) including Taylor Bayou Tidal]	
[2426]	[Harris]	[Goose Creek]	[1]	[4.0]	[Perennial stream from Baker Street upstream to the confluence of an unnamed tributary from Highlands Reservoir]	
[2426]	[Harris]	[Goose Creek]	[L]	[3.0]	[Perennial stream from the confluence with East Fork Goose Creek upstream to Baker Street]	
[2427]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[2427]	[Harris]	[Unmaintained channelized ditches and streams]	Π	<mark>[4.0]</mark>	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[2428]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[2428]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[2429]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[2429]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[2430]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[2430]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[2432]	[Brazoria]	[Mustang Bayou]	[1]	[4.0]	[Perennial stream from CR 166 upstream to the confluence with an unnamed tributary 0.3 km upstream of SH 35]	

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[2437]	[Galveston]	<mark>[Hurricane Levee</mark> Canal]	[1]	<mark>[3.0]</mark>	[Man-made tidal ditch from the confluence with the south shore of the Texas City Ship Channel upstream to the Texas City Hurricane Levee pump station 0.23 km upstream of Loop 197 South]	
[2438]	[Harris]	[Concrete lined and maintained channelized ditches and streams]	[L]	[3.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, whether concrete lined or earthen, and are maintained by the district]	
[2438]	[Harris]	[Unmaintained channelized ditches and streams]	[1]	[4.0]	[Perennial (including effluent-dominated) freshwater Harris County Flood Control District ditches that have been channelized into trapezoidal channels, are earthen, and are not maintained by the district]	
[2453]	<mark>[Jackson,</mark> Victoria]	[Garcitas Creek]	[H]	[4.0]	[Perennial tidal stream from the confluence with Lavaca Bay in Jackson/Victoria County upstream to the confluence with Marcado Creek in Victoria County]	[A 24-hour average DO criterion of 3.0 mg/L and a 24-hour minimum DO criterion of 2.0 mg/L apply from June to September.]

[Segment]	[County]	[Water Body]	[ALU]	[DO]	[Description]	[Additional Site-Specific Factors]
[2491]	<mark>[Cameron,</mark> Hidalgo]	<mark>[Drainage</mark> Ditches]	[L]	<mark>[3.0]</mark>	[Perennial freshwater drainage ditches that flow into the segment in the counties listed]	
[2494]	[Cameron]	<mark>[Drainage</mark> Ditches]	[L]	<mark>[3.0]</mark>	[Perennial freshwater drainage ditches that flow into the segment in the counties listed]	

1 The following site-specific multiple regression equation is used to determine the 24-hour average and minimum DO criteria. A 24-hour average DO criterion of 5 mg/L is the upper bounds if the indicated DO equation predicts DO values that are higher than 5.0 mg/L. When the 24-hour average DO is predicted to be lower than 1.5 mg/L, then the DO criterion is set as 1.5 mg/L. When the 24-hour average DO criterion is greater than 2.0 mg/L, the corresponding 24-hour minimum DO criterion should be 1.0 mg/L less than the calculated 24-hour average criterion. When the 24-hour average DO criterion is less than or equal to 2.0 mg/L, the corresponding 24-hour minimum DO criterion should be 0.5 mg/L less than the calculated 24-hour average criterion. When the 24-hour average DO criterion is less than or equal to 2.0 mg/L, the corresponding 24-hour minimum DO criterion should be 0.5 mg/L less than the calculated 24-hour average criterion. When stream flow is below 0.1 cfs, then 0.1 cfs is the presumed flow that should be used in the equation. This equation supersedes Table 4 of §307.7(b)(3)(A) of this title.

DO = 12.11 - 0.309 T + 1.05 logQ - 1.02 logWS

- where: DO = 24-hour average DO criterion
  - T = temperature in degrees Celsius (C)
  - Q = flow in cubic feet per second cfs

WS = watershed size in square km (up to 1000 km²)]

[2 A site-specific low-flow of 5.95 cfs applies to achieve the 4.0 mg/L DO 24-hour average criterion at the critical summer-time temperatures of 29.7°C. A site-specific DO criterion of 3.0 mg/L as a 24-hour average applies from May to October when flows are ≥1.2 ft<sup>3</sup>/s and < 5.95 cfs. The following site-specific multiple regression equation relating DO averages, flow, and temperature may be used to determine appropriate headwater flows:

 $\mathbf{O} = \mathbf{e}^{(0.253\text{T}-10.4 + \text{DO})/0.625}$ 

where: Q = flow in cfs

T = temperature in degrees Celsius

DO = 24-hour average DO

## [Appendix E - Site-specific Toxic Criteria]

[The water bodies found in this appendix have a site-specific standard for the chemical parameter listed. The procedures for obtaining a site-specific standard are specified in §307.2(d) of this title (relating to Description of Standards) and result in site-specific criteria or a site-specific adjustment factor (such as a water-effect ratio (WER), multiplier, etc.). For most of the chemical parameters listed, this factor is used along with hardness in the formulas listed in Table 1 of §307.6(c)(1) of this title (relating to Toxic Materials) to calculate the dissolved portion of the parameter. The newly calculated criteria from Table 1 of §307.6(c)(1) of this title are then used to calculate discharge limits for permitted facilities. To calculate discharge limits, use site-specific criteria or the site-specific adjustment factors listed in this appendix in accordance with the *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194) as amended. If a smaller portion of a water body has a separate and different site-specific adjustment factor, this factor supersedes any other factor specified for the larger water body that includes the smaller water body. In establishing Texas Pollutant Discharge Elimination System (TPDES) permit conditions, the site-specific criteria only apply to the referenced facility except where otherwise noted in footnote 3 of this appendix.]

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	[Additional Site- Specific Considerations]
[0202]	[Unnamed tributary from the edge of the mixing zone with Smith Creek upstream to Outfall 001 in Lamar County]	[03021-000]	[Paris Generation, LP]	[Copper <sup>4, 5</sup> ]	[Acute Criterion = 37.28 µg/L]	
[0301]	[Remnant channel of Baker Slough from the edge of the mixing zone in Segment 0301 upstream to the outfall in Cass County]	[01339-000]	[International Paper Co.]	[Aluminum <sup>1, 4</sup> ]	[6.39]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	[Additional Site- Specific Considerations]
[0303]	[River Crest Reservoir in Red River County]	[00945-000]	[Luminant Generation Co.]	[Copper <sup>1, 3</sup> ]	[3.4]	
[0305]	[Unnamed tributary of Cottonwood Branch from the edge of the mixing zone with an unnamed NRCS reservoir upstream to Outfall 001 in Lamar County]	[04127-000]	[La Frontera Holdings, LLC]	[Copper <sup>1, 4</sup> ]	<mark>[3.98]</mark>	
[0403]	[Johnson Creek Reservoir in Marion County]	[01331-000]	[SWEPCO]	[Copper <sup>1, 3</sup> ]	[5.15]	[Hardness = 20 mg/L] [TSS = 4 mg/L]
[0404]	[Big Cypress Creek in Camp, Titus, and Morris Counties]	[00348-000]	[U.S. Steel Tubular Products, Inc.]	[Lead <sup>2, 3</sup> ]	[Acute Criterion = 38.3 μg/L] [Chronic Criterion = 5.3 μg/L]	[Hardness = 40.1 mg/L] [Criteria listed in the "Site-Specific Adjustment Factor" column include a correction factor of 0.924152]
[0404]	[Welsh Reservoir in Titus County]	[01811-000]	[SWEPCO]	[Aluminum <sup>1, 3</sup> ]	[10]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	<mark>[Additional Site-</mark> Specific Considerations]
[0404]	[Unnamed tributary of Hart Creek from the edge of the mixing zone in Hart Creek upstream to the outfall in Titus County]	[10575-004]	<mark>[City of Mount</mark> Pleasant]	[Copper <sup>1,4</sup> ]	[7.16]	
[0409]	[Sugar Creek from the edge of the mixing zone in Segment 0409 upstream to the outfall in Upshur County]	[10457-001]	[City of Gilmer]	[Copper <sup>1,4</sup> ]	[6.83]	
[0501]	[Sabine River Tidal in Orange County]	[00475-000]	[E.I. DuPont de Nemours]	[Copper <sup>1, 4</sup> ]	[1.9]	
[0505]	[Sabine River from the confluence with Brandy Branch approximately 1 mi (1.6 km) upstream from Highway 43 in Harrison County upstream to SH 149 in Gregg County]	[00471-000]	[Eastman Chemical Co.]	[Copper <sup>1,4</sup> ]	[6.7]	[Hardness = 40 mg/L]
[0506]	[Mill Creek from CR 1106 upstream to the outfall in Van Zandt County]	[10399-002]	[City of Canton]	[Copper <sup>1,4</sup> ]	[7.71]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	<mark>[Additional Site-</mark> Specific Considerations]
[0510]	[Mill Creek from the edge of the mixing zone in Segment 0510 upstream to the confluence with Adaway Creek in Rusk County]	[10187-002]	[City of Henderson]	[Copper <sup>1, 4</sup> ]	[4.95]	
[0511]	[Unnamed tidal drainage ditch from the edge of the mixing zone in Segment 0511 upstream to the outfall in Orange County]	[00454-000]	[Firestone Polymers, Inc.]	[Copper <sup>1, 4</sup> ]	[2.54]	
[0511]	[Unnamed tidal drainage ditch from the edge of the mixing zone in Segment 0511 upstream to the outfall in Orange County]	[00670-000]	[Honeywell, Inc.]	[Copper <sup>1, 4</sup> ]	[2.39]	
[0601]	[From the edge of the mixing zone in the tidal marshes and Entergy Canal tidal upstream to Outfall 001 in Orange County]	[00336-000]	[Entergy Texas, Inc.]	[Copper <sup>1, 4</sup> ]	[2.3]	[Based on total copper – a partitioning coefficient will not be used to calculate permit limits (assume 100% is in dissolved form)]

Site-Specific Additional Site-**Adjustment Specific Considerations**] [Segment] [Permittee] [Site Description] [TPDES] [Parameter] **Factor**] [0601][The entirety of the mixing zone for [ExxonMobil]  $[Zinc^{1,4}]$ [2.89][00462-000]Outfall 001 within the Neches River Tidal in Jefferson County] [0601][Copper<sup>1,4</sup>] [All non-tidally influenced ditches [04731-000] [INEOS Calabrian [3.26] upstream of Star Lake Canal Corp.] upstream to Outfall 001 in Jefferson County] [0603] [City of Jasper] [Copper<sup>1, 4</sup>] [4.67][Sandy Creek from the edge of the [10197-001] mixing zone in Segment 0603 upstream to the outfall in Jasper County] [0604]Buck Creek from the confluence [01268-000]Lufkin Industries, [Copper<sup>1, 4</sup>] [7.94]with Clayton Creek upstream to the LLC] confluence with the unnamed tributary receiving the discharge from the outfall in Angelina County] [0604]Unnamed tributary of Bear Creek [International Paper [Aluminum<sup>1,4</sup>] [5.58][01902-000]from the edge of the zone of initial – Corrigan] dilution in Bear Creek upstream to the outfall in Polk County]

Site-Specific Additional Site-**Adjustment Specific Considerations**] [Segment] [Permittee] **Factor**] [Site Description] [TPDES] [Parameter] [0604][Hurricane Creek from the edge of [10214-001][City of Lufkin] [Copper<sup>1, 4</sup>] [4.43]the mixing zone with Cedar Creek upstream to Outfall 001 in Angelina County [0604] [City of Rusk] [4.3]One-eye Creek from the edge of the [10447-001][Copper<sup>1, 4</sup>] [Hardness = 40 mg/L]mixing zone in Box Creek upstream to the outfall in Cherokee County] [Lake Striker in Cherokee County] [Luminant] [Aluminum<sup>1, 3</sup>] [3.7] [0611][00946-000][0611][Ragsdale Creek from the edge of [City of [Copper<sup>1, 4</sup>] [Hardness = 48 mg/L] [10693-001][4.6]the mixing zone in Keys Creek Jacksonville] upstream to the outfall in Cherokee County] [Abitibi [0615][Papermill Creek from the edge of [00368-000] [Aluminum<sup>1, 4</sup>] [8.39] the zone of initial dilution in **Consolidated**] Segment 0615 upstream to the outfall in Angelina County]

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	[Additional Site- Specific Considerations]
[0702]	[Taylor Bayou Tidal within the zone of initial dilution and the mixing zone of Outfall 001 in Segment 0702 in Jefferson County]	[00309-000]	[The Premcor <mark>Refining Group,</mark> Inc.]	[Copper <sup>1, 4</sup> ]	[2.95]	
[0805]	[Forney Branch from the edge of the mixing zone in White Rock Creek upstream to the outfall in Dallas County]	[01251-000]	[Luminant Generation Co.]	[Copper <sup>1,4</sup> ]	[3.9]	
[0806]	[West Fork Trinity River in Tarrant County]	[00555-000]	[Luminant Generation Co.]	[Copper <sup>1,4</sup> ]	[2.5]	
[0820]	[Muddy Creek from the edge of the mixing zone with Segment 0820 upstream to Outfall 001 in Dallas County]	[14216-001]	<mark>[North Texas</mark> Municipal Water Dist.]	[Copper <sup>1,4</sup> ]	[4.98]	
[0823]	[Cantrell Slough from the edge of the mixing zone in Segment 0823 upstream to Outfall 001 in Denton County]	[14323-001]	[UTRWD]	[Copper <sup>1,4</sup> ]	[6.43]	

Site-Specific Additional Site-**Adjustment Specific Considerations**] [Segment] [Permittee] [Site Description] [TPDES] [Parameter] **Factor**] [0827][Floyd Branch from the edge of the [10257-001][North Texas [Copper<sup>4,5</sup>] [Acute Criterion = mixing zone with Cottonwood . Municipal Water 32.13 µg/L Creek upstream to Outfall 001 in Dist.] Chronic Criterion = Dallas County 19.95 µg/L] [0901][Unnamed tributary from the edge [02940-000][Copper<sup>1, 4</sup>] [6.314] [Enterprise of the mixing zone with Segment Products Operating, LLC - Mont Belvieu] 0901 upstream to Outfall 001 in Chambers County] [0901] [Copper<sup>1, 4</sup>] [3.247] [Unnamed tributary from the edge [02940-000] [Enterprise of the mixing zone with Segment Products Operating, 0901 upstream through an LLC - Mont Belvieul unnamed ditch to Outfall 002 in Chambers County] [1.8][1001]San Jacinto River Tidal in Harris [NA] [NA] [Copper<sup>1, 3</sup>] County] [1005][Houston Ship Channel/San Jacinto [NA] [NA] [Copper<sup>1, 3</sup>] [1.8]River Tidal in Harris County

Site-Specific Additional Site-**Adjustment Specific Considerations**] [Segment] [Permittee] **Factor**] [Site Description] [TPDES] [Parameter] [1005][01539-000][Oxy Vinyls] [Nickel<sup>1, 4</sup>] [1.13][Phillips Ditch and Santa Anna Bayou: Phillips Ditch from the edge of the mixing zone in Santa Anna Bayou upstream to Outfall 001 in Harris County] [1005][The Houston Ship Channel/San [Oxy Vinyls] [Copper<sup>1, 4</sup>] [1.8][02097-000]Jacinto River tidal from the edge of the mixing zone in Segment 2421 upstream to the confluence with Santa Anna Bayou in Harris County] [1005][Santa Anna Bayou from the edge of  $[Zinc^{1,4}]$ [1.82][04119-000]Akzo Nobel Based on total zinc - a the mixing zone in Segment 1005 Chemicals LLC and partitioning coefficient upstream to Outfall 001 in Harris <mark>Akzo Nobel</mark> will not be used to calculate permit limits **Functional** County] **Chemicals LLC** (assume 100% is in dissolved form)] [1005]Phillips Ditch from the edge of the [Aluminum<sup>1, 4</sup>] [3.93] [04119-000]<mark>[Akzo Nobel</mark> MZ in Santa Anna Bayou upstream Chemicals LLC and to Outfall 001 in Harris County] <mark>Akzo Nobel</mark> **Functional** Chemicals LLC

Site-Specific Additional Site-**Adjustment Specific Considerations**] [Segment] [TPDES] [Permittee] **Factor**] [Site Description] [Parameter] [1006][Houston Ship Channel Tidal in [NA] [NA] [Copper<sup>1, 3</sup>] [1.8]Harris County] [1006][Greens Bayou Tidal from the edge [01031-000][NRG Texas Power [Copper<sup>1, 4</sup>] [2.4] [TSS = 14.75 mg/L]of the mixing zone in the Houston LLC] [Dissolved Fraction Ship Channel upstream to the Available = 87%] confluence with Spring Gully in Harris County] [1006] [01429-000] [Safety-Kleen] [Copper<sup>1, 4</sup>] [2.3] [Tucker Bayou from the edge of the mixing zone in Segment 1006 upstream to the outfall in Harris County] [1007][Copper<sup>1, 3</sup>] [1.8][Houston Ship Channel/Buffalo [NA] [NA] Bayou Tidal in Harris County] [Copper<sup>1, 4</sup>] [1008][Montgomery County Drainage [12030-001] [Rayford Road [6.82] District No. 6 Channel IIDF from the MUD] confluence with Spring Creek, Segment 1008, upstream to the outfall in Montgomery County]

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	[Additional Site- Specific Considerations]
[1008]	[Panther Branch from the edge of the mixing zone in Lake Woodlands upstream to the outfall in Montgomery County]	[12597-001]	[San Jacinto River Authority]	[Copper <sup>1, 4</sup> ]	[6.45]	
[1009]	[Faulkey Gully from the mixing zone with Segment 1009 upstream to Outfall 001 in Harris County]	[11832-001]	[Faulkey Gully MUD]	[Copper <sup>1, 4</sup> ]	[3.997]	
[1009]	[Seals Gully from the confluence with HCFCD K142-02-00 upstream to Outfall 001 in Harris County]	[11835-001]	[Bridgestone MUD]	[Copper <sup>1, 4</sup> ]	[3.19]	
[1009]	[Cypress Creek and Harris County Flood Control District Ditch K159- 00-00 from the edge of the mixing zone in Cypress Creek upstream to the outfall in Harris County]	<mark>[13296-002]</mark>	[Harris County MUD No. 358]	[Copper <sup>1,4</sup> ]	[8.47]	
[1013]	<mark>[Buffalo Bayou Tidal in Harris</mark> <mark>County]</mark>	[NA]	[NA]	[Copper <sup>1, 3</sup> ]	[1.8]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	[Additional Site- Specific Considerations]
[1014]	[Willow Fork Bayou from the edge of the mixing zone with Segment 1014 in Fort Bend County upstream to Outfall 001 in Waller County]	[02229-000]	[Igloo Products Corp.]	[Aluminum <sup>1,4</sup> ]	[5.43]	
[1014]	[Unnamed ditch and Harris County Flood Control ditch W167-01-00 from the edge of the mixing zone in Turkey Creek upstream to the outfall in Harris County]	[03994-000]	[National Oilwell Varco, L.P.]	[Zinc <sup>1,4</sup> ]	[5.24]	
[1014]	[Turkey Creek from the edge of the mixing zone with Segment 1014 upstream through Harris County Flood Control District W167-04-00 and a series of unnamed ditches to Outfall 001 in Harris County]	[04760-000]	[Weatherford U.S. L.P.]	[Copper <sup>1,4</sup> ]	[4.55]	
[1014]	[Horsepen Creek in Harris County]	[12726-001]	<mark>[Harris Co. MUD</mark> No. 155]	[Copper <sup>1, 4</sup> ]	[4.65]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	<mark>[Additional Site-</mark> Specific Considerations]
[1014]	[Willow Fork Drainage Dist. Lateral Ditch VA1 from the edge of the mixing zone in Segment 1014 upstream to the outfall in Fort Bend County]	[13558-001]	[Cinco MUD No. 1]	[Copper <sup>1, 4</sup> ]	[7.26]	
[1113]	[Horsepen Bayou in Harris County]	[10539-001]	[City of Clear Lake Water Authority]	[Copper <sup>1, 4</sup> ]	[2.74]	
[1201]	[Segment 1201 in Brazoria County]	[00007-000]	[Dow Chemical]	[Copper <sup>1, 4</sup> ]	[1.6]	
[1209]	[Unnamed ditch from the edge of the zone of initial dilution of the unnamed ditch in Gibbons Creek Reservoir upstream to Outfall 001 in Grimes County]	[02120-000]	[Texas Municipal Power Agency]	[Aluminum <sup>1, 4</sup> ]	[6.81]	
[1209]	[Unnamed tributary of Sulphur Creek from the edge of the mixing zone with Sulphur Creek upstream to the outfall in Grimes County]	[03996-000]	<mark>[Tenaska Frontier</mark> Partners, LTD.]	[Copper <sup>1,4</sup> ]	[2.64]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	[Additional Site- Specific Considerations]
[1236]	[Ft. Phantom Hill Reservoir in Jones County]	[01422-000]	[AEP North Texas]	[Aluminum <sup>1, 3</sup> ]	[2.9]	
[1242]	<mark>[Lake Creek Reservoir in McClennan</mark> County]	[00954-000]	[Luminant Generation Co.]	[Copper <sup>1, 3</sup> ]	[2.4]	
[1412]	[Red Draw Reservoir in Howard County]	[01768-000]	[ALON USA]	[Selenium]	[Acute Criterion = 219 µg/L Chronic Criterion = 7.5 µg/L]	
[1701]	<mark>[Victoria Barge Canal in Calhoun</mark> County]	[00447-000]	[Dow Chemical]	[Copper <sup>1, 4</sup> ]	[1.81]	
[1701]	[Victoria Barge Canal in Victoria County]	[03943-000]	[Air Liquide]	[Copper <sup>1, 4</sup> ]	[2.55]	
[2427]	[San Jacinto Bay in Harris County]	[NA]	[NA]	[Copper <sup>1, 3</sup> ]	[1.8]	
[2429]	[Scott Bay in Harris County]	[NA]	[NA]	[Copper <sup>1, 3</sup> ]	[1.8]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	<mark>[Additional Site-</mark> Specific Considerations]
[2431]	[Moses Bayou from the edge of the mixing zone in Segment 2431 upstream to the drainage ditches receiving the discharge from the outfall in Galveston County]	[01263-000]	[ISP Technologies]	[Copper <sup>1, 4</sup> ]	[1.88]	
[2432]	[From the edge of the mixing zone in Mustang Bayou upstream to Outfall 001 in Fort Bend County]	<mark>[04306-000]</mark>	[Nalco Production LLC]	[Copper <sup>1, 4</sup> ]	[3.11]	
[2432]	[From the edge of the mixing zone in Mustang Bayou upstream to Outfall 002 in Fort Bend County]	<mark>[04306-000]</mark>	[Nalco Production LLC]	[Copper <sup>1, 4</sup> ]	[4.00]	
[2441]	[From the edge of the mixing zone of the tidal portion of Little Boggy Creek upstream to Outfall 002 in Matagorda County]	<mark>[02481-000]</mark>	[Equistar Chemicals, LP]	[Copper <sup>1, 4</sup> ]	[2.43]	[Based on total copper – a partitioning coefficient will not be used to calculate permit limits (assume 100% is in dissolved form)]
[2453]	[Saltwater portion of Lynn Bayou below the facility's outfall in Calhoun County]	[10251-001]	[City of Port Lavaca]	[Copper <sup>1, 4</sup> ]	[1.57]	

[Segment]	[Site Description]	[TPDES]	[Permittee]	[Parameter]	<mark>[Site-Specific</mark> Adjustment Factor]	<mark>[Additional Site-</mark> Specific Considerations]
[2481]	[Kinney Bayou tidal/Jewel Fulton Canal from the edge of the mixing zone in Ingleside Cove upstream to the outfall in San Patricio County]	[10422-001]	[City of Ingleside]	[Copper <sup>1, 4</sup> ]	[2.0]	
[2481]	[Kinney Bayou tidal/Jewel Fulton Canal from the edge of the mixing zone in Ingleside Cove upstream to the outfall in San Patricio County]	[10422-001]	[City of Ingleside]	[Zinc <sup>1, 4</sup> ]	[1.14]	
<mark>[2484</mark> ]	[Tidal portion of concrete lined ditches receiving effluent from the outfall from the edge of the mixing zone with the Tule Lake portion of Segment 2484 upstream to the end of tidal influence in Nueces County]	[03137-000]	[MarkWest Javelina Company, L.L.C.]	[Copper <sup>1,4</sup> ]	[4.13]	[Based on total copper – a partitioning coefficient will not be used to calculate permit limits (assume 100% is in dissolved form)]
[2485]	[La Volla Creek from the edge of the mixing zone in Oso Creek upstream to the outfall in Nueces County]	[10401-003]	<mark>[City of Corpus</mark> Christi]	[Copper <sup>1, 4</sup> ]	[2.07]	

Site-Specific Additional Site-**Specific Adjustment Considerations**] [Permittee] [Segment] [Site Description] [TPDES] [Parameter] **Factor**] [2494][Vadia Ancha from the edge of the [10350-001][Laguna Madre [Copper<sup>1, 4</sup>] [2.52]mixing zone in Segment 2494 Water District] upstream to the tidal mud flats receiving the discharge from the outfall in Cameron County] Results based on a water-effect ratio study.] [1

[2 The equation used for acute criterion calculation is e <sup>(1.273(In hardness)-0.9744)</sup>, and the equation used for chronic criterion calculation is e <sup>(1.273(In hardness)-2.958)</sup>.]

- [3 Site-specific criteria apply to the entire water body listed under the "Site Description" column. If the site described is a designated segment, the boundaries of the segment are given in Appendix C of §307.10 of this title.]
- [4 Site-specific criteria may only be used in the evaluation of permit limits for the facility listed under the "TPDES" and "Facility" columns.]

[5 Results based on a biotic ligand model.]

## [Appendix F: Site-specific Nutrient Criteria for Selected Reservoirs]

[In the following table, nutrient criteria for selected reservoirs are specified in terms of concentrations of chlorophyll *a* in water as a measure of the density of phytoplankton (suspended microscopic algae).] <mark>'Notes on the derivation of</mark> <mark>criteria are described below<sup>1</sup>.'</mark>

Long-term medians of chlorophyll *a* data will be used in the assessment. [The criteria are applicable to the monitoring site(s) listed in the Site Identification (ID) column for each reservoir or to comparable monitoring sites.] If sampling data are available from more than one of the listed sites, then the data are pooled to provide a single median for purposes of comparing to the criteria. Segment numbers in parentheses () indicate that the water body is in close proximity to the segment listed, but the water body is not part of the segment.'

[Criteria in the following table are adjusted to minimum levels that could generally be historically quantified by laboratory chemical analyses. When a chlorophyll *a* criterion is below 5.00 μg/L, then the criterion is set at the minimum default criterion of 5.00 μg/L. The calculated values are shown in parentheses ( ).]

Procedures to assess attainment for chlorophyll a criteria are described in §307.9(c)(2) and (e)(7) of this title (relating to Determination of Standards Attainment).

[Segment	[Reservoir Name]	[Site ID]	<mark>[Chlorophyll a</mark>
No.]			<mark>Criteria (µg/L)]</mark>
[0208]	[Lake Crook]	<b>[10137]</b>	[7.38]
[0209]	[Pat Mayse Lake]	<mark>[10138]</mark>	[12.40]
[0213]	[Lake Kickapoo]	[10143]	[6.13]
[0217]	[Lake Kemp]	<mark>[10159]</mark>	[8.83]
[0223]	[Greenbelt Lake]	[10173]	[5.00 (4.59)]
[0405]	[Lake Cypress Springs]	[10312]	[17.54]
<mark>[0510]</mark>	[Lake Cherokee]	<mark>[10445]</mark>	<mark>[8.25]</mark>

[Segment	[Reservoir Name]	[Site ID]	[Chlorophyll a
No.]			<mark>Criteria (µg/L)]</mark>
[0603]	[B. A. Steinhagen Lake]	[10582]	[11.67]
[0610]	[Sam Rayburn Reservoir]	[14906]	[6.22]
[0613]	[Lake Tyler]	[10637]	[13.38]
[0613]	[Lake Tyler East]	[10638]	[10.88]
<mark>[0614]</mark>	[Lake Jacksonville]	<mark>[10639]</mark>	<mark>[5.60]</mark>
[0811]	[Bridgeport Reservoir]	<mark>[10970]</mark>	<mark>[5.32]</mark>
[0813]	[Houston County Lake]	<mark>[10973]</mark>	[11.10]
<mark>[0816]</mark>	[Lake Waxahachie]	<mark>[10980]</mark>	[19.77]
[0817]	[Navarro Mills Lake]	<mark>[10981]</mark>	[15.07]
[1207]	[Possum Kingdom Lake]	<mark>[11865]</mark>	[10.74]
<mark>[1216]</mark>	[Stillhouse Hollow Lake]	<mark>[11894]</mark>	[5.00 (2.07)]
[1220]	[Belton Lake]	[11921]	[6.38]
<mark>[1228]</mark>	[Lake Pat Cleburne]	<mark>[11974]</mark>	[19.04]
<mark>[1231]</mark>	[Lake Graham]	<mark>[11979]</mark>	<mark>[6.07]</mark>
<mark>[1233]</mark>	[Hubbard Creek	[12002]	<mark>[5.61]</mark>
	Reservoir]		
<mark>[1234]</mark>	[Lake Cisco]	[12005]	[5.00 (4.64)]
<mark>[1235]</mark>	[Lake Stamford]	[12006]	[16.85]
<mark>[1240]</mark>	[White River Lake]	[12027]	[13.85]
[1249]	[Lake Georgetown]	[12111]	[5.00 (3.87)]
[1403]	[Lake Austin]	<mark>[12294]</mark>	[5.00 (3.58)]
<mark>[1404]</mark>	[Lake Travis]	<mark>[12302]</mark>	<mark>[5.00 (3.66)]</mark>
<mark>[1405]</mark>	[Marble Falls Lake]	<mark>[12319]</mark>	[10.48]
<mark>[1406]</mark>	[Lake Lyndon B. Johnson]	<mark>[12324]</mark>	[10.29]
[1408]	[Lake Buchanan]	<mark>[12344]</mark>	[9.82]
<mark>[1419]</mark>	[Lake Coleman]	<mark>[12398]</mark>	<mark>[6.07]</mark>

[Segment	[Reservoir Name]	[Site ID]	<mark>[Chlorophyll <i>a</i></mark>
No.]			<mark>Criteria (µg/L)]</mark>
[1422]	[Lake Nasworthy]	<b>[12418]</b>	[16.91]
<b>[(1426)]</b>	[Oak Creek Reservoir]	<mark>[12180]</mark>	[6.93]
[1429]	[Lady Bird Lake (Town	[12476]	[7.56]
	Lake)]		
[1433]	[O.H. Ivie Reservoir]	[12511]	<mark>[5.77]</mark>
[1805]	[Canyon Lake]	[12597]	[5.00 (4.11)]
[1904]	[Medina Lake]	[12826]	[5.00 (2.15)]
[2116]	[Choke Canyon	<mark>[13019]</mark>	[12.05]
	Reservoir]		

'1 Criteria for chlorophyll *a* were calculated from historical sampling data and set at the upper parametric prediction intervals (Hahn and Meeker, 1991, Statistical Intervals, a Guide for Practitioners. Wiley Series in Probability and Mathematical Statistics. Wiley-Interscience Publications). Historical sampling data was used from 1990 through 2008, and only reservoirs with 30 or more datapoints for chlorophyll *a* are included. As needed, the historical period was extended back through the period of record (potentially back as far as 1969) in order to acquire sufficient data for individual reservoirs. Values that were less than the minimum historical reporting limit were assigned a value of one-half the reporting limit. Data outside an interquartile range of 1.5 on a Tukey box plot were excluded as outliers. Statistical calculations of prediction intervals were based on a 0.01 confidence level, and the number of samples that are available for assessing compliance was assumed to be 10.'

## [Appendix G - Site-specific Recreational Uses and Criteria for Unclassified Water Bodies]

[The water bodies listed in this appendix are those waters that are not designated segments listed in Appendix A of this section. The water bodies are included because a regulatory action has been taken or is anticipated to be taken by the commission or because sufficient information exists to provide a recreational use designation. The segment numbers listed refer to the designated segments as defined in Appendix C of this section. The county listed is the primary location where the use designation is assigned. The water body is a tributary within the drainage basin of the listed segment. The recreation use designations and bacteria indicator criteria are the same as defined in §307.4(j) of this title (relating to General Criteria) and §307.7(b) of this title (relating to Site-Specific Uses and Criteria). The description defines the specific area where the recreation use designation applies. Generally, there is not sufficient data on these waters to develop other conventional criteria and those criteria are the same as for the segment where the water body is located unless further site-specific information is obtained.]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[0101]	<mark>[Hutchinson,</mark> Carson]	[Dixon Creek]	[SCR 1]	<mark>[630]</mark>	[E. coli]	[From the confluence with the Canadian River in Hutchinson County upstream to the confluence of Middle and East Dixon creeks in Carson County]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
0201	Bowie	Mud Creek	SCR 1	630	E. coli	From the confluence with the Red River upstream to the headwaters near the intersection of US 82 and CR 3403
0202	Grayson, Fannin	Bois d' Arc Creek	SCR 1	630	E. coli	From the confluence with the Red River in Fannin County upstream to the headwaters northwest of the City of Whitewright in Grayson County
0202	Grayson, Fannin	Choctaw Creek	SCR 1	630	E. coli	From the confluence with the Red River east of the City of Denison in Fannin County to the upstream perennial portion near the intersection of SH 56 and SH 289 in Grayson County
0202	Lamar	Smith Creek	SCR 1	630	E. coli	From the confluence with Pine Creek upstream to the confluence of two unnamed streams south of Loop 286 in the City of Paris
0202	Grayson	Iron Ore Creek	SCR 1	630	E. coli	From the confluence with Choctaw Creek upstream to the headwaters near FM 120 west of the City of Denison

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[0214]	[Wichita]	[Buffalo Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with the Wichita River upstream to the headwaters east of the City of Electra]
<mark>[0230]</mark>	[Wilbarger, Foard]	[Paradise Creek]	[SCR 1]	<mark>[630]</mark>	[E. colí]	[From the confluence with the Pease River east of the City of Vernon in Wilbarger County upstream to the headwaters 0.5 km west of the intersection of US 70 and CR 233 in Foard County]
0404	Titus	Tankersley Creek	SCR 1	630	E. coli	From the confluence with Big Cypress Creek upstream to the confluence with an unnamed tributary 0.25 km upstream of IH 30
0404	Titus	Hart Creek	SCR 1	630	E. coli	From the confluence with Big Cypress Creek upstream to 0.2 km upstream of FM 1402
[0409]	<mark>[Upshur, Wood,</mark> Camp]	[South Lilly Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with Lilly Creek upstream to approximately 2 miles west of FM 1647]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[0502]	<mark>[Jasper,</mark> Newton]	[Nichols Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with the Sabine River in Newton County upstream to the headwaters at FM 1013 northwest of the City of Kirbyville in Jasper County]
0505	Gregg	Grace Creek	SCR 1	630	E. coli	From the confluence with the Sabine River upstream to the headwaters at FM 1844
0507	Hunt, Rockwall	South Fork of Sabine River	SCR 1	630	E. coli	From the confluence with Lake Tawakoni in Hunt County upstream to the confluence of Parker and Sabine creeks in Rockwall County
0512	Hopkins, Wood	Running Creek	SCR 1	630	E. coli	From the confluence with Lake Fork at the Hopkins/Wood County line upstream to the headwaters 0.4 km south of SH 11, southeast of the City of Sulphur Springs, excluding Elberta Lake, in Hopkins County
0512	Hopkins, Rains	Elm Creek	SCR 1	630	E. coli	From the confluence with Lake Fork in Rains County upstream to the headwaters at CR 1110 southwest of the City of Sulphur Springs in Hopkins County

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
0606	Smith	Prairie Creek	SCR 1	630	E. coli	From the confluence with the Neches River upstream to an unnamed tributary approximately 0.6 km downstream of US 69
0611	Smith, Cherokee	Mud Creek	SCR 1	630	E. coli	From the confluence with the Angelina River in Cherokee County upstream to the confluence with Prairie Creek in Smith County
0615	Angelina	Paper Mill Creek	SCR 1	630	E. coli	From the confluence with Angelina River/Sam Rayburn Reservoir upstream to the confluence with Mill Creek
[0810]	[Wise]	[Big Sandy Creek]	[SCR 1]	[630]	[ <u>E. coli</u> ]	[From the confluence with Waggoner Creek to FM 1810 west of the City of Alvord]
[0810]	[Wise]	[Garrett Creek]	[SCR 1]	[630]	[ <u>E. coli</u> ]	[From the confluence with Salt Creek upstream to Wise County Road approximately 22.5 km upstream of SH 114]
[0810]	[Wise]	[Salt Creek]	[SCR 1]	<mark>[630]</mark>	[ <u>E. coli</u> ]	[From the confluence with Garrett Creek to a point 17.7 km upstream]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
0838	Tarrant, Johnson	Walnut Creek	SCR 1	630	E. coli	From the confluence with Joe Pool Lake in Tarrant County upstream to the headwaters at Spring Street in the City of Burleson in Johnson County
[1017]	[Harris]	<mark>[Brickhouse</mark> Gully/Bayou]	[SCR 1]	[630]	[E. coli]	[From the confluence with Whiteoak Bayou Above Tidal upstream to the headwaters 1.1 km upstream of Gessner Road]
[1017]	[Harris]	[Unnamed tributary of Whiteoak Bayou]	[SCR 1]	[630]	[ <i>E. coli</i> ]	[From the confluence with Whiteoak Bayou Above Tidal downstream of TC Jester Blvd upstream to Hempstead Hwy north of US Hwy 290]
[1017]	[Harris]	[Unnamed tributary of Whiteoak Bayou]	[SCR 1]	[630]	[ <i>E. coli</i> ]	[From the confluence with Whiteoak Bayou Above Tidal near W 11th Street upstream to a point immediately upstream of W 26th Street south of Loop 610 W]
[1202]	[Austin]	[Allens Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with the Brazos River upstream to the headwaters 1.6 km north of IH 10]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[1202]	[Fort Bend]	<mark>[Bullhead Bayou</mark> East]	[SCR 1]	<mark>[630]</mark>	[ <u>E. coli</u> ]	[From Lexington Blvd to the Sweetwater Golf Course near Commonwealth Blvd in Fort Bend County]
[1202]	[Fort Bend]	<mark>[Bullhead Bayou</mark> West]	[SCR 1]	<mark>[630]</mark>	[ <i>E. coli</i> ]	[From the confluence with Fort Bend County Drainage District Ditch H to the headwaters in the City of Pecan Grove]
[1202]	[Fort Bend]	[Unnamed tributary of Bullhead Bayou]	[SCR 1]	<mark>[630]</mark>	[ <u>E. coli</u> ]	[From the confluence with Bullhead Bayou East upstream to the headwaters]
1209	Brazos	Wickson Creek	SCR 1	630	E. coli	From the confluence with an unnamed first order tributary approximately 1.3 km upstream of Reliance Road crossing upstream to the confluence with an unnamed first order tributary approximately 15 meters upstream of Dilly Shaw Road
1209	Robertson, Brazos	Cedar Creek	SCR 1	630	E. coli	From the confluence with the Navasota River in Brazos County upstream to the confluence with Moores Branch and Rocky Branch in Robertson County

[Segment]	[County]	[Water Body]	[Use]	[Geometric Mean Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[1209]	[Robertson]	[Duck Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with the Navasota River upstream to Twin Oak Reservoir dam excluding Twin Oak Reservoir]
1209	Grimes	Gibbons Creek	SCR 1	630	E. coli	From the confluence with the Navasota River upstream to SH 90, excluding Gibbons Creek Reservoir
[1209]	[Madison]	[Shepherd Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with the Navasota River upstream to a point 1.1 km upstream of FM 1452]
1209	Limestone, Robertson	Steele Creek	SCR 1	630	E. coli	From the confluence with Navasota River in Robertson County upstream to a point 3.8 km upstream of FM 147 in Limestone County
[1210]	<mark>[Hill,</mark> Limestone]	<mark>[Navasota River</mark> Above Lake Mexia]	[SCR 1]	[630]	[E. coli]	[From the confluence with the headwaters of Lake Mexia in Limestone County to a point 2.0 km upstream of SH 31 in Hill County]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[1212]	<mark>[Burleson, Lee,</mark> Milam]	[East Yegua Creek]	[SCR 1]	[630]	[ <u>E. coli</u> ]	[From the confluence with Middle Yegua and Yegua creeks southeast of the City of Dime Box in Lee County to the upstream portion of the stream south of Alcoa Lake in Milam County]
"1221"	"Comanche, Erath"	"Resley Creek"	"SCR 2"	<mark>"1030"</mark>	" <u>E. coli</u> "	"From the confluence of the Leon River east of the City of Gustine in Comanche County to the headwaters 3.3 km upstream of SH 6 in Erath County"
"1221"	"Comanche"	"South Leon River"	"SCR 1"	"630"	" <i>E. coli</i> "	"From the confluence of the Leon River south of the City of Gustine to the upstream perennial portion of the stream south of the City of Comanche"
[1221]	[Comanche]	[Indian Creek]	[SCR 2]	[1030]	[ <i>E. coli</i> ]	[From confluence with Leon River upstream to the confluence with Armstrong Creek]
[1221]	<mark>[Comanche,</mark> Erath]	[Walnut Creek]	[SCR 2]	[1030]	[ <i>E. coli</i> ]	From the confluence with Leon River in Comanche County upstream to the headwaters 3.8 km west of the City of Dublin in Erath County]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[1222]	[Comanche]	[Duncan Creek]	[SCR 1]	[630]	[ <i>E. coli</i> ]	[From the confluence with Proctor Lake northeast of the City of Comanche to the upstream perennial portion of the stream west of the City of Comanche]
[1223]	<mark>[Erath,</mark> Comanche]	[Armstrong Creek]	[SCR 2]	[1030]	[ <u>E. coli</u> ]	[From the confluence with the Leon River downstream of Leon Reservoir in Comanche County upstream to the headwaters 9.9 km east of SH 16 in Erath County]
[1226]	[Erath]	[Indian Creek]	[SCR 1]	<mark>[630]</mark>	[ <u>E. coli]</u>	[From the confluence with the North Bosque River upstream to the headwaters 5.6 km east of the City of Stephenville]
[1226]	[Erath]	[Sims Creek]	[SCR 1]	[630]	[ <i>E. coli</i> ]	[From the confluence with the North Bosque River upstream to the headwaters 5.6 km southeast of the City of Stephenville, excluding reservoir UB19]
[1226]	[Erath]	[Alarm Creek]	[SCR 1]	[630]	[ <i>E. coli</i> ]	[From the confluence with the North Bosque River upstream to the headwaters 4.8 km west of the City of Stephenville, excluding reservoir UB17]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[1226]	[Erath]	[Little Green Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with Green Creek upstream to the confluence with the North Fork and South Fork of Little Green Creek 3.8 km south of SH 6]
[1242]	<mark>[Brazos]</mark>	<mark>[Cottonwood</mark> Branch]	[SCR 1]	[630]	[E. coli]	[From the confluence with Still Creek upstream 0.95 km to the confluence with an unnamed tributary]
1242	Brazos	Thompsons Creek	SCR 1	630	E. coli	From the confluence with the Brazos River upstream to the confluence with Thompsons Branch north of FM 1687
[1242]	[Robertson]	[Campbells Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with the Little Brazos River upstream to the headwaters 1.6 km west of Old San Antonio Road]
1242	Robertson	Mud Creek	SCR 1	630	E. coli	From the confluence with the Little Brazos River upstream to the confluence with Touchstone Branch and Wolf Den Branch

[Segment]	[County]	[Water Body]	[Use]	[Geometric Mean Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
1242	Robertson	Pin Oak Creek	SCR 1	630	E. coli	From the confluence with the Little Brazos River upstream to the headwaters 3.3 km south of the City of Franklin
1242	Robertson	Spring Creek	SCR 1	630	E. coli	From the confluence with the Little Brazos River upstream to the headwaters 2.4 km north of FM 391
1242	Robertson	Walnut Creek	SCR 1	630	E. coli	From the confluence with the Little Brazos River upstream to the headwaters 1.6 km south of the City of White Rock
1242	Falls, McLennan, Limestone	Big Creek	SCR 1	630	E. coli	From the confluence with the Little Brazos River upstream to the confluence with unnamed creeks near the northeast corner of the City of Mart
1246	Coryell, McLennan	Wasp Creek	SCR 1	630	E. coli	From the confluence with Tonk Creek in the City of Crawford in McLennan County upstream to the headwaters in Coryell County 0.24 km east of FM 185

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[1247]	[Williamson]	[Willis Creek]	[SCR 1]	[630]	[ <u>E. coli</u> ]	[From the confluence with the headwaters of Granger Lake upstream to CR 313]
[1255]	[Erath]	[Goose Branch]	[SCR 2]	[1030]	[E. colí]	[From the confluence with the South Fork of the North Bosque River 4.0 km west of the City of Stephenville upstream to the headwaters 0.8 km north of FM 8, excluding Goose Branch Reservoir]
[1255]	[Erath]	[North Fork Upper North Bosque River]	[SCR 2]	[1030]	[E. colí]	[From the confluence with the South Fork of the Upper North Bosque River in the City of Stephenville upstream to the headwaters 3.2 km north of FM 219, excluding reservoirs UB1 and UB2]
[1255]	[Erath]	[Scarborough Creek]	[SCR 2]	[1030]	[E. coli]	[From the confluence with the North Fork of the Upper North Bosque River upstream to the headwaters 0.2 km southeast of FM 219, excluding Scarborough Creek Reservoir]
[1255]	[Erath]	[Unnamed Tributary of Goose Branch]	[SCR 2]	[1030]	[E. colí]	[From the confluence with Goose Branch upstream to the headwaters 0.3 km southeast of the intersection of FM 8 and FM 219]

[Segment]	[County]	[Water Body]	[Use]	<mark>[Geometric Mean</mark> Colonies/100 mL]	<mark>[Indicator</mark> Bacteria]	[Description]
[1255]	[Erath]	[Unnamed Tributary of Scarborough Creek]	[SCR 1]	<mark>[630]</mark>	[E. coli]	[From the confluence with Scarborough Creek 1.6 km west of SH 108 upstream to the headwaters 0.48 km north of FM 219]
[1255]	[Erath]	[Woodhollow Branch]	[SCR 2]	[1030]	[E. coli]	[From the confluence with the South Fork of the North Bosque River 9.65 km northwest of the City of Stephenville upstream to the headwaters 2.4 km north of FM 219]
[1255]	[Erath]	[Dry Branch]	[SCR 1]	<mark>[630]</mark>	[E. coli]	[From the confluence with the Upper North Bosque River upstream to the headwaters 3.7 km east of SH 106, excluding reservoir UB6]
[1302]	<mark>[Colorado,</mark> Wharton]	[Gum Tree Branch]	[SCR 1]	[630]	[ <i>E. coli</i> ]	[From the confluence with West Bernard Creek near CR 252 in Wharton County upstream approximately 24.1 km to the headwaters near RR 102]
[2004]	[Bee]	[Aransas Creek]	[SCR 1]	[630]	[E. coli]	[From the confluence with the Aransas River upstream approximately 10 km to the headwaters upstream of US 59]